

STATISTICAL EVALUATION OF LONGITUDINAL DATA (1969-2011) FROM A NON-  
DENOMINATIONAL CHRISTIAN, REGIONAL CRISIS CALL CENTER FOR  
FREQUENCY DISTRIBUTIONS OF VARIOUS CALL PARAMETERS

By

Susan Kosciolk Salerno

Approved:

---

Ralph W. Hood, Jr.  
Professor of Psychology  
(Chair)

---

Amye R. Warren  
Professor of Psychology  
(Committee Member)

---

Michael B. Johnson  
Assistant Professor of Psychology  
(Committee Member)

---

Jeffrey Elwell  
Dean of the College of Arts & Sciences

---

A. Jerald Ainsworth  
Dean of the Graduate School

STATISTICAL EVALUATION OF LONGITUDINAL DATA (1969-2011) FROM A NON  
DENOMINATIONAL CHRISTIAN, REGIONAL CRISIS CALL CENTER FOR  
FREQUENCY DISTRIBUTIONS OF VARIOUS CALL PARAMETERS

By

Susan Kosciolk Salerno

A Thesis Submitted to the Faculty of the University  
of Tennessee at Chattanooga in Partial  
Fulfillment of the Requirements of the  
Degree of Master's of Science

The University of Tennessee of Chattanooga  
Chattanooga, Tennessee

December 2012

Copyright © 2012

By Susan Kosciolek Salerno

All Rights Reserved

## ABSTRACT

Anonymous calls to a non-denominational Christian, regional crisis call center were documented in Volunteer Call Logs (VCLs). VCLs (N=629,710) were coded for age, gender, marital status and category of distress for each call. Additionally, VCLs reported parameters such as time of day, day of week, month of year for each call. VCLs were tabulated for frequency and grouped according to parameters by administrative personnel. Frequency distributions of all parameters were summarized in an annual statistical report and made available to the general public. The frequency distributions of the archival annual statistical reports (1969-2011) were used to generate a description of the population served by the crisis call center. The statistical descriptions of the population were compared to a variety of regional, state, and national data.

## DEDICATION

I dedicate this research to my children, Christina and Michael Salerno.

## ACKNOWLEDGEMENTS

The author wishes to express her sincere gratitude to the many people without whose assistance her thesis could not have been completed. Foremost appreciation is due to Dr. Ralph W. Hood, Jr., her committee Chair, for his magnanimity in expending time and effort to guide and assist her throughout the intricacies of the masters program and the thesis process. Appreciation for invaluable contributions must include the other members of her thesis committee, Dr. Amye R. Warren and Dr. Michael B. Johnson. In consideration for his contributions during the conceptual phase of her thesis process, the author would like to thank Dr. Richard L. Metzger. Dr. A. Jerald Ainsworth, Dean of the UTC Graduate School, is due special gratitude for his generous guidance throughout the thesis formatting process, and his acknowledgement of the enormity of her task to evaluate the archival data by granting an exception to some of the thesis formatting standards. The author would like to thank CONTACT of Chattanooga and executive director, Gary Paul, who graciously allowed the author to research the crisis center archives for the data that made this thesis possible. The author wishes to acknowledge CONTACT of Chattanooga administrative assistant, Barbara Jones, for her 30 years of dedicated service in coding and tabulating the volunteer call logs which documented the 629,710 crisis center calls received by the many volunteers who dedicate time and caring while providing active listening to those in need. Finally, the author wishes to express appreciation to the University of Tennessee at Chattanooga, the UTC Graduate School, the

Department of Psychology, and the 2012 Provost Student Research Award Review Committee for acknowledging the value of the longitudinal data by awarding the author a 2012 Provost Student Research Award in support of her efforts to statistically evaluate the forty-three years of archival data.

## TABLE OF CONTENTS

DEDICATION.....	v
ACKNOWLEDGEMENTS.....	vi
LIST OF TABLES.....	xix
LIST OF FIGURES .....	xxxii
LIST OF ABBREVIATIONS.....	lvi
LIST OF SYMBOLS.....	lvii
CHAPTER 1: INTRODUCTION .....	1
Background.....	1
Objectives of the Study.....	3
CHAPTER II: LITERATURE REVIEW .....	5
Introduction.....	5
Review of the Literature.....	5
Summary.....	12
CHAPTER III: METHODOLOGY .....	13
Introduction.....	13
Program Description .....	13
Advertisement of Services .....	13
Participants.....	14
Volunteers and Training.....	14
Approach/Protocols.....	14
Data Coding.....	15
Scope and Limitations of the Study .....	16
Significance of the Study .....	17
CHAPTER IV: RESULTS.....	18



Annual Total of Crisis Center Call Frequency.....	18
Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Years.....	18
Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Complete Year.....	19
Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Complete Decade.....	24
Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Complete Decade Group.....	28
Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Complete Decade Group.....	34
Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Five (5) Year Increments.....	38
Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Five Year Increment.....	45
Annual Total of Crisis Center Call Frequency and Hamilton County, TN.....	48
Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population.....	48
Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population.....	51
Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population.....	53
Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons.....	58
Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons.....	61
Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population and Unemployment Rate (%).....	63
Correlation Coefficients for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population and Annual Unemployment Rate (%).....	68
Correlation Coefficients for Annual Total of Crisis Center Call Frequency, Annual Estimates of Resident Population and Unemployed Persons.....	70
Annual Total of Crisis Center Call Frequency and State of Tennessee.....	73
Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population.....	73
Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population.....	76
Descriptive Statistics Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons.....	78

Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Estimates of Unemployed Persons.....	81
Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population and Annual Unemployment Rate (%).....	83
Correlation Coefficients for Annual Total of Crisis Center Call Frequency as Ratio of Annual Estimates of Resident Population and Annual Unemployment Rate .....	89
Annual Total of Crisis Center Call Frequency and Age.....	91
Descriptive Statistics for Annual Total of Crisis Center Call Age Frequency per Age Category .....	91
Descriptive Statistics for Age Category Frequency of Annual Total of Crisis Center Call Age Frequency as Ratio of Annual Total of Crisis Center Call Age Frequency .....	98
Correlation Coefficients for 18-35 Age Category Frequency as Ratio of Annual Total of Crisis Center Age Frequency and 36-64 Age Category Frequency of the Annual Total of Crisis Center Call Age Frequency .....	104
Annual Total of Crisis Center Call Frequency and Anonymity .....	108
Descriptive Statistics Annual Total of Crisis Center Call Frequency per Anonymity Category .....	108
Descriptive Statistics for Anonymity Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency .....	116
Annual Total of Crisis Center Call Frequency and Gender .....	123
Descriptive Statistics for Annual Total of Crisis Call Frequency per Gender Category .....	123
Descriptive Statistics for Gender Category Frequencies of Annual Total of Crisis Center Call Gender Frequency as Ratio (%) of Annual Total of Crisis Center Call Gender Frequency .....	129
Annual Total of Crisis Center Call Frequency and Marital Status .....	134
Descriptive Statistics for Annual Total of Crisis Center Call Marital Status Frequency per Marital Status Category .....	134
Descriptive Statistics for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency.....	141
Descriptive Statistics for Living Arrangement Category of Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency .....	149
Annual Total of Crisis Center Call Frequency and Repeat Call .....	156
Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Repeat Category .....	156

Descriptive Statistics for Repeat Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency .....	162
Annual Total of Crisis Center Call Frequency and Call Category .....	168
Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Total of Crisis Center Call Category Frequency .....	168
Annual Total of Crisis Center Call Category Frequency and Abortion .....	178
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Abortion Category .....	178
Descriptive Statistics for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	185
Descriptive Statistics for Pre and Post-Closing Abortion Category Frequencies of Annual Total of Crisis Center Call Category Frequency per Abortion Category .....	190
Descriptive Statistics for Pre and Post Closing Abortion Category Frequencies of Annual Total of Crisis Center Call Category Frequency per Abortion Category as Ratio of Annual Total of Crisis Center Call Category Frequency .....	194
Annual Total of Crisis Center Call Category Frequency and Alcohol.....	198
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Alcohol Category .....	198
Descriptive Statistics for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	205
Annual Total of Crisis Center Call Category Frequency and Appreciation.....	210
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Appreciation Category .....	210
Descriptive Statistics for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	217
Annual Total of Crisis Center Call Category Frequency and Dating.....	223
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Dating Category .....	223
Descriptive Statistics for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Call Frequency .....	230
Annual Total of Crisis Center Call Category Frequency and Deafness.....	235
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Deaf Category .....	235
Annual Total of Crisis Center Call Category Frequency and Depression .....	236

Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Depression Category .....	236
Descriptive Statistics for Depression Category Frequency of Annual Total of Crisis Center Call Frequency Category as Ratio of Annual Total of Crisis Center Call Category Frequency .....	243
Annual Total of Crisis Center Call Category Frequency and Desertion.....	248
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Desertion Category .....	248
Descriptive Statistics for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	255
Annual Total of Crisis Center Call Category Frequency and Drugs.....	261
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Drugs Category .....	261
Descriptive Statistics for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	268
Annual Total of Crisis Center Call Category Frequency and Emotions .....	273
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Emotional/Mental Category .....	273
Descriptive Statistics for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	280
Annual Total of Crisis Center Call Category Frequency and Employment.....	286
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Employment Category .....	286
Descriptive Statistics for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	293
Annual Total of Crisis Center Call Category Frequency and Family .....	299
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Family Category .....	299
Descriptive Statistics for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	306
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Finances Category .....	311
Descriptive Statistics for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	318
Annual Total of Crisis Center Call Category Frequency and Food/Shelter.....	324

Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Food/Shelter Category .....	324
Descriptive Statistics for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	331
Annual Total of Crisis Center Call Category Frequency and Grief.....	337
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Grief Category .....	337
Descriptive Statistics for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	344
Annual Total of Crisis Center Call Category Frequency and Health.....	350
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Health Category .....	350
Descriptive Statistics for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	357
Annual Total of Crisis Center Call Category Frequency and Homosexuality .....	363
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Homosexual Category .....	363
Descriptive Statistics for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	370
Annual Total of Crisis Center Call Category Frequency and Information .....	376
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Information Category .....	376
Descriptive Statistics for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	383
Annual Total of Crisis Center Call Category Frequency and Juvenile.....	389
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Juvenile Category .....	389
Descriptive Statistics for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	396
Annual Total of Crisis Center Call Category Frequency and Legal .....	401
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Legal Category .....	401
Descriptive Statistics for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	408
Annual Total of Crisis Center Call Category Frequency and Loneliness.....	413

Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Lonely Category .....	413
Descriptive Statistics for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	420
Annual Total of Crisis Center Call Category Frequency and Marital Issues.....	426
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Marital Category .....	426
Descriptive Statistics for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	433
Annual Total of Crisis Center Call Category Frequency and Mental Issues .....	438
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Mental Category .....	438
Descriptive Statistics for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	445
Annual Total of Crisis Center Call Category Frequency and Miscellaneous .....	451
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Miscellaneous Category .....	451
Descriptive Statistics for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	458
Annual Total of Crisis Center Call Category Frequency and Other Issues .....	464
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Other Category .....	464
Descriptive Statistics for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	471
Annual Total of Crisis Center Call Category Frequency and Other Family.....	477
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Other Family Category .....	477
Descriptive Statistics for Other Family Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	484
Annual Total of Crisis Center Call Category Frequency and Physical Abuse.....	490
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Physical Abuse Category .....	490
Descriptive Statistics for Physical Abuse Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	497
Annual Total of Crisis Center Call Category Frequency and Reassurance.....	502

Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency and Reassurance Category .....	502
Annual Total of Crisis Center Call Category Frequency and Relationship .....	507
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Relationship Category .....	507
Descriptive Statistics for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	514
Annual Total of Crisis Center Call Category Frequency and Religious .....	519
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Religious Category .....	519
Descriptive Statistics for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	526
Annual Total of Crisis Center Call Category Frequency and School .....	532
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency pre School Category .....	532
Descriptive Statistics for School Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	539
Annual Total of Crisis Center Call Category Frequency and Sex.....	544
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Sex Category.....	544
Descriptive Statistics for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	551
Annual Total of Crisis Center Call Category Frequency and Silence.....	556
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Silent Category .....	556
Descriptive Statistics for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	563
Annual Total of Crisis Center Call Category Frequency and Suicide.....	568
Descriptive Statistics Annual Total of Crisis Center Call Category Frequency per Suicide Category.....	568
Descriptive Statistics for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	575
Annual Total of Crisis Center Call Category Frequency and Unwed Parent .....	580
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Unwed Parent Category .....	580

Descriptive Statistics for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	587
Annual Total of Crisis Center Call Category Frequency and Major Groups.....	592
Annual Total of Crisis Center Call Category Frequency per Major Group Categories .....	592
Descriptive Statistics for Major Group Category Frequencies of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	595
Annual Total of Crisis Center Call Category Frequency and Major Group 1: Mental Health.....	598
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 1: Mental Health Category .....	598
Descriptive Statistics for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	605
Annual Total of Crisis Center Call Category Frequency and Major Group 2: Interpersonal .....	611
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 2: Interpersonal Category .....	611
Descriptive Statistics for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	618
Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Major Group 1: Mental Health Category as Ratio of Annual Total of Crisis Center Call Frequency and Annual Total of Crisis Center Call Frequency per Major Group 2: Interpersonal Category as Ratio of Annual Total of Crisis Center Call Frequency .....	623
Annual Total of Crisis Center Call Category Frequency and Major Group 3: Suicide ...	627
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 3: Suicide Category .....	627
Descriptive Statistics for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	634
Annual Total of Crisis Center Call Category Frequency and Major Group 4: Physical Health.....	639
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 4: Physical Health Category .....	639
Descriptive Statistics for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	646



Annual Total of Crisis Center Call Category Frequency and Major Group 5: Abuse and Violence.....	652
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 5: Abuse and Violence Category.....	652
Descriptive Statistics for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	660
Annual Total of Crisis Center Call Category Frequency and Major Group 6: Basic Necessities.....	666
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 6: Basic Necessities Category.....	666
Descriptive Statistics for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	673
Annual Total of Crisis Center Call Category Frequency and Major Group 7: Sexual.....	679
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 7: Sexual Category.....	679
Descriptive Statistics for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	686
Annual Total of Crisis Center Call Category Frequency and Major Group 8: Other .....	692
Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 8: Other Category .....	692
Descriptive Statistics for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency .....	699
Annual Total of Crisis Center Call Day Frequency and Days of the Week .....	705
Descriptive Statistics for Annual Total of Crisis Center Call Day Frequency per Day Categories.....	705
Day Category Frequencies of Annual Total of Crisis Center Call Day Frequency as Ratio (%) of Annual Total of Crisis Center Call Day Frequency .....	713
Annual Total of Crisis Center Call Frequency and Month of Year.....	719
Annual Total of Crisis Center Call Month Category Frequencies per Month Category .....	719
Month Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio of Annual Total of Crisis Center Call Month Frequency .....	728
Annual Total of Crisis Center Call Month Frequency and Season of Year.....	737
Descriptive Statistics for Annual Total of Crisis Center Call Month Frequency per Season Category .....	737

Descriptive Statistics for Season Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio of Annual Total of Crisis Center Call Month Frequency .....	742
Annual Total of Crisis Center Call Shift Frequency and Shift .....	746
Descriptive Statistics for Annual Total of Crisis Center Call Shift Frequency per Shift Category .....	746
Descriptive Statistics for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency as Ratio of Annual Total of Crisis Center Call Shift Frequency .....	753
Annual Total of Crisis Center Call Month Category Frequencies and Temperature .....	760
Descriptive Statistics for Annual Total of Crisis Center Call Month Category Frequencies per Temperature Category .....	760
Descriptive Statistics for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio of Annual Total of Crisis Center Call Month Frequency .....	766
CHAPTER V: DISCUSSIONS.....	771
CHAPTER VI: RECOMMENDATIONS.....	776
REFERENCES.....	780
VITA .....	785

LIST OF TABLES

4.1 Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Years (1969-2011) and Complete Years (1970-2011) of archival data.....22

4.2 Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Years (1969-2011), Complete Years (1970-2011), and Complete Decades (1970-2009) of archival data.....29

4.3 Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Complete Decade Group of archival data (1970-2009).....32

4.4 Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Complete Decade Group of archival data (1970-2009).....38

4.5 Descriptive Statistics for Annual Total of the Crisis Center Call Frequency per Five (5) Year Increment of archival data (1970-2009).....43

4.6 Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Five Year Increment of archival data (1970-2009).....48

4.7 Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population in Hamilton County, TN of archival data (1970-2011).....50

4.8 Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Estimated of Resident Population in Hamilton County, TN of archival data (1970-2011).....53

4.9 Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population of archival data (1970-2011).....56

4.10 Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons in Hamilton County, TN of archival data (1990-2011).....60

4.11	Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons in Hamilton County, TN of archival data (1990-2011).....	63
4.12	Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in Hamilton County, TN and Annual Unemployment Rate (%) in Hamilton County, TN of archival data (1970-2011).....	66
4.13	Correlation Results for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in Hamilton County, TN and Annual Unemployment Rate (%) in Hamilton County, TN of archival data (1990-2011).....	70
4.14	Correlation Coefficients for Annual Total of the Crisis Center Call Frequency, Annual Estimates of Resident Population and Annual Number of Unemployed Persons in Hamilton County, TN of archival data (1990-2011).....	73
4.15	Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population in State of TN of archival data (1970-2010).....	75
4.16	Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population in State of TN of archival data (1970-2010).....	78
4.17	Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons in State of TN of archival data (1976-2011).....	80
4.18	Correlation Results for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons in State of TN of archival data (1976-2011).....	83
4.19	Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in State of TN and Annual Unemployment Rate (%) in State of TN of archival data (1981-2010).....	86
4.20	Correlation Results for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population State of TN and Annual Unemployment Rate (%) State of TN of archival data (1981-2009).....	91
4.21	Descriptive Statistics for Age Category Frequencies of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011).....	96
4.22	Descriptive Statistics for Age Category Frequencies of Annual Total of Crisis Center Call Age Frequency as Ratio (%) of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011).....	102

4.23	Correlation Results for 18-35 Age Category of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency and 36-64 Age Category of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	106
4.24	Descriptive Statistics for Anonymity Category Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	112
4.25	Descriptive Statistics of Anonymity Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	118
4.26	Descriptive Statistics for Gender Category Frequencies of Annual Total of Crisis Center Call Gender Frequency and Annual Total of Crisis Center Call Gender Frequency of archival data (1977-2011).....	126
4.27	Descriptive Statistics for Gender Category Frequencies of Annual Total of Crisis Center Call Gender Frequency as Ratio (%) of Annual Total of Crisis Center Call Gender Frequency of archival data (1977-2011).....	131
4.28	Descriptive Statistics for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency of archival data (1977-2011).....	138
4.29	Descriptive Statistics for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of archival data (1977-2011).....	145
4.30	Descriptive Statistics for Living Arrangement Category Frequencies of Marital Status Category Frequency of annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of the archival data (1977-2011).....	152
4.31	Descriptive Statistics for Repeat Category Frequencies of Annual Total of Crisis Center Call Frequency and Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	159
4.32	Descriptive Statistics for Repeat Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	164
4.33	Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Frequency of archival data (1970-2011).....	171

4.34	Descriptive Statistics for Call Category Frequencies as Ratio (%) of Annual Total of Crisis Center Call Category Frequency per Alphabetical order of archival data (1970-2011).....	174
4.35	Descriptive Statistics for Call Category Frequencies as Ratio (%) of Annual Total of Crisis Center Call Category Frequency in Descending Order per Mean of archival data (1970-2011).....	176
4.36	Descriptive Statistics for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	181
4.37	Descriptive Statistics for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	187
4.38	Descriptive Statistics for Abortion Frequency of Annual Total of Crisis Center Call Category Frequency per Pre-Closing (1970-1992), Post-Closing (1993-2011), and Complete Years (1970-2011) of archival data.....	192
4.39	Descriptive Statistics for Abortion Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency per Pre-Closing (1970-1992), Post-Closing (1993-2011), and Complete Years (1970-2011) of archival data.....	196
4.40	Descriptive Statistics for Alcohol Category Frequency for the Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	201
4.41	Descriptive Statistics for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	207
4.42	Descriptive Statistics for Appreciation Category Frequency of the Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	213
4.43	Descriptive Statistics for Appreciation Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	219

4.44	Descriptive Statistics for Dating Category of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Frequency Category (of archival data 1970-2011).....	226
4.45	Descriptive Statistics for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	232
4.46	Descriptive Statistics for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011).....	239
4.47	Descriptive Statistics for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011).....	245
4.48	Descriptive Statistics for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	251
4.49	Descriptive Statistics for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency (1970-1977).....	257
4.50	Descriptive Statistics for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	264
4.51	Descriptive Statistics for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	270
4.52	Descriptive Statistics for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	276
4.53	Descriptive Statistics for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	282
4.54	Descriptive Statistics for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	289

4.55	Descriptive Statistics for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	295
4.56	Descriptive Statistics for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	302
4.57	Descriptive Statistics for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	308
4.58	Descriptive Statistics for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	314
4.59	Descriptive Statistics for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	320
4.60	Descriptive Statistics for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	327
4.61	Descriptive Statistics for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency (1978-2011).....	333
4.62	Descriptive Statistics for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011).....	340
4.63	Descriptive Statistics for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011).....	346
4.64	Descriptive Statistics for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	353



4.65	Descriptive Statistics for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	359
4.66	Descriptive Statistics for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	366
4.67	Descriptive Statistics for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	372
4.68	Descriptive Statistics for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	379
4.69	Descriptive Statistics for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	385
4.70	Descriptive Statistics for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	392
4.71	Descriptive Statistics for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	398
4.72	Descriptive Statistics for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	404
4.73	Descriptive Statistics for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data(1970-2011).....	410
4.74	Descriptive Statistics for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	416
4.75	Descriptive Statistics for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	422

4.76	Descriptive Statistics for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	429
4.77	Descriptive Statistics for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	435
4.78	Descriptive Statistics for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	441
4.79	Descriptive Statistics for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	447
4.80	Descriptive Statistics for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	454
4.81	Descriptive Statistics for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	460
4.82	Descriptive Statistics for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	467
4.83	Descriptive Statistics for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	473
4.84	Descriptive Statistics for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	480
4.85	Descriptive Statistics for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	486

4.86	Descriptive Statistics for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	493
4.87	Descriptive Statistics for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	499
4.88	Descriptive Statistics for Reassurance Category Frequency of the archival data (2003-2011).....	504
4.89	Descriptive Statistics for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	510
4.90	Descriptive Statistics for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	516
4.91	Descriptive Statistics for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	522
4.92	Descriptive Statistics for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	528
4.93	Descriptive Statistics for School Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	535
4.94	Descriptive Statistics for School Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	541
4.95	Descriptive Statistics for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	547
4.96	Descriptive Statistics for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	553

4.97	Descriptive Statistics for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1977-2011).....	559
4.98	Descriptive Statistics for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1977-2011).....	565
4.99	Descriptive Statistics for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	571
4.100	Descriptive Statistics for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	577
4.101	Descriptive Statistics for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	583
4.102	Descriptive Statistics for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	589
4.103	Major Group Designation for Annual Total of Crisis Center Call Categories of archival data of archival data (1970-2011).....	593
4.104	Descriptive Statistics for Major Group Categories of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency in Descending Numerical Order of archival data (1970-2011).....	596
4.105	Descriptive Statistics for Major Group Categories of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency in Descending Order by Mean of archival data (1970-2011).....	597
4.106	Descriptive Statistics for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	601
4.107	Descriptive Statistics for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	607

4.108	Descriptive Statistics for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	614
4.109	Descriptive Statistics for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1969-2011).....	620
4.110	Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Major Group 1: Mental Health Category as Ratio (%) of Annual Total of Crisis Center Call Frequency and Annual Total of Crisis Center Call Frequency per Major Group 2: Interpersonal Category as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1970-2011).....	624
4.111	Descriptive Statistics for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	630
4.112	Descriptive Statistics for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	636
4.113	Descriptive Statistics for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	642
4.114	Descriptive Statistics for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	648
4.115	Descriptive Statistics for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	656
4.116	Descriptive Statistics for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	662
4.117	Descriptive Statistics for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	669
4.118	Descriptive Statistics for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total	

	of Crisis Center Call Category Frequency encompassing Forty-two Years of archival data (1970-2011).....	675
4.119	Descriptive Statistics for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	682
4.120	Descriptive Statistics for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1969-2011).....	688
4.121	Descriptive Statistics for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	695
4.122	Descriptive Statistics for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	701
4.123	Descriptive Statistics for Day Category Frequencies of Annual Total of Crisis Center Call Day Frequency of archival data (1977-2011).....	710
4.124	Descriptive Statistics for Day Category Frequencies of Annual Total of Crisis Center Call Day Frequency as Ratio (%) of Annual Total of Crisis Center Call Day Frequency of archival data (1977-2011).....	716
4.125	Descriptive Statistics for Month Category Frequencies of Annual Total of Crisis Center Call Month Frequency and Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011).....	725
4.126	Descriptive Statistics for Month Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011).....	734
4.127	Descriptive Statistics for Season Category Frequencies of Annual Total of Crisis Center Call Month Frequency and Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011).....	741
4.128	Descriptive Statistics for Season Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011).....	746

4.129	Descriptive Statistics for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency and Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011).....	750
4.130	Descriptive Statistics for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency as Ratio (%) of Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011).....	756
4.131	Descriptive Statistics for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Category Frequency and Annual Total of Crisis Center Call Month Category Frequency of archival data (1970-2011).....	763
4.132	Descriptive Statistics for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011).....	768

## LIST OF FIGURES

4.1	Simple Line Chart for Annual Total of Crisis Center Call Frequency per Complete Years of archival data (1970-2011).....	23
4.2	Simple Bar Chart for Annual Total of Crisis Center Call Frequency per Complete Years with Complete Years Mean Line (14,091.19) of archival data (1970-2011).....	24
4.3	Box Plot Diagram for Annual Total of Crisis Center Call Frequency per Complete Decade Group with Complete Decade Mean Line (15,295.43) of archival data (1970-2009).....	33
4.4	Box Plot Diagram for Annual Total of Crisis Center Call Frequency per Five Year Increment (1970-2009) with Complete Decade Mean Line (15,295.43) of archival data (1970-2009).....	44
4.5	Multiple Line Chart for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population in Hamilton County, TN of archival data (1970-2011)..... 451	451
4.6	Simple Line Chart of Annual Total of Crisis Center Call Frequency as Ratio of Annual Estimates of Resident Population in Hamilton County, TN of archival data (1970-2011).....	57
4.7	Simple Bar Chart of Annual Total of Crisis Center Call Frequency as Ratio of Annual Estimates of Resident Population in Hamilton County, TN with % Annual Total of Crisis Center Call Frequency Mean Line (4.41%) archival data (1970-2011).....	58
4.8	Multiple Line Chart for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons in Hamilton County, TN of archival data (1990-2011).....	61
4.9	Multiple Line Chart for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population of Hamilton County, TN and Annual Unemployment Rate (%) in Hamilton County, TN of archival data (1990-2011).....	67
4.10	Multiple Line Chart for Annual Total of Crisis Center Call Frequency and Annual	



Estimates of Resident Population in State of TN of the archival data (1970-2010).....	76
4.11 Multiple Line Chart for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons in State of TN of archival data (1976-2011).....	81
4.12 Simple Line Chart of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in State of TN of archival data (1981-2010).....	87
4.13 Multiple Line Chart of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in State of TN and Annual Unemployment Rate (%) in State of TN of archival data (1981-2011).....	88
4.14 Multiple Line Chart for Age Category Frequencies of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011).....	97
4.15 Stacked Bar Chart for Age Category Frequencies of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011).....	98
4.16 Multiple Line Chart for Age Category Frequencies of Annual Total of Crisis Center Call Age Frequency as Ratio (%) of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011).....	103
4.17 Stacked Bar Chart of Age Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011).....	104
4.18 Multiple Line Chart for 18-35 Age Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Age Frequency and 18-35 Age Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011).....	108
4.19 Simple Line Chart for Name Given Frequency of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	113
4.20 Simple Bar Chart for Name Given Frequency of Annual Total of Crisis Center Call Frequency with Name Given Mean Line (1,858.03) of archival data (1977-2011).....	114
4.21 Multiple Line Chart for Anonymity Category Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	115
4.22 Stacked Bar Chart for Anonymity Categories Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	116
4.23 Simple Line Graph for Name Given Category Frequency of Annual Total of Crisis Center	

Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	120
4.24 Simple Bar Chart for Name Given Category Frequency of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency with Name Given Mean Line (12.02%) of archival data (1977-2011).....	121
4.25 Multiple Line Chart for Anonymity Category Frequencies as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	122
4.26 Stacked Bar Chart for Anonymity Category Frequencies as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	123
4.27 Multiple Line Chart for Gender Category Frequencies of Annual Total of Crisis Center Call Gender Frequency of archival data (1977-2011).....	128
4.28 Stacked Bar Chart for Gender Category Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	129
4.29 Multiple Line Chart for Gender Category Frequencies of Annual Total of Crisis Center Call Gender Frequency as Ratio (%) of Annual Total of Crisis Center Call Gender Frequency of archival data (1977-2011).....	133
4.30 Stacked Bar Chart for Gender Category Frequencies of Annual Total of Crisis Center Call Gender Frequency as Ratio (%) of Annual Total of Crisis Center Call Gender Frequency of archival data (1977-2011).....	134
4.31 Multiple Line Chart for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency of archival data (1977-2011).....	140
4.32 Stacked Bar Chart for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency of archival data (1977-2011).....	141
4.33 Multiple Line Chart for Living Arrangement Category Frequencies of Marital Status Category Frequency of annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of the archival data (1977-2011).....	147
4.34 Stacked Bar Chart for Living Arrangement Category Frequencies of Marital Status Category Frequency of annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of the archival data (1977-2011).....	148

4.35	Multiple Line Chart for Day Category of Annual Total of Crisis Center Call Day Frequency of archival data (1977-2011).....	154
4.36	Stack Bar Chart for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of archival data (1977-2011).....	155
4.37	Multiple Line Chart for Repeat Category Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	161
4.38	Stacked Bar Chart for Repeat Category Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	162
4.39	Multiple Line Chart for Repeat Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	166
4.40	Stacked Bar Chart for Repeat Call Category Frequency of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011).....	167
4.41	Simple Line Chart for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	183
4.42	Simple Bar Chart for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency with Abortion Category Mean Line (42.07) of archival data (1970-2011).....	184
4.43	Multiple Line Chart for Abortion Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	185
4.44	Simple Line Chart for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	189
4.45	Simple Bar Chart for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Abortion Category Mean Line (0.2745%) of archival data (1970-2011).....	190
4.46	Multiple Line Chart for Abortion Frequency of Annual Total of Crisis Center Call Category Frequency Grouped Per Pre-Closing (1970-1972) and Post-Closing (1993-2011)	

Categories with Abortion Category Mean Line (42.07) of archival data (1970-2011).....	194
4.47 Multiple Line Chart for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency sorted by Pre-Closing (1970-1972) and Post-Closing (1993-2011) with % Abortion Category Mean Line (0.27%) of archival data (1970-2011).....	198
4.48 Simple Line Chart for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	203
4.49 Simple Bar Chart for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency with Alcohol Category Mean Line (313.93) of archival data (1970-2011).....	204
4.50 Multiple Line Chart for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	205
4.51 Simple Line Chart for Alcohol Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	209
4.52 Simple Bar Chart for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Alcohol Category Mean Line (1.99%) of archival data (1970-2011).....	210
4.53 Simple Line Chart for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011) Stacked Bar Chart of Day Categories of Annual Total of Crisis Center Call Day Frequency of archival data (1977-2011).....	215
4.54 Simple Bar Chart for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency with Appreciation Category Mean Line (96.33) of archival data (1970-2011).....	216
4.55 Multiple Line Chart for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	217
4.56 Simple Line Chart for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category	

Frequency of archival data (1970-2011).....	221
4.57 Simple Bar Chart for Appreciation Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Appreciation Category Mean Line (0.66%) of archival data (1970-2011).....	222
4.58 Simple Line Chart for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	228
4.59 Simple Bar Chart for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency with Dating Category Mean Line (220.48) of archival data (1970-2011).....	229
4.60 Multiple Line Chart for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	230
4.61 Simple Line Chart for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	234
4.62 Simple Bar Chart for Dating Category of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Dating Category Mean Line (1.38%) of archival data (1970-2011).....	235
4.63 Simple Line Chart for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011).....	241
4.64 Simple Bar Chart for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency with Depression Category Mean Line (206.00) of archival data (2003-2011).....	242
4.65 Multiple Line Chart for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011).....	243
4.66 Simple Line Chart for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011).....	247
4.67 Simple Bar Chart for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category	

Frequency with % Depression Category Mean Line (96.33%) of archival data (2003-2011).....	248
4.68 Simple Line Chart for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	253
4.69 Simple Bar Chart for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency with Desertion Category Mean Line (39.50) of archival data (1970-1977).....	254
4.70 Multiple Line Chart for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	255
4.71 Simple Line Chart for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	259
4.72 Simple Bar Chart for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Desertion Category Mean Line (2.21%) of archival data (1970-1977).....	260
4.73 Simple Line Chart for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	266
4.74 Simple Bar Chart for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency with Drugs Category Mean Line (227.81) of archival data (1970-2011).....	267
4.75 Multiple Line Chart for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	268
4.76 Simple Line Chart for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	272
4.77 Simple Bar Chart for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Drugs Category Mean Line (1.49%) of archival data (1970-2011).....	273

4.78	Simple Line Chart for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	278
4.79	Simple Bar Chart for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency with Emotional/Mental Category Mean Line (2,120.88) of archival data (1970-2011).....	279
4.80	Multiple Line Chart for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	280
4.81	Simple Line Chart for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency (1970-2011).....	284
4.82	Simple Bar Chart for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Emotional/Mental Category Mean Line (14.35%) of archival data (1970-2011).....	285
4.83	Simple Line Chart for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	291
4.84	Simple Bar Chart for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency with Employment Category Mean Line (227.12) of archival data (1970-2011).....	292
4.85	Multiple Line Chart for Employment Category of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	293
4.86	Simple Line Chart for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	297
4.87	Simple Bar Chart for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Employment Category Mean Line (1.56%) of archival data (1970-2011).....	298
4.88	Simple Line Chart for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	304

4.89	Simple Bar Chart for Family Category Frequency of Annual Total of Crisis Center Call Category with Family Category Mean Line (1,550.63) of archival data (1970-1977).....	305
4.90	Multiple Line Chart for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	306
4.91	Simple Line Chart for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	310
4.92	Simple Bar Chart for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Family Category Mean Line (10.46%) of archival data (1970-1977).....	311
4.93	Simple Line Chart for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	316
4.94	Simple Bar Chart for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency with Finances Category Mean Line (289.19) of archival data (1970-2011).....	317
4.95	Multiple Line Chart for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	318
4.96	Simple Line Chart for Finance Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	322
4.97	Simple Bar Chart for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Finances Mean Line (1.97%) of archival data (1970-2011).....	323
4.98	Simple Line Chart for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	329
4.99	Simple Bar Chart for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency with Food/Shelter Category Mean Line (176.62) of archival data (1978-2011).....	330



4.100 Multiple Line Chart for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data(1978-2011).....	331
4.101 Simple Line Chart for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	335
4.102 Simple Bar Chart for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Food/Shelter Category Mean Line (1.18%) of archival data (1978-2011).....	336
4.103 Simple Line Chart for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011).....	342
4.104 Simple Bar Chart for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency with Grief Category Mean Line (112.22) of archival data (1970-2011).....	343
4.105 Multiple Line Chart for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011).....	344
4.106 Simple Line Chart for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011).....	348
4.107 Simple Bar Chart for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Grief Category Mean Line (0.53%) of archival data (2003-2011).....	349
4.108 Simple Line Chart for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	355
4.109 Simple Bar Chart for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency with Health Category Mean Line (594.36) of archival data (1970-2011).....	356
4.110 Multiple Line Chart for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	357

4.111 Simple Line Chart for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	361
4.112 Simple Bar Chart for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Health Category Mean Line (4.14%) of archival data (1970-2011).....	362
4.113 Simple Line Chart for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	368
4.114 Simple Bar Chart for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency with Homosexual Category Mean Line (162.71) of archival data (1970-2011).....	369
4.115 Multiple Line Chart for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	370
4.116 Simple Line Chart for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	374
4.117 Simple Bar Chart for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Homosexual Category Mean Line (1.02%) of archival data (1970-2011).....	375
4.118 Simple Line Chart for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	381
4.119 Simple Bar Chart for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency with Information Category Mean Line (1,714.19) of archival data (1970-2011).....	382
4.120 Multiple Line Chart for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	383
4.121 Simple Line Chart for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category	

Frequency of archival data (1970-2011).....	387
4.122 Simple Bar Chart for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Information Category Mean Line (3.31%) of archival data (1970-2011).....	388
4.123 Simple Line Chart for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	394
4.124 Simple Bar Chart for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency with Juvenile Category Mean Line (1,837.25) of archival data (1970-1977).....	395
4.125 Multiple Line Chart for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	396
4.126 Simple Line Chart for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	400
4.127 Simple Bar Chart for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Juvenile Category Mean Line (12.72%) of archival data (1970-1977).....	401
4.128 Simple Line Chart for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	406
4.129 Simple Bar Chart for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency with Legal Category Mean Line (126.55) of archival data (1970-2011).....	407
4.130 Multiple Line Chart for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	408
4.131 Simple Line Chart for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	412
4.132 Simple Bar Chart for Legal Category Frequency of Annual Total of Crisis Center Call	

Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Legal Category Mean Line (0.84%) of archival data (1970-2011).....	413
4.133 Simple Line Chart for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	418
4.134 Simple Bar Chart for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency with Lonely Category Mean Line (766.97) of archival data (1970-2011).....	419
4.135 Multiple Line Chart for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	420
4.136 Simple Line Chart for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	424
4.137 Simple Bar Chart for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Lonely Category Mean Line (16.07%) of archival data (1970-2011).....	425
4.138 Simple Line Chart for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	431
4.139 Simple Bar Chart for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency with Marital Category Mean Line (638.12) of archival data (1978-2011).....	432
4.140 Multiple Line Chart for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	433
4.141 Simple Line Chart for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	437
4.142 Simple Bar Chart for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Marital Category Mean Line (3.98%) of archival data (1978-2011).....	438

4.143 Simple Line Chart for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	443
4.144 Simple Bar Chart for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency with Mental Category Mean Line (360.50) of archival data (1977-2011).....	444
4.145 Multiple Line Chart for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	445
4.146 Simple Line Chart for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	449
4.147 Simple Bar Chart for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Mental Category Mean Line (2.37%) of archival data (1970-1977).....	450
4.148 Simple Line Chart for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	456
4.149 Simple Bar Chart for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency with Miscellaneous Category Mean Line (1,052.13) of archival data (1970-1977).....	457
4.150 Multiple Line Chart for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency (1970-1977).....	458
4.151 Simple Line Chart for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977).....	462
4.152 Simple Bar Chart for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Miscellaneous Category Mean Line (7.13%) of archival data (1970-2011).....	463
4.153 Simple Line Chart for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	469

4.154 Simple Bar Chart for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency with Other Category Mean Line (1,982.32) of archival data (1978-2011).....	470
4.155 Multiple Line Chart for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	471
4.156 Simple Line Chart for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	475
4.157 Simple Bar Chart for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Other Category Mean Line (12.60%) of archival data (1978-2011).....	476
4.158 Simple Line Chart for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	482
4.159 Simple Bar Chart for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency with Other Family Category Mean Line (876.24) of archival data (1978-2011).....	483
4.160 Multiple Line Chart for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	484
4.161 Simple Line Chart for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	488
4.162 Simple Bar Chart for Other Family Category of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Other Family Category Mean Line (5.77%) of archival data (1978-2011).....	489
4.163 Simple Line Chart for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency (1978-2011).....	495
4.164 Simple Bar Chart for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency with Physical Abuse Category Mean Line (248.47) of	

archival data (1978-2011).....	496
4.165 Multiple Line Chart for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	497
4.166 Simple Line Chart for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011).....	501
4.167 Simple Bar Chart for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Physical Abuse Category Mean Line (1.63%) of archival data (1978-2011).....	502
4.168 Simple Line Chart for Reassurance Category Frequency of archival data (2006-2011).....	506
4.169 Simple Bar Chart for Reassurance Category Frequency of Annual Total of Crisis Center Call Category Frequency with Reassurance Category Mean Line (2,705.83) of archival data (2006-2011).....	507
4.170 Simple Line Chart for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	512
4.171 Simple Bar Chart for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency with Relationship Category Mean Line (946.40) of archival data (1970-2011).....	513
4.172 Multiple Line Chart for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	514
4.173 Simple Line Chart for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	518
4.174 Simple Bar Chart for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Relationship Category Mean Line (6.07%) of archival data (1970-2011).....	519
4.175 Simple Line Chart for Religious Category Frequency of Annual Total of Crisis Center Call	

Category Frequency of archival data (1970-2011).....	524
4.176 Simple Bar Chart for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency with Religious Category Mean Line (441.29) of archival data (1970-2011).....	525
4.177 Multiple Line Chart for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	526
4.178 Simple Line Chart for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	530
4.179 Simple Bar Chart for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Religious Category Mean Line (2.09%) of archival data (1970-2011).....	531
4.180 Simple Line Chart for School Category of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	537
4.181 Simple Bar Chart for School Category Frequency of Annual Total of Crisis Center Call Category Frequency with School Category Mean Line (64.29) of archival data (1970-2011).....	538
4.182 Multiple Line Chart for School Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	539
4.183 Simple Line Chart for School Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	543
4.184 Simple Bar Chart for School Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % School Category Mean Line (0.41%) of archival data (1970-2011).....	544
4.185 Simple Line Chart for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	549
4.186 Simple Bar Chart for Sex Category Frequency of Annual Total of Crisis Center Call	



Category Frequency with Sex Category Mean Line (621.48) of archival data (1970-2011).....	550
4.187 Multiple Line Chart for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	551
4.188 Simple Line Chart for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	555
4.189 Simple Bar Chart for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Sex Category Mean Line (3.89%) of archival data (1970-2011).....	556
4.190 Simple Line Chart for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1977-2011).....	561
4.191 Simple Bar Chart for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency with Silent Category Mean Line (138.66) of archival data (1977-2011).....	562
4.192 Multiple Line Chart for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1977-2011).....	563
4.193 Simple Line Chart for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1977-2011).....	567
4.194 Simple Bar Chart for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Silent Category Mean Line (0.82%) of archival data (1977-2011).....	568
4.195 Simple Line Chart for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	573
4.196 Simple Bar Chart for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency with Suicide Category Mean Line (131.21) of archival data (1970-2011).....	574

4.197 Multiple Line Chart for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	575
4.198 Simple Line Chart for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	579
4.199 Simple Bar Chart for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Suicide Category Mean Line (0.88%) of archival data (1970-2011).....	580
4.200 Simple Line Chart for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	585
4.201 Simple Bar Chart for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency with Unwed Parent Category Mean Line (140.33) of archival data (1970-2011).....	586
4.202 Multiple Line Chart for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	587
4.203 Simple Line Chart for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	591
4.204 Simple Bar Chart for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Unwed Parent Category Mean Line (0.92%) of archival data (1970-2011).....	592
4.205 Simple Line Chart for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	603
4.206 Simple Bar Chart for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 1: Mental Health Mean Line (4,635.76) of archival data (1970-2011).....	604
4.207 Multiple Line Chart for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	605

4.208 Simple Line Chart for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency (1970-2011).....	609
4.209 Simple Bar Chart for Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 1 Category Mean Line (31.54%) of archival data (1970-2011).....	610
4.210 Simple Line Chart for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	616
4.211 Simple Bar Chart for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 2 Mean Line (3,787.86) of archival data (1970-2011).....	617
4.212 Multiple Line Chart for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	618
4.213 Simple Line Chart for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	622
4.214 Simple Bar Chart for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 2 Category Mean Line (24.71%) of archival data (1970-2011).....	623
4.215 Multiple Line Chart of Annual Total of Crisis Center Call Frequency per Major Group 1: Mental Health Category as Ratio (%) of Annual Total of Crisis Center Call Frequency and Annual Total of Crisis Center Call Frequency per Major Group 2: Interpersonal Category as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1970-2011).....	626
4.216 Simple Line Chart for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	632
4.217 Simple Bar Chart for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 3: Suicide Category Mean Line (131.21) of archival data (1970-2011).....	633

4.218 Multiple Line Chart for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	634
4.219 Simple Line Chart for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	638
4.220 Simple Bar Chart for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 3: Suicide Category Mean Line (0.29%) of archival data (1970-2011).....	639
4.221 Simple Line Chart for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	644
4.222 Simple Bar Chart for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 4: Physical Health Mean Line (1,255.83) of archival data (1970-2011).....	645
4.223 Multiple Line Chart for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	646
4.224 Simple Line Chart for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	650
4.225 Stacked Bar Chart for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 4: Physical Health Category Mean Line (8.27%) of archival data (1970-2011).....	651
4.226 Simple Line Chart for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	658
4.227 Simple Bar Chart for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 5: Abuse and Violence Category Mean Line (201.14) of archival data (1970-2011).....	659
4.228 Multiple Line Chart for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	660

4.229 Simple Line Chart for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data ( 1970-2011).....	664
4.230 Simple Bar Chart for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 5: Abuse and Violence Category Mean Line (1.32%) of archival data (1970-2011).....	665
4.231 Simple Line Chart for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	671
4.232 Simple Bar Chart for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 6 Mean Line (1,255.83) of archival data (1970-2011).....	672
4.233 Multiple Line Chart for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	673
4.234 Simple Line Chart for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	677
4.235 Simple Bar Chart for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 6: Basic Necessities Category Mean Line (16.14%) of archival data (1970-2011).....	678
4.236 Simple Line Chart for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	684
4.237 Simple Bar Chart for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 7: Sexual Category Mean Line (784.19) of archival data (1970-2011).....	685
4.238 Multiple Line Chart for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	686
4.239 Simple Line Chart for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center	

Call Category Frequency of archival data (1970-2011).....	690
4.240 Simple Bar Chart for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 7: Sexual Category Mean Line (4.90%) of archival data (1970-2011).....	691
4.241 Simple Line Chart for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	697
4.242 Simple Bar Chart for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 8: Other category Mean Line (1,920.69) of archival data (1970-2011).....	698
4.243 Multiple Line Chart for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	699
4.244 Simple Line Chart for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011).....	703
4.245 Simple Bar Chart for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 8: Other Category Mean Line (12.24%) of archival data (1970-2011).....	704
4.246 Multiple Line Chart for Day Category of Annual Total of Crisis Center Call Day Frequency of archival data (1970-2011).....	712
4.247 Stacked Bar Chart of Day Categories of Annual Total of Crisis Center Call Day Frequency of archival data (1970-2011).....	713
4.248 Multiple Line Chart of Day Category Frequencies of Annual Total of Crisis Center Call Day Frequency as Ratio (%) of Annual Total of Crisis Center Call Day Frequency of archival data (1970-2011).....	718
4.249 Stacked Bar Chart for Day Category Frequencies of Annual Total of Crisis Center Call Day Frequency as Ratio (%) of Annual Total of Crisis Center Call Day Frequency of archival data (1970-2011).....	719
4.250 Simple Line Chart for Month Category Frequencies of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011).....	727

4.251 Multiple Bar Chart for Month Category Frequency of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011).....	728
4.252 Multiple Line Chart for Month Categories of Annual Total of Crisis Center Call Month Category Frequencies as Ratio (%) of Annual Total of Crisis Center Call Month Category Frequencies encompassing Forty-two Years of archival data (1970-2011).....	736
4.253 Stacked Bar Chart for Month Categories of Annual Total of Crisis Center Call Month Category Frequencies as Ratio (%) of Annual Total of Crisis Center Call Month Category Frequencies encompassing Forty-two Years of archival data (1970-2011).....	737
4.254 Multiple Line Chart for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011).....	752
4.255 Stacked Bar Chart for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011).....	753
4.256 Multiple Line Chart for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency as Ratio (%) of Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011).....	758
4.257 Stacked Bar Chart for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency as Ratio (%) of Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011).....	759
4.258 Multiple Line Chart for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Category Frequency of archival data (1970-2011).....	765
4.259 Stacked Bar Chart for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Category Frequency of archival data (1970-2011).....	766
4.260 Multiple Line Chart for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011).....	770
4.261 Stacked Bar Chart for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Category Frequency (1970-2011).....	771

## LIST OF ABBREVIATIONS

CAFS, Caller Frequency Category System

CPI, California Psychological Inventory

DHHS, U. S. Department of Health and Human Services

nsa, not seasonally adjusted

SD, Standard Deviation

SPD, Serious Psychological Distress

SAMSHA, Substance Abuse and Mental Health Services Administration

TN, Tennessee

US, United States

VCL, Volunteer Call Log



## LIST OF SYMBOLS

=, equal to

$\neq$ , not equal to

p, correlation value

r, Pearson Product Moment Correlation value

## CHAPTER 1: INTRODUCTION

### Background

Integral to an individual's happiness is their ability to create and sustain a meaningful and satisfying life. A necessary component for an individual's ability to engage in that pursuit is the individual's mental health. As defined by the World Health Organization,

“Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. In this positive sense, mental health is the foundation for individual well-being and the effective functioning of a community. (2010, p. 1)

For all individuals, mental, physical and social health are vital strands of life that are interwoven and deeply interdependent. Those vital strands that sustain a meaningful and satisfying life can become fragile when an individual experiences a crisis event. A crisis event can be personal in nature, initiated by the collapse of a romance or dissolution of a marriage, death of spouse, child or other significant family member or friend, loss of job or other economic hardship, deterioration of physical health or diagnosis of a life threatening disease, victim of violent act such as robbery, assault or rape, and impact of substance abuse are just a few example of a life situation that can cause a crisis episode. A crisis event can be community-wide in nature, initiated by acts of nature such as flooding, tornado, hurricane, or earthquake, indiscriminate mass violence committed at the hands of a deranged individual, closing of a manufacturing plant or large business are all examples of life events precipitated by events

outside of the control of an individual while causing a crisis episode, non-the-less. A crisis event can be non-specific in nature, initiated by the accumulation of many lesser events that culminate in the onset of a crisis episode.

When the crisis episode is caused by a sudden, arbitrary or random event, the crisis is considered acute. When the crisis episode is the result of a series of individual events occurring over a period of time with each event pushing the individual toward the resulting state of disequilibrium, the crisis is considered chronic. When the crisis episode is caused by transitions in life, such as adolescence, marriage, parenthood and retirement, the crisis episode is considered developmental. Regardless of the cause, the impact is the same; a period of psychological disequilibrium where the individual's typical coping mechanisms are no longer effective in the individual's ability to function in day to day life.

A crisis episode has three (3) distinct phases (O'Donnell, 2001):

1. The acute phase occurs immediately to within 48 hours of the traumatic event. An individual may experience an emotional state of shock, disbelief and/or denial.
2. The cataclysm phase occurs between 48 hours to several months of the traumatic event. An individual may experience feelings of helplessness, anxiety, confusion, anger and frustration.
3. The reconstruction phase occurs when the individual begins to regain some form of emotional equilibrium.

An individual's social structure can be invaluable source of support when experiencing a crisis episode; family, coworker(s) and/or community resources can provide assistance to an individual in need. Regardless of the available social resources, an individual may decide the

impact of a traumatic event cannot be resolved on their own and contending with day-to-day life requires assistance and expertise beyond the support of their familial, social and community relationships. In the late 1960's, the development of telephone crisis call centers in the United States attempted to provide assistance for those in distress or crisis whom may be without either the financial resources to seek help from a mental health professional or for whom a mental health care professional was unavailable. The crisis intervention center can provide immediate service in crisis assessment, intervention, information and referrals, or an active listener to the individual in need of temporary assistance when experiencing a crisis episode. As of 2000, there were over 9,000 crisis intervention centers in existence nationwide:

. . . including “all national and local 24-hour crisis lines, (such as those) for crime victims, battered women, sexual assault victims, troubled employees, adolescent runaways, and child abuse victims as well as the crisis intervention units at mental health centers , the total estimate would be approximately 35 to 45 million crisis calls per year.” (Roberts, 2002, pg.7)

With use of crisis intervention centers increasing, understanding their role as a component of an individual's social structure is fundamental to understanding and addressing the needs of that individual.

### Objectives of the Study

CONTACT of Chattanooga is a non-denominational Christian crisis call center that has provided assistance to the greater Chattanooga community since September of 1969, making it one of the country's longest established crisis call centers. Simply stated, their mission is “Helping people in crisis and need, 24 hours a day, 365 days a year.” (CONTACT of Chattanooga, 2012, p. 1)

In the last 43 years, 629,710 anonymous crisis calls have been received by CONTACT of Chattanooga. Volunteer call logs (VCLs) created at the time of the crisis telephone call provide a descriptive report as a document of the call. Since September of 1969, the VCLs have been tabulated for frequency encompassing a variety of data. The VCLs code crisis call for 34 different categories of crisis call, as well as describe other information such as gender, age, marital status, emotional state and number of repeat callers. These data have been annualized and made available to the public as a Statistical Report. This public archive of CONTACT of Chattanooga crisis call center frequency data provides a salient opportunity to examine the crisis center call frequency for:

1. Specificity, such as gender and crisis call category frequency as a means to describe the crisis call center population distributions and identify specific caller needs;
2. Longitudinally variation for change in population descriptions and crisis call category distributions that reflect use population changes; as well as
3. Correlations with other socioeconomic data for additional variables that might be associated with crisis center use.
4. Implications of broader moral and social implications that might be associated with crisis center call frequency.

## CHAPTER II: LITERATURE REVIEW

### Introduction

Previous research literature on crisis intervention centers has been topic specific, with studies focusing on a particular variable or aspect associated with a crisis intervention center. Literature may examine a specific descriptor of the population served by the crisis intervention center, crisis specific topics such as suicide, and/or issues related to the organizational structure of the center such as volunteer selection and evaluation of treatment modalities.

### Review of the Literature

Of primary importance is identification of the use population for a crisis intervention center. Assessing the influence of vulnerability factors and their effect on the coping mechanisms of an individual experiencing a life crisis was measured in a retrospective study of 100 referral to a crisis intervention center. The research suggested that individuals without a confidante were more likely to have an unsuccessful outcome (Cullen, Ballard, & Mohan, 1991). Caller expectations about the outcome of a crisis center call can influence the perceived value of the outcome of that call regardless of the reason for the call (McGowen & King, 1980).

Identifying a first-time call or repeat call is the first priority of the crisis center volunteer. Research suggests that chronic or frequent callers can be identified using the Caller Frequency Category System (CAFS) (Johnson & Barry, 1978) While it may be easier for volunteers to identify repeat callers in a local crisis call center and not necessitate use of the CAFS, chronic or

frequent callers represent a significant issue for telephone based crisis intervention services. Frequent callers raise practical and clinical issues that are different than ones associated with first time callers. Haycock (1998) suggests that frequent callers differ from non-frequent callers in a variety of factors; greater psychiatric impairment, differences in demographic variables, and differences in presenting problems.

Caller preference for anonymity was examined for personality characteristics that might differentiate them from name given callers. Researchers examined 37 suicidal subjects from a crisis call center and found that suicidal subjects who wished to remain anonymous were not statistically different from suicidal subjects who would give their names. However, anonymous subjects were more likely to describe themselves as “lonely” (Nelson, 1975).

Prior research with respect to gender suggests that the majority of a crisis call center population is female, regardless of age or type of hotline (Baron, Klein, & Thurman 1980; Franks & Medforth 2005; Teare, Garrett, Coughlin, Shanahan, & Daly 1995). Treatment models for females often focus on issues related to advocacy centers for victims of spousal abuse, rape, and assault, such as identifying treatment goals of the client population (Geller & Walsh, 1977). Research that identifies therapeutic approaches that are most likely to be effective for sexual assault survivors and recommendations for effective treatment modalities typically address issues that are women specific, acknowledging the unique factors that may precipitate a crisis episode for a woman (Decker & Naugle, 2009). Predicting domestic violence incidence rates and identifying potential factors that might increase violence frequency is often examined in respect to lunar phases. Although researchers found no statistical evidence of a correlation, many individuals within the law enforcement community continue to perceive a positive

correlation between the full moon phase and perceived increase in reported incidents of domestic violence (Dowling, 2005).

In 1973, a survey of 253 crisis call centers and hotlines identified drug use related calls as the most frequent type of crisis call category, overall a 20% of all calls reported in this category, with a range from 2% to 80% (McCord & Packwood, 1973). Additional factors pertaining to drug use related calls include the volunteers' prior drug experience and subsequent impact on volunteer effectiveness (Levy & Brown, 1974), as well as evaluating treatment modalities for outcome effectiveness on drug related calls (Clark & Rootman, 1974).

The research literature related to suicide specific topics encompasses a wide variety of issues related to the suicidal crisis center caller. Research can be as specific as a case report of a chronically suicidal woman and a discussion of the strengths and weaknesses of therapeutic models in dealing with the chronically suicidal caller (Berman, 1990). Evaluation of the effectiveness of interaction of the chronically suicidal with a crisis intervention center found virtually no long-term helpful effect (McKenna, 1975). Volunteer response times to suicidal callers were evaluated for differences between in-house telephone answering services and out-sourced agencies (McGee, Richard, & Bercun, 1972). Leenaars and Lester (1995) examined the correlation between the presence of suicide prevention centers and suicide rates in Canada. They found a tendency for a reduction in the suicide rate when a suicide prevention center was present in the community. Discussing and addressing administrative and procedural issues associated with a suicide and crisis intervention centers suggest the importance of establishing formal guidelines for situations where no actual cultural norms exist (Motto, 1973). The ethical and moral issues of whether or not the goal of the crisis intervention center should be suicide



prevention are discussed in the context of distinguishing between a caller's "cry for help" and "suicide enactment" (Lester, 1996).

More recent literature reporting crisis call center call category data suggests that current call category frequency concerns mental health issues, and specifically individuals suffering from depression (Fakoury 2002; Potenza, Steinberg, McLaughlin, Wu, Rounsaville, & O'Malley 2001). Bryant and Harvey (2000) suggest that telephone counseling services that target specific populations should employ comprehensive training specific to that target population to ensure that volunteers possess adequate and relevant knowledge about that population and the populations' specific needs.

Archival data from crisis specific call centers can provide insight into the factors contributing to the onset of a crisis episode in the family context. The examination of data, collected from 26 parents who called a crisis hot-line seeking to prevent child abuse, for factors associated with the crisis episode found a positive correlation between the number of children and length of time in the community (Pardeck & Nolden, 1985). Other studies offer models for establishing age specific crisis intervention centers. Friedrich (1977) describes a social model for a youth crisis information center in Austria .

An important component of the crisis intervention center is the volunteer. Researchers have attempted to identify typical personality variables associated with the volunteers who choose to donate their discretionary time to a crisis intervention center. Engs and Kirk (1974) conducted survey study of five crisis intervention centers in the State of TN asking volunteers who had worked for at least one month to complete the California Psychological Inventory (CPI) (Megargee, 2009). Demographic results were reported for gender, age, reason of service, and

career designation. Descriptive statistics for gender indicated that 55 percent of all volunteers were females and 45 percent were males. Descriptive statistics for age appeared to primarily present two distinct age groups; 24.3 percent were from the 20-24 age category and 36.5 percent were from the 40+ age category, with the mean age reported as 34.7. Descriptive statistics for reason of service reported that 72 percent indicated motivation “to help others” as their primary reason for volunteering while the remaining 28 percent indicated motivation for “self-growth,” “experience,” or “course credit.” Evaluation of longevity of volunteer service indicated that volunteers working to help others worked almost twice as many months as volunteers working for self-growth, experience, or course credit. Descriptive analyses showed that 85.1 percent of the volunteers were nonprofessionals while 14.9 percent were professionals working as practicing physicians, nurses, clergy, social workers, psychologists, or students in one of these disciplines.

Of equal importance to the crisis intervention center are issues of staff retention and the identification of potential factors leading to staff turnover. Roberts and Camasso (1994) examined 107 crisis intervention centers for a variety of potential factors leading to staff retention and turnover; factors included organizational setting, staffing patterns, funding issues, and service population. They found a correlation between staffing turnover and service to high risk groups suggesting that volunteer burnout may be related to prolonged exposure to intense crisis episodes. Conversely, discordance between volunteer expectations and the actual volunteer experience may be related to staff turnover and burnout, as well. Anecdotal evidence from CONTACT of Chattanooga administrative staff suggests that volunteers whose expectations are “to help others” as opposed to “self-growth,” “experience,” or “course credit”

become disengaged when they experience a high frequency of non-crisis related calls. While the observation is interesting, further research is necessary to examine the veracity of this observation. A mentor training model has been suggested as a technique for volunteer training at crisis intervention centers (Kranz & Lock, 1985). Ebert (1976) recommends the need for establishing procedures to ensure caller confidentiality when his study found that many centers allowed the listening of calls on telephone extensions by other volunteer staff without the knowledge and consent of the caller.

The value of specific therapeutic models and the timeliness of delivery of therapy as a factor of perceived benefit of those models is debated within the literature. The seven-stage crisis intervention model seeks to establish a systematic and structured conceptual model for crisis assessment and intervention (Roberts & Ottens, 2005). The therapeutic effectiveness of telephone therapy, face-to-face or delayed therapy (control group) for short-term crisis intervention was investigated with respect to 15-57 year old female non-emergency outpatients. Results suggested that subjects receiving either therapy were improved over the control group subjects suggesting that the proximity of treatment to the crisis event is an important component in the value of the therapy (Perri, 1972). The Emergency Treatment Center backs up 10 police departments in Palo Alto, California to provide services to people and adolescents who are experience psychological emergencies to facilitate a rapid response time for those individuals experiencing a crisis event (Everstine, Bodin, & Erstine, 1977). After September 11, 2002 and the terrorist attacks in the United States, school based assessment for children suffering from Post Traumatic Stress Disorder (PTSD) emphasized both immediate and follow-up activities for children experiencing a crisis episode (Webb, 1994). The value of silence as an indicator of pain

is discussed as an important component of the therapeutic model in the crisis center call and that listening to silence is an essential role for the volunteer attempting to help a person experiencing a crisis episode (Scott & Lester, 1998).

An extensive body of research has been examined temporal fluctuations as a factor in call frequency variations in crisis intervention centers. Durkheim (1897) presented descriptive data that suggested suicide increased based on temporal fluctuation; increasing from January to June, and then decreasing the rest of the year. Additionally, he suggested that the lowest suicide rates were found on Friday, Saturday and Sunday and noted variations in rates between the beginning of the month and end of the month citing “38 percent in the first days of the month, 32 percent in the next 10 days and 30 percent in the last 10 days” (1897, p. 119). Nobel (1996) examined suicide-related call frequency in relationship to temporal variability and found the fluctuations large enough to suggest adjusting the scheduling of crisis center staff to accommodate those variations. However, Gabennesch (1988) contends “the suicidal person’s affective state can be adversely influenced by circumstances which tend to promote the aspiration or expectation for feeling better” (p. 138). He suggests that the spring, weekends, and holidays are examples of events that may contain more potentiality than they deliver, and the subsequent discrepancy between the expectation and the actual event is responsible for the suicide behavior rather than temporal patterns. Voracek and Sonneck (1999) suggest that there is sufficient evidence for both theories, and further research is necessary to determine the statistical significance of the biometeorological effects on crisis center call frequency.

The function and value of a crisis intervention center is examined within the research literature. Within the cognitive psychology framework, Haywood (1977) suggests a therapeutic

model that challenges an individual's subjective conceptions about the meaning of stress as a means of helping them cope with stress. Within crisis specific intervention centers, researchers knowledge the evolving function of the crisis intervention center within the community context and the emerging importance of the crisis center as a community coordinator (Nelson, 1977).

## Summary

Previous studies have provided valuable information pertinent to a particular aspect of the crisis call center; information pertaining to a specific type of caller, a particular need, or an aspect of the structural, organizational, philosophical, or methodological factors associated with a crisis intervention center environment. Studies are needed that longitudinally focus on the non-specific crisis call centers whose mandate seeks to serve an individual coping with a wide variety of issues across their lifespan (Ingram, Ringle, Hallstrom, Schill, Gohr & Thompson, 2007). To the best of my knowledge, no previous studies have attempted to examine a complete set of data associated with a specific crisis call center. Examining the data in this manner would provide a more complete description of the complex social community contained within the structure of a crisis intervention center.

The purpose of this thesis is to provide an exhaustive descriptive statistical analysis encompassing forty-three (43) years of archival data (1969-2011) from a non-specific crisis call center. There exist inherent statistical limitations in a data set containing only frequency distributions without the ability to cross-tabulate call parameters. Nonetheless, the descriptive statistical analysis reports the suggested interpretative complexities contained within the archival data. The scope of analysis, frequency tabulation, descriptive statistical analyses, and interpretation of results for each call parameter are contained within their respective sections.

## CHAPTER III: METHODOLOGY

### Introduction

CONTACT of Chattanooga is a non-denominational Christian crisis call center that has provided crisis intervention and help-line services to the greater Chattanooga, Tennessee area since September 8, 1969. Functioning under a non-profit charter, calls to the crisis intervention center are free of charge, anonymous and confidential.

### Program Description

Initially, trained volunteers accepted calls 24 hours, 7 days a week, throughout the year, offering active listening, encouragement, information and referral to regional social service agencies for those experiencing a crisis episode. Since 2006, budgetary constraints have caused the crisis call center to restrict hours of operation from 7 a.m. to 11 p.m.

### Advertisement of Services

CONTACT of Chattanooga utilizes various sources of advertising media to inform the general public regarding the existence of the crisis call center and provide a description of services available. Those advertising media include but are not limited to the following:

1. Pre-printed flyers posted in public places
2. Pre-printed brochures
3. Public Service Announcements in Radio, Television and Movie Theaters
4. Large Scale Advertisements on Billboards and Buses

## 5. Internet Website

### Participants

CONTACT of Chattanooga accepts all telephone calls to the crisis center.

### Volunteers and Training

CONTACT of Chattanooga's telephone lines are staffed by trained volunteers. Although volunteers are generally recruited from local churches, any adult interested in becoming a caring listener is eligible to become a crisis call center volunteer.

Volunteers must successfully complete the required training of 50 hours of training in basic counseling skills. Training is available from a variety of sources; basic classroom instruction in crisis call management, monthly in-service training and a library of pre-recorded lectures that address specific topics; including domestic violence, substance abuse, eating disorders, loss and grief, and human sexuality.

Typically, CONTACT of Chattanooga maintains a roster of 60-70 active volunteers; at one time, they had as many as 200 volunteers and currently have 55. The volunteers at CONTACT of Chattanooga are a dedicated community with many maintaining a long term commitment to the crisis call center; six volunteers have received crisis center calls for 30+ years, thirteen for 20+ years, and eight for 15+ years. Volunteers typically work four (4) hour shifts, once or twice a month.

### Approach/Protocols

The crisis call center volunteers engage anonymous callers in active listening while providing encouragement to those who need affirmation, as well as offering information and referral to regional social service agencies in the greater Chattanooga area. Crisis center call

guidelines recommend a maximum length of fifteen (15) minutes for a call, with exceptions for an individual experiencing an acute crisis that may necessitate additional time to adequately address the expressed needs of the caller. While no audio record is generated during the call, volunteers gather data from each crisis center call and document that data on a Volunteer Call Log (VCL). Administrative personnel tabulate the data from the VCLs. An annual statistical report of crisis center call frequency is generated from the tabulated data.

#### Data Coding

A Volunteer Call Log (VCL) is generated at the time of receipt of the crisis center call to document the call. A variety of descriptive information is indicated on the VCL according to the volunteer. All descriptive information is based on either self-report disclosed during the crisis center call or a “best guess estimate” of the information by crisis center volunteer. As anonymity is of primary importance, no attempt is made to verify the information disclosed during the call or estimated by the volunteer. Each VCL is tabulated as a “call” and no regard is made as to whether or not the document represents a unique caller.

VCL documents data grouped per gender, age and marital status, purpose of call, time and day of call. A designation of “unknown” is indicated on the VCL when the volunteer has not been provided with the data for a specific descriptive category of information and is unable to discern the appropriate designation for descriptive. Volunteers document other variables of interest on the VCLs, such as whether caller is a repeat caller or whether caller chooses to disclose their name.

In reviewing of the frequency data, it is assumed that any individual requiring an “immediate emergency service” would call the appropriate agency and not the crisis call center.



For example, if someone were having a “heart attack,” the individual would call “911” rather than the crisis center. Therefore, any crisis center call designated by a category descriptor is assumed to be a call regarding an emotional duress with respect to the category descriptor rather than an immediate emergency. The only call category that is of exception to this assumption is the call category for suicide.

#### Scope and Limitations of the Study

The annual statistical report contains frequency distributions for gender, age, marital status, repeat call, name disclosure, call category, time, day and month. The scope of frequency tabulations were expanded during the forty-three years of collection of the archival data; not all descriptive information for call categories were tabulated across all years. Specifics for each frequency tabulation and the years encompassed will be addressed in the section specific to each frequency distribution of the archival data, as well as the analysis of the descriptive results.

During the tabulation of the data contained in the annual statistical reports, some inconsistencies in the frequency totals across descriptive categories were noted. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies contained within the archival data. All data contained within the annual statistical reports are represented in longitudinal statistical evaluation on an “as is” basis. To reconcile these frequency inconsistencies, spreadsheets were generated to verify totals for each descriptive category ensuring that frequency results accurately report the forty-three years of the archival data.

During the collection of the archival data, frequency distributions contained in the VCLs were not cross tabulated with any other crisis center call frequency data. Analysis of the archival

data is limited to a descriptive statistical analysis of the frequency distributions tabulated from the VCL's. When longitudinal data of regional, state or national socioeconomic parameters were available, correlation coefficients were calculated to identify additional statistical descriptions that might be suggested as being associated with the crisis call center frequency distributions.

### Significance of the Study

Of importance to any organization is the descriptive identification of the population that organization serves. Understanding the population of service allows the organization to critically evaluate whether or not they are meeting the needs of that population, as well as identify areas for improvement within the organization. For CONTACT of Chattanooga, this information is important for a variety of reasons:

1. By statistically describing the population that utilize the crisis call center, CONTACT of Chattanooga can identify the population that utilize the crisis call center.
2. By identifying the population that utilize the crisis call center, CONTACT of Chattanooga can evaluate whether or not they are adequately meeting the needs of the crisis call center caller.
3. Evaluating the needs of the population that utilize the crisis call center, CONTACT of Chattanooga can evaluate the training process of the volunteers who provide services to the crisis center caller and whether or not the volunteer training is sufficient to prepare the volunteer staff to meet the needs of the crisis center caller.

## CHAPTER IV: RESULTS

### Annual Total of Crisis Center Call Frequency

#### *Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Years*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. The forty-three (43) years of archival data encompasses the years of 1969 through 2011. A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call frequency encompassing the forty-three (43) years of the archival data (1969-2011). Results of the descriptive statistical analysis reported a sum of 629,710 for the crisis center call frequency with a mean of 14,644.42 and a standard deviation of 3,722.951. Descriptive statistical analysis reported a minimum frequency of 3,860 and a maximum frequency of 21,292 for the annual total of crisis center call frequency.

Including the incomplete year of 1969 ( $n \neq 12$ ) in the descriptive statistical analysis would have produced skewed results in the descriptive statistical analysis. While the results are informative in calculating the frequency total encompassing the forty-three (43) years of the archival data (1969-2011), the year of 1969 ( $N = 3$ ) should be removed and the archival data reanalyzed encompassing the forty-two (42) complete (1970-2011) to produce statistically accurate descriptive results.

*Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Complete Year*

The archival data for the annual total of crisis center call frequency was grouped per complete year ( $n = 12$ ), excluding the year of 1969 as an incomplete year ( $n \neq 12$ ). Forty-two (42) complete years were identified from the archival data (1970-2011).

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call frequency encompassing forty-two (42) complete years ( $n = 12$ ) of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 625,850 for crisis center call frequency with a mean of 14,901.19 and a standard deviation of 3,360.69. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call frequency per complete years.

When performing descriptive statistical analysis and the archival data set is used in its entirety including the year of 1969, the archival data shall be referred to as “forty-three (43) years of archival data (1969-2011).” When performing descriptive statistical analysis and the archival data set is used excluding the year of 1969, the archival data shall be referred to as “forty-two (42) complete years of the archival data (1970-2011).”

The archival data was evaluated per frequency distribution of the annual total of crisis center call frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The year of 2010 was identified as the year reporting the minimum frequency of the annual total of crisis center call frequency (6,733). The year of 1988 was identified as the year reporting the maximum frequency of the annual total of crisis center call frequency (21,292).

The archival data was evaluated per frequency distribution relative to the mean (14,901.19) for the annual total of crisis center call frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The year of 1982 (15,047) was identified as the year closest to the mean (+145.81). The year of 2010 (6,733) was identified as the year furthest from the mean (-8,168.19).

The simple line chart of the annual total of crisis center call frequency suggests that there exists a steady decline in the frequency of crisis center calls since the year of 2003. Further investigation is required to determine if this frequency decline is statistically significant and subsequent implications for crisis center call use. (see section on crisis center call frequency as it relates to annual estimates of population in Hamilton County, TN.)

Descriptive statistical analyses results for forty-three (43) years (1969-2011) and forty-two (42) complete years (1970-2011) are reported in Table 4.1. Figure 4.1 provides a visual representation for the annual total of crisis center call frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.2 provides a visual representation for the annual total of crisis center call frequency as a simple bar chart encompassing forty-two (42) complete years (1970-2011) of the archival data with a complete years mean line ( $m = 14,901.19$ ). Black bars represent years reported as having highest (1988) and lowest (2010) frequency.

Table 4.1  
 Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Years (1969-2011)  
 and Complete Years (1970-2011) of archival data

Descriptive Statistics			
		Call Frequency Years (1969-2011)	Call Frequency Complete Years (1970-2011)
N	Valid	43	42
	Missing	0	0
Minimum		3,860	6,733
Maximum		21,292	21,292
Sum		629,710	625,850
Mean		14,644.42	14,901.19
Standard Deviation		3,722.95	3,360.69



Figure 4.1 Simple Line Chart for Annual Total of Crisis Center Call Frequency per Complete Years of archival data (1970-2011)

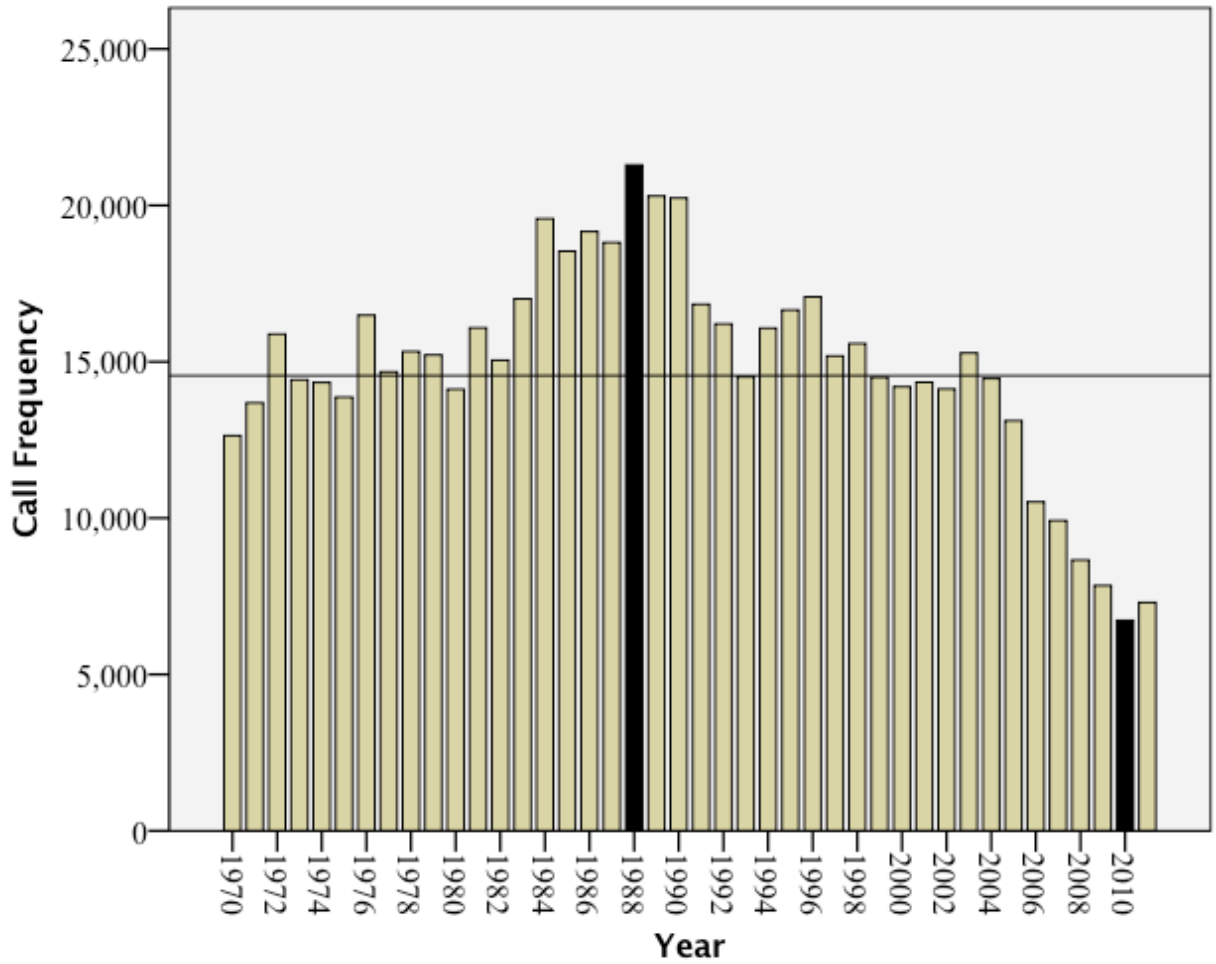


Figure 4.2 Simple Bar Chart for Annual Total of Crisis Center Call Frequency per Complete Years with Complete Years Mean Line (14,091.19) of archival data (1970-2011)



## Annual Total of Crisis Center Call Frequency per Decade

### *Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Complete Decade*

The archival data for the annual total of crisis center call frequency was grouped per decade ( $n = 10$ ). Inclusion of incomplete decades ( $n \neq 10$ ) in procedures for statistical analyses would have reported skewed results. Therefore, decades 1960-1969 and 2010-2019 are excluded from descriptive statistical analyses for the annual total of crisis center call frequency when grouped per decade. Four (4) complete decades were identified encompassing forty (40) years of the archival data (1970-2009).

Descriptive statistical analyses evaluated the annual total of crisis center call frequency when grouped per decade encompassing forty (40) years of archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 611,817 for the annual total of crisis center call frequency when grouped per complete decade with a mean of 15,295.43 and a standard deviation of 2,919.20. Descriptive statistical analysis reported a minimum frequency of 7,866 and a maximum frequency of 21,292 for the annual total of crisis center call frequency when grouped per complete decade.

Descriptive statistical analysis results for the annual total of crisis center call frequency encompassing forty-three (43) years of archival data (1969-2011), the annual total of crisis center call frequency encompassing forty-two (42) complete years of the archival data (1970-2011) and the annual total of crisis center call frequency when grouped by complete decade encompassing forty (40) years of the archival data (1970-2009) are reported in Table 2 for comparison purposes.

When performing descriptive statistical analysis and the archival data set is used in its entirety including the year of 1969, the data set shall be referred to as “forty-three (43) years of the archival data (1969-2011).” When performing descriptive statistical analysis and the archival data set is used excluding the year of 1969, the data set shall be referred to as “forty-two (42) complete years of the archival data (1970-2011).” When performing descriptive statistical analysis and the archival data set is used excluding the decades of 1960-1969 and 2010-2019, the data set shall be referred to as “ four (4) complete decades of the archival data (1970-2009).”

Descriptive statistical analysis reports the highest total frequency (625,710) for the annual total of crisis center call frequency encompassing forty-three (43) years of the archival data (1969-2011) and the lowest total frequency (611,817) for the annual total of crisis center call frequency when grouped by decade encompassing four (4) complete decades of the archival data (1970-2009).

Descriptive statistical analysis reports the highest mean (15,295.43) for the annual total of crisis center call frequency when grouped by decades encompassing four (4) complete decades of archival data (1970-2009) and the lowest mean (14,019.19) for the annual total of crisis center call frequency encompassing forty-two (42) complete years of the archival data (1970-2011).

Descriptive statistical analysis reports the highest standard deviation (3,722.95) for the annual total of crisis center call frequency encompassing forty-three (43) years of archival data (1969-2011) and the lowest standard deviation (2,919.20) for the annual total of crisis center call frequency when grouped per decade encompassing four-(4) complete decades of the archival data (1970-2009).

Descriptive statistical analysis results for the annual total of crisis center call frequency per years (1969-2011), complete years (1970-2011) and complete decades (1970-2009) of the archival data are reported in Table 4.2.

Table 4.2  
 Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Years (1969-2011),  
 Complete Years (1970-2011) and Complete Decades (1970-2009) of archival data

Descriptive Statistics		Call Frequency Years (1969-2011)	Call Frequency Complete Years (1970-2011)	Call Frequency Complete Decades (1970-2009)
N	Valid	43	42	40
	Missing	0	0	0
Minimum		3,860	6,733	7,844
Maximum		21,292	21,292	21,292
Sum		629,710	625,850.00	611,817.00
Mean		14,644.42	14,019.19	15,295.43
Standard Deviation		3,722.95	3,360.69	2,919.20

*Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Complete Decade Group*

The archival data for the annual total of crisis center call frequency when grouped per the decade of 1970-1979 was evaluated encompassing four (4) complete decades of the archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 146,546 crisis center call frequency for the decade of 1970-1979 with a mean of 14,654.60 and a standard deviation of 1,126.05. The year of 1970 was identified as the year incurring the minimum frequency of the annual total of crisis center call frequency (12,639) within the decade of 1970-1979. The year of 1976 was identified as the year incurring the maximum frequency of the annual total of crisis center call frequency (16,487) within the decade of 1970-1979.

The archival data for the annual total of crisis center call frequency when grouped per the decade of 1980-1989 was evaluated encompassing four (4) complete decades of the archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 179,936 crisis center call frequency for the decade of 1980-1989 with a mean of 17,993.60 and a standard deviation of 2,340.76. The year of 1980 was identified as the year incurring the minimum frequency of the annual total of crisis center call frequency (14,121) within the decade of 1970-1989. The year of 1988 was identified as the year incurring the maximum frequency of the annual total of crisis center call frequency (21,292) within the decade of 1980-1989.

The archival data for the annual total of crisis center call frequency when grouped per the decade of 1990-1999 was evaluated encompassing four (4) complete decades of the archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 162,866 crisis center call frequency for the decade of 1990-1999 with a mean of 16,286.60 and a standard deviation of 1,656.06. The year of 1999 was identified as the year incurring the minimum

frequency of the annual total of crisis center call frequency (14,506) within the decade of 1990-1999. The year of 1990 was identified as the year incurring the maximum frequency of the annual total of crisis center call frequency (20,231) within the decade of 1990-1999.

The archival data for the annual total of crisis center call frequency when grouped per decade of 2000-2009 was evaluated encompassing forty (40) years of archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 122,469 crisis center call frequency for the decade of 2000-2009 with a mean of 12,246.90 and a standard deviation of 2,734.03. The year of 2009 was identified as the year incurring the minimum frequency of the annual total of crisis center call frequency (7,844) within the decade of 2000-2009. The year of 2003 was identified as the year incurring the maximum frequency of the annual total of crisis center call frequency (15,277) within the decade of 2000-2009.

The archival data for the annual total of crisis center call frequency was evaluated encompassing forty (40) years of archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 611,817 for the annual total of crisis center call frequency with a mean of 115,295.43 and a standard deviation of 2,919.20. The year of 2009 was identified as the year incurring the minimum frequency of the annual total of crisis center call frequency (7,844). The year of 1988 was identified as the year incurring the maximum frequency of the annual total of crisis center call frequency (21,292).

Descriptive statistical analysis results for annual total of crisis center call frequency when grouped per complete decade group encompassing four (4) complete decades of the archival data (1970-2009) are reported in Table 4.3. Figure 4.3 provides a visual representation for the annual total of the crisis center call frequency when grouped per decade as a box plot diagram

encompassing four (4) complete decades of the archival data (1970-2009) with a complete decades mean line (15,295.43).

Table 4.3  
 Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Complete Decade  
 Group of archival data (1970-2009)

Descriptive Statistics						
		Decade 1970-1979	Decade 1980-1989	Decade 1990-1999	Decade 2000-2009	Call Frequency (1970-2009)
N	Valid	10	10	10	10	40
	Missing	0	0	0	0	0
Minimum		12,639	14,121	14,506	7,844	7,844
Maximum		16,487	21,292	20,231	15,277	21,292
Sum		146,546	179,936	162,886	122,469	611,817
Mean		14,654.60	17,993.60	16,286.60	12,246.90	15,295.43
Standard Deviation		1,126.05	2,340.74	1,656.06	2,743.05	2,919.20



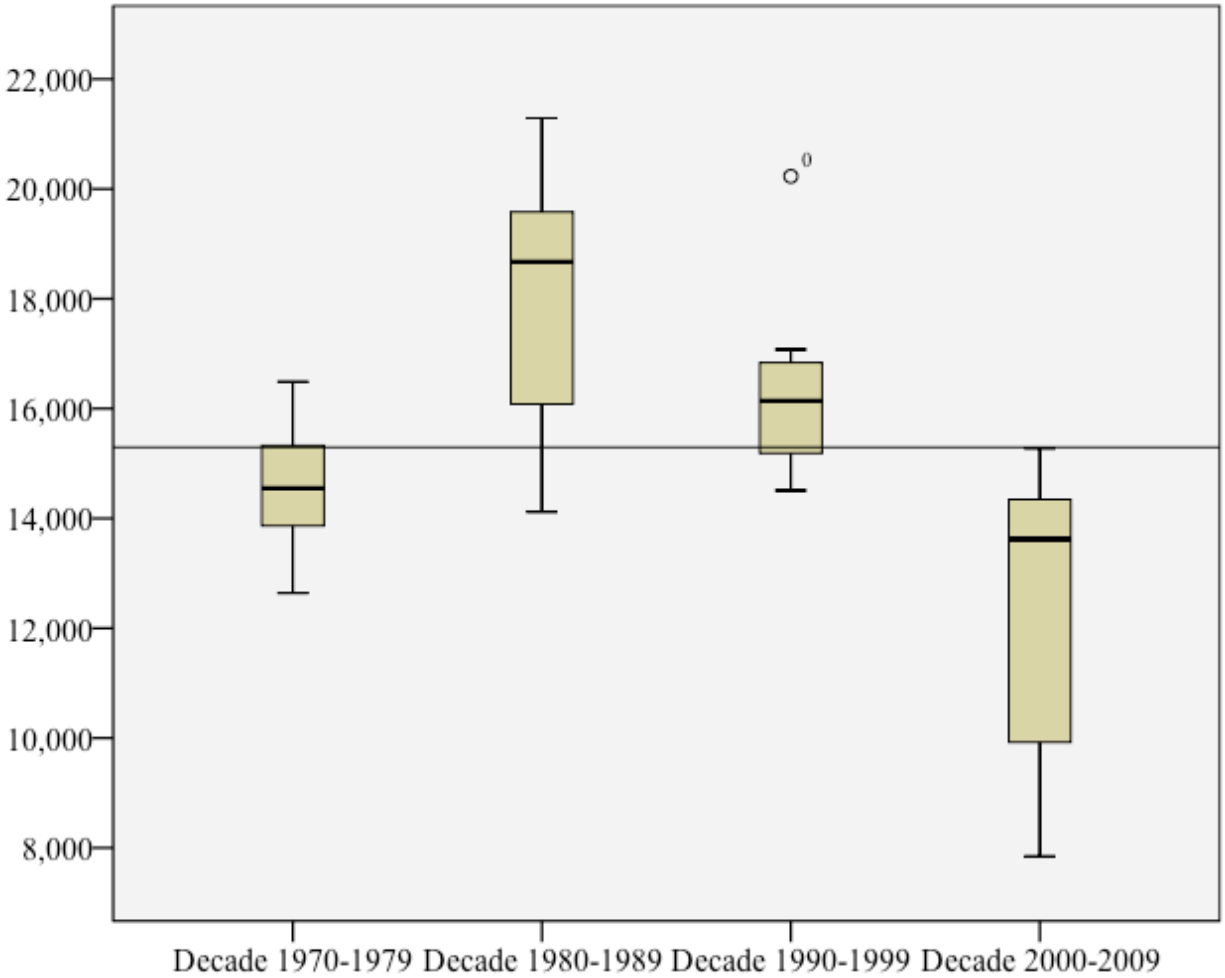


Figure 4.3 Box Plot Diagram for Annual Total of Crisis Center Call Frequency per Complete Decade Group with Complete Decades Mean Line (15,295.43) of archival data (1970-2009)

Descriptive statistical analysis reported the decade of 1980-1989 as the decade incurring the highest frequency (179,936) for the annual total of crisis center call frequency encompassing four-(4) complete decades of the archival data (1970-2009) Descriptive statistical analysis reported the decade of 2000-2009 as the decade incurring the lowest frequency (122,469) for the annual total of crisis center call frequency when grouped by decades encompassing four (4) complete decades of the archival data (1970-2009).

Descriptive statistical analysis reported the decade of 1980-1989 as the decade calculating the highest mean (17,993.60) for the annual total of crisis center call frequency when grouped by decades encompassing four (4) complete decades of the archival data (1970-2009). Descriptive statistical analysis reported the decade of 2000-2009 as the decade calculating the lowest mean (12,246.90) for the annual total of crisis center call frequency encompassing four (4) complete decades of the archival data (1970-2009).

Descriptive statistical analysis reported the decade of 2000-2009 as the decade calculating the highest standard deviation (2,734.03) for the annual total of crisis center call frequency encompassing four (4) complete decades of the archival data (1970-2009). Descriptive statistical analysis reported the decade of 1970-1979 as the decade calculating the lowest standard deviation (1,126.05) for the annual total of crisis center call frequency when grouped per decade encompassing four-(4) complete decades of the archival data (1970-2009).

*Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Complete Decade Group*

Correlation coefficients were computed among the decade groups ( $n = 10$ ) for the annual total of crisis center call frequency encompassing four (4) complete decades of the archival data (1970-2009).

Results of the correlation analysis reported a  $r = .464$  with a  $p > .05$  for the comparison of decade 1970-1979 to decade 1980-1989. Results suggest a positive correlation when crisis center call frequency for decade 1970-1979 is compared to the crisis center call frequency for decade 1980-1989, however that reported positive correlation is not statistically significant.

Results of the correlation analysis reported a  $r = -.504$  with a  $p > .05$  for the comparison of decade 1970-1979 to decade 1990-1999. Results suggest a negative correlation when the crisis center call frequency for decade 1970-1979 is compared to the crisis center call frequency for decade 1990-1999, however that reported negative correlation is not statistically significant.

Results of the correlation analysis reported a  $r = -.500$  with a  $p > .05$  for the comparison of decade 1970-1979 to decade 2000-2009. Results suggest a negative correlation when the crisis center call frequency for decade 1970-1979 is compared to the crisis center call frequency for decade 2000-2009, however that reported negative correlation is not statistically significant.

Results of the correlation analysis reported a  $r = -.600$  with a  $p > .05$  for the comparison of decade 1980-1989 to decade 1990-1999. Results strongly suggest a negative correlation when the crisis center call frequency for decade 1980-1989 is compared to the crisis center call frequency for decade 1990-1999, however that reported negative correlation is not statistically significant.

Results of the correlation analysis reported a  $r = -.729$  with a  $p < .05$  for the comparison of decade 1980-1989 to decade 2000-2009. Results strongly suggest a negative correlation when the crisis center call frequency for decade 1970-1979 is compared to the crisis center call frequency for decade 1980-1989, and that reported negative correlation is statistically significant.

Results of the correlation analysis reported a  $r = .362$  with a  $p > .05$  for the comparison of decade 1990-1999 to decade 2000-2009. Results suggest a positive correlation when the crisis center call frequency for decade 1990-1999 is compared to the crisis center call frequency for decade of 200-20009, however that reported positive correlation is not statistically significant.

The correlation analysis results suggest that differences, in the reported correlations of the annual total of the crisis center call frequency when grouped per decade, exist when the four (4) complete decades were compared encompassing forty (40) years of the archival data (1970-2009). However only one (1) comparison, the comparison between the decade of 1980-1989 and the decade of 2000-2009, reported a correlation coefficient ( $r = -.729$ ) that was determined to be highly statistically significant ( $p < .05$ ). This would suggest that while differences in the decade total of crisis center call frequency were reported, those differences were not significant enough to be considered statistically different, except for the negative correlation in the crisis center call frequency between the decades of 1980-1989 and 2000-2009. Additionally, the results suggest that despite apparent differences in the crisis center call frequency, the frequency of crisis center calls has remained statistically consistent encompassing for the majority of the archival data encompassing the forty (40) years (1970-2009).

Correlation coefficients for the annual total of crisis center call frequency when grouped per decade encompassing four (4) complete decades of the archival data (1970-2009) are reported in Table 4.4.

Table 4.4  
Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Complete Decade  
Group of archival data (1970-2009)

Correlation Coefficients		Call Frequency Decade 1970-1979	Call Frequency Decade 1980-1989	Call Frequency Decade 1990-1999	Call Frequency Decade 200-2009
Call Frequency Decade 1970-1979	Pearson Correlation	1	0.464	-0.504	-0.500
	Sig. (2-tailed)		0.177	0.138	0.141
	N	10	10	10	10
Call Frequency Decade 1980-1989	Pearson Correlation	0.464	1	-0.600	-0.729**
	Sig. (2-tailed)	0.177		0.067	0.017
	N	10	10	10	10
Call Frequency Decade 1990-1999	Pearson Correlation	-0.504	-0.600	1	0.362
	Sig. (2-tailed)	0.138	0.067		0.304
	N	10	10	10	10
Call Frequency Decade 2000-2009	Pearson Correlation	-0.500	-0.729**	0.362	1
	Sig. (2-tailed)	0.141	0.017	0.304	
	N	10	10	10	10

\*\* Correlation is significant at the 0.05 level (2-tailed)

## Annual Total of the Crisis Center Call Frequency per Five (5) Year Increments

### *Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Five (5) Year Increments*

The archival data for the annual total of crisis center call frequency was grouped per five (5) year increment. Evaluation of the resulting increments identified the increments of 1965-1969 and 2010-2014 as incomplete ( $n \neq 5$ ). Inclusion of incomplete five (5) year increments in procedures for descriptive statistical analysis and computation of correlation coefficients would have resulted in a skewed results. Therefore, the five (5) year increments 1965-1969 and 2010-2014 were omitted. Eight (8) complete groups of five (5) year increment were included in the descriptive statistical analysis.

Descriptive statistical analysis evaluated the annual total of the crisis center call frequency when grouped per the five (5) year increment of 1970-1974. Results of the descriptive statistical analysis reported a sum of 70,968 crisis center call frequency for the five (5) year increment of 1970-1974 with a mean of 14,193.60 and a standard deviation of 1,183.26. Descriptive statistical analysis reported a minimum frequency of 12,639 and a maximum frequency of 15,883 for the five (5) year increment of 1970-1974 of the annual total of crisis center call category frequency.

Descriptive statistical analysis evaluated the annual total of the crisis center call frequency when grouped per five (5) year increment of 1975-1979 encompassing forty (40) years of archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 75,578 crisis center call frequency for the five (5) year increment of 1975-1979 with a mean of 15,115.60 and a standard deviation of 959.987. Descriptive statistical analysis reported a

minimum frequency of 13,868 and a maximum frequency of 16,487 for the five (5) year increment of 1975-1979 of the annual total of crisis center call category frequency.

Descriptive statistical analysis evaluated the annual total of the crisis center call frequency when grouped per five (5) year increment of 1980-1984 encompassing forty (40) years of archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 81,842 crisis center call frequency for the five (5) year increment of 1980-1984 with a mean of 16,368 and a standard deviation of 2,097.983. Descriptive statistical analysis reported a minimum frequency of 14,121 and a maximum frequency of 19,579 for the five (5) year increment of 1980-1984 of the annual total of crisis center call category frequency.

Descriptive statistical analysis evaluated the annual total of the crisis center call frequency when grouped per five (5) year increment of 1985-1989 encompassing forty (40) years of archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 98,094 crisis center call frequency for the five (5) year increment of 1985-1989 with a mean of 19,618.80 and a standard deviation of 1,150.360. Descriptive statistical analysis reported a minimum frequency of 18,533 and a maximum frequency of 21,292 for the five (5) year increment of 1985-1989 of the annual total of crisis center call category frequency.

Descriptive statistical analysis evaluated the annual total of the crisis center call frequency when grouped per five (5) year increment of 1990-1994 encompassing forty (40) years of archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 83,862 crisis center call frequency for the five (5) year increment of 1990-1994 with a mean of 16,772.40 and a standard deviation of 2,113.042. Descriptive statistical analysis reported a



minimum frequency of 14,518 and a maximum frequency of 20,231 for the five (5) year increment of 1990-1994 of the annual total of crisis center call category frequency.

Descriptive statistical analysis evaluated the annual total of the crisis center call frequency when grouped per five (5) year increment of 1995-1999 encompassing forty (40) years of archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 79,004 crisis center call frequency for the five (5) year increment of 1995-1999 with a mean of 15,800.80 and a standard deviation of 1,056.273. Descriptive statistical analysis reported a minimum frequency of 14,506 and a maximum frequency of 17,075 for the five (5) year increment of 1995-1999 of the annual total of crisis center call category frequency.

Descriptive statistical analysis evaluated the annual total of the crisis center call frequency when grouped per five (5) year increment of 2000-2004 encompassing forty (40) years of archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 72,417 crisis center call frequency for the five (5) year increment of 2000-2004 with a mean of 14,483.40 and a standard deviation of 461.879. Descriptive statistical analysis reported a minimum frequency of 14,133 and a maximum frequency of 15,277 for the five (5) year increment of 2000-2004 of the annual total of crisis center call category frequency.

Descriptive statistical analysis evaluated the annual total of the crisis center call frequency when grouped per five (5) year increment of 2005-2009 encompassing forty (40) years of archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 50,052 crisis center call frequency for the five (5) year increment of 2005-2009 with a mean of 10,010.40 and a standard deviation of 2,024.940. Descriptive statistical analysis reported a

minimum frequency of 7,844 and a maximum frequency of 13,110 for the five (5) year increment of 2004-2009 of the annual total of crisis center call category frequency.

Descriptive statistical analyses evaluated eight (8) complete groups of five (5) year increments encompassing forty (40) complete years of the archival data (1970-2009). Results of the descriptive statistical analysis reported a sum of 611,817 for the annual total of crisis center call frequency with a mean of 15,595.43 and a standard deviation of 2,919.20. Descriptive statistical analysis reported a minimum frequency of 7,844 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency. These results are consistent with previous reported results when the archival data for the annual total of crisis center call frequency was grouped per complete decade.

Descriptive statistical analysis results are reported in Table 4.5. Figure 4.4 provides a visual representation for the annual total of the crisis center call frequency when grouped per five (5) year increment as a box plot diagram encompassing forty (40) complete years of the archival data (1970-2009) with a complete decade groups mean line ( $m = 15,295.425$ ).

Table 4.5  
 Descriptive Statistics for Annual Total of the Crisis Center Call Frequency per Five (5) Year  
 Increment of archival data (1970-2009)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
Increment 1970-1974	5	12,639	15,883	70,968	14,193.60	1,183.26
Increment 1970-1975	5	13,868	16,487	75,578	15,115.60	959.99
Increment 1980-1984	5	14,121	19,579	81,842	16,368.40	2,097.98
Increment 1985-1989	5	18,533	21,292	98,094	19,618.80	1,150.360
Increment 1990-1994	5	14,518	20,231	83,862	16,772.40	2,113.04
Increment 1995-1999	5	14,506	17,075	79,004	15,800.80	1,056.27
Increment 2000-2004	5	14,133	15,277	72,417	14,483.40	461.88
Increment 2005-2009	5	7,844	13,110	50,052	10,010.40	2,024.940
Call Frequency	40	7,844	21,292	611,817	15,295.43	2,919.20

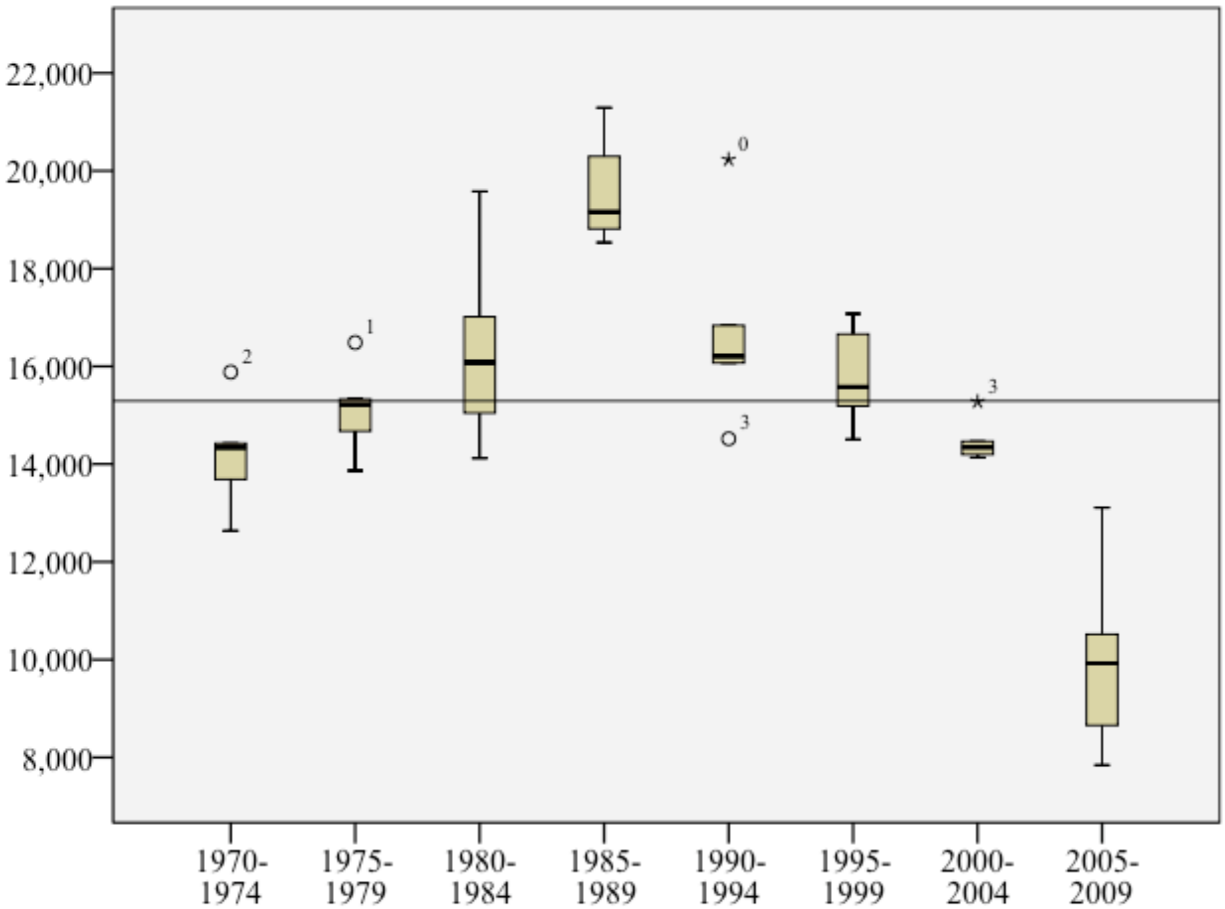


Figure 4.4 Box Plot Diagram for Annual Total of Crisis Center Call Frequency per Five Year Increment (1970-2009) with Complete Decade Group Mean Line (15,295.43) of archival data (1970-2009)

The five (5) year increment of 1985 to 1989 was reported to have the highest frequency of crisis center calls (sum = 98,094) while the five (5) year increment of 2005-2009 was reported to have the lowest frequency of crisis center calls (sum = 50,052). The five (5) year increment of 1985-1989 was reported to have the highest average of crisis center calls (m = 19,618.80) while the five (5) year increment of 2000-2009 was reported to have the lowest average of crisis center calls (m = 10,010.40). The five (5) year increment of 1990-1994 was reported to have the largest

variance in crisis center call frequency with a (SD = 2,113.042) while the five (5) year increment of 2000-2004 was reported to have the smallest variance in crisis center call frequency (SD = 461.879).

*Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Five Year Increment*

Correlation coefficients were computed among individual five (5) year groups crisis center call frequency encompassing of forty (40) years archival data (1970-2009). Results of the correlation analysis reported a correlation ( $\pm r$ ) for all comparisons. However, those differences were statistically significant only for two (2) correlations; the comparison between five year period 2000-2004 and five year period 1985-1989, and the comparison between five year period 2005-2009 and five year period 1990-1994. Results of the correlation analysis reported a  $r = .926$  with a  $p < .05$  for the comparison of five year period of 2000-2004 to five year period of 1985-1989. Results strongly suggest a positive correlation when the crisis center call frequency for five year period 2000-2004 is compared to the crisis center call frequency for five year period 1985-1989 and that reported strong positive correlation is statistically significant. Results of the correlation analysis reported a  $r = .898$  with a  $p < .05$  for the comparison of five year period 2005-2009 to five year period 1990-1994. Results strongly suggest a positive correlation when the crisis center call frequency for five year period of 2005-2009 is compared to the crisis center call frequency for five year period 1990-1994 and that reported strong positive correlation is statistically significant.

Correlation analysis results for the total of crisis center call frequency when grouped per five (5) years are consistent with the correlation analysis results for total of crisis center call frequency when grouped per decade encompassing forty (40) years of archival data. These results suggest that while differences in the five (5) year increments of crisis center call frequency were reported, those differences are not significant enough to be considered statistically different, except for the positive correlations between the comparison of five year

period of 2000-2004 to five year period of 1985-1989 and the comparison of five year period of 2005-2009 to five year period 1990-1994. The correlation coefficients strongly suggest that the annual total of crisis center call frequency have statistically significantly decreased when comparing the total of crisis center call frequency of five (5) year period 1985-1989 to the total of of crisis center call frequency of five (5) year period 2000-2004 and when comparing the total of crisis center call frequency for five (5) year period 1994-1994 to the total of crisis center call frequency for five (5) year period 2005-2009. Additionally, the results suggest that despite apparent differences, in the crisis center call frequency among the majority of five (5) year increments (75%), the frequency of crisis center calls has remained statistically consistent for the majority of the archival data encompassing forty (40) years (1970-2009).

Correlation coefficients for the annual total of crisis center call frequency when grouped per a five (5) year increment encompassing four (4) complete decade groups of the archival data (1970-2009) are presented in Table 4.6. Statistically significant correlations are highlighted in yellow to facilitate ease of location.

Table 4.6  
Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Five Year  
Increment of archival data (1970-2009)

Correlation Results									
		1970 to 1974	1975 to 1979	1980 to 1984	1985 to 1989	1990 to 1994	1995 to 1999	2000 to 2004	2005 to 2009
1970 to 1974	Pearson Correlation	1	0.124	0.203	0.192	-0.698	-0.651	0.046	-0.610
	Sig. (2-tailed)		0.842	0.744	0.758	0.190	0.234	0.942	0.275
	N	5	5	5	5	5	5	5	5
1975 to 1979	Pearson Correlation	0.124	1	0.429	0.340	-0.559	0.189	0.275	-0.468
	Sig. (2-tailed)	0.842		0.471	0.575	0.328	0.760	0.654	0.426
	N	5	5	5	5	5	5	5	5
1980 to 1984	Pearson Correlation	0.203	0.439	1	0.713	-0.606	-0.653	0.411	-0.873
	Sig. (2-tailed)	0.744	0.471		0.176	0.278	0.233	0.492	0.054
	N	5	5	5	5	5	5	5	5
1985 to 1989	Pearson Correlation	0.192	0.340	0.713	1	-0.779	-0.466	0.926*	-0.779
	Sig. (2-tailed)	0.758	0.575	0.176		0.120	0.429	0.024	0.120
	N	5	5	5	5	5	5	5	5
1990 to 1999	Pearson Correlation	-0.698	-0.559	-0.606	-0.779	1	0.537	-0.659	0.898*
	Sig. (2-tailed)	0.190	0.328	0.278	0.120		0.350	0.226	0.038
	N	5	5	5	5	5	5	5	5
1995 to 1994	Pearson Correlation	-0.651	0.189	-0.652	-0.466	0.537	1	-0.181	0.755
	Sig. (2-tailed)	0.234	0.760	0.233	0.429	0.350		0.771	0.140
	N	5	5	5	5	5	5	5	5
2000 to 2005	Pearson Correlation	-0.046	0.275	0.411	0.926*	-0.659	-0.181	1	-0.522
	Sig. (2-tailed)	0.942	0.654	0.492	0.024	0.226	0.771		0.366
	N	5	5	5	5	5	5	5	5
2005 to 2009	Pearson Correlation	-0.610	-0.468	-0.873	-0.779	0.898*	0.755	-0.522	1
	Sig. (2-tailed)	0.275	0.426	0.054	0.120	0.038	0.140	0.366	
	N	5	5	5	5	5	5	5	5



## Annual Total of Crisis Center Call Frequency and Hamilton County, TN

### *Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population*

The archival data for the annual total of the crisis center call frequency was compared to the annual estimates of the resident population in Hamilton County, TN encompassing forty-two (42) complete years of the archival data (1970-2011) (US Department of Commerce: Census Bureau, 2012). Results of the descriptive statistical analysis reported a sum of 625,850 for the annual total of crisis center call frequency with a mean of 14,901.19 and a standard deviation of 3,360.69. Descriptive statistical analysis reported a minimum frequency of 7,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Results of the descriptive statistical analysis reported a sum of 12,451,819 for the annual estimates of the resident population in Hamilton County, TN with a mean of 296,471.88 and a standard deviation of 22,322.73. Descriptive statistical analysis reported a minimum frequency of 255,077 and a maximum frequency of 340,855 for the annual estimates of the resident population in Hamilton County, TN.

Descriptive statistical results for annual total of crisis center call frequency and annual estimates of resident population in Hamilton County, TN encompassing forty-two (42) complete years of archival data (1970-2011) are presented in Table 4.7. Figure 4.5 provides a visual representation for the annual total of the crisis center call frequency and the annual estimates of the resident population in Hamilton County, TN as a multiple line chart encompassing forty-two (42) complete years of archival data (1970-2011).

Table 4.7

Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population in Hamilton County, TN of archival data (1970-2011)

Descriptive Statistics		Call Frequency	Estimated Population Hamilton County, TN
N	Valid	42	42
	Missing	0	0
Minimum		6,733	255,077
Maximum		21,292	340,855
Sum		625,850	12,451,819
Mean		14,901.19	296,471.88
Standard Deviation		3,360.69	22,322.73

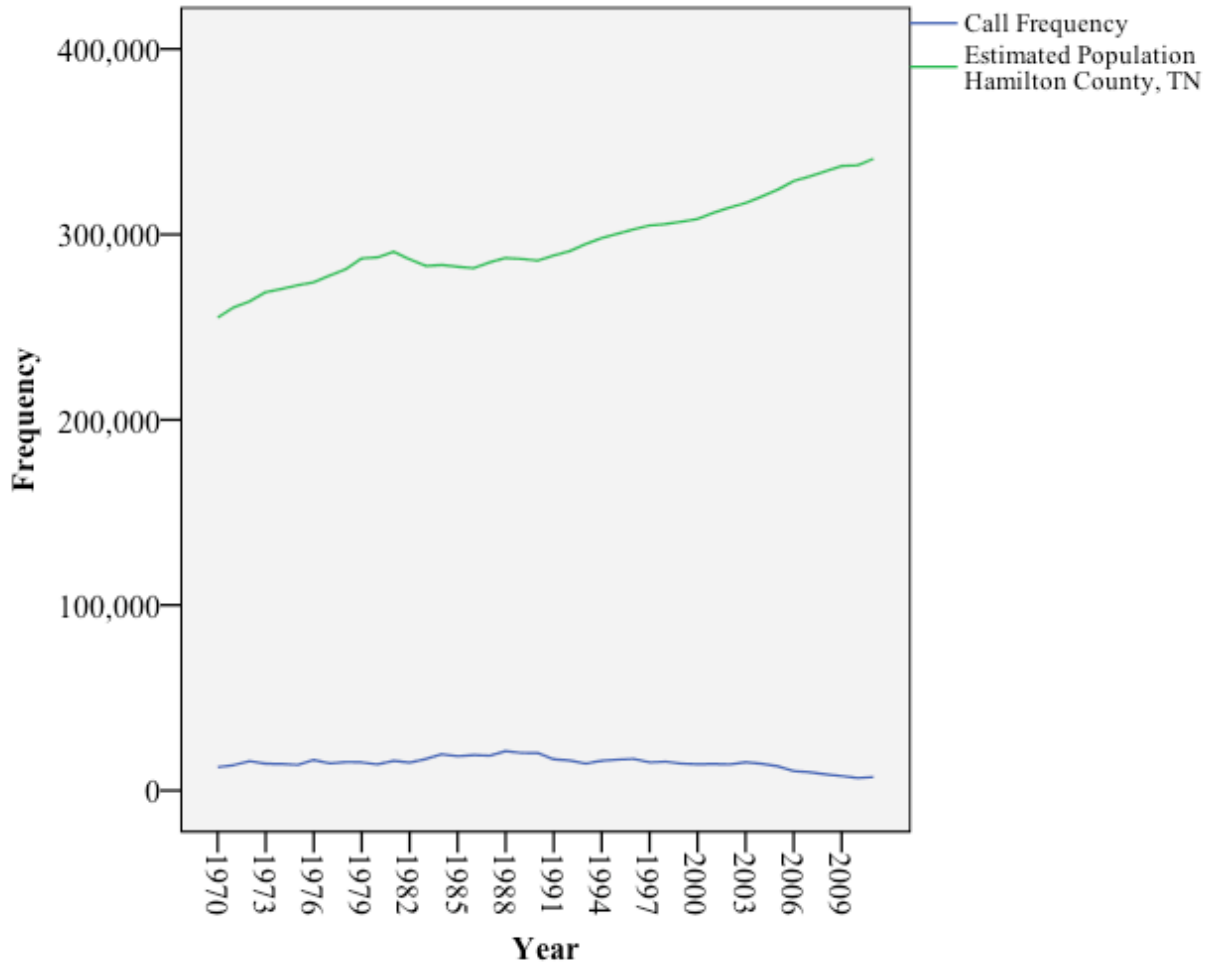


Figure 4.5 Multiple Line Chart for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population in Hamilton County, TN of archival data (1970-2010)

An examination of the descriptive statistical analysis as suggests that the annual total of crisis center call frequency has decreased when compared to the increase in the annual estimates of the resident population in Hamilton County, TN encompassing the forty-two (42) complete years of archival data. Computation of correlation coefficients is recommended to determine whether or not a true inverse correlation exists and the strength of that relationship, if it does.

*Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population*

Correlation coefficients were computed among the annual total of crisis center call frequency and the annual estimates of the resident population in Hamilton County, TN encompassing forty-two (42) years of archival data (1970 to 2011) (US Department of Commerce: US Census Bureau, 2012). Results of the correlation analysis reported a  $r = -.612$  with a  $p < .001$ . Results strongly suggest a significant negative correlation when the annual total of crisis center call frequency is compared to the annual estimates of the resident population in Hamilton County, TN and that the reported significant negative correlation is highly statistically significant.

Correlation coefficients for the annual total of crisis center call frequency and annual estimated resident population in Hamilton County, TN encompassing forty-two (42) complete years of archival data (1970-2011) are reported in Table 4.8.

Table 4.8  
Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Estimated of Resident Population in Hamilton County, TN of archival data (1970-2011)

Correlation Coefficients			
		Call Frequency Crisis Center	Estimated Population Hamilton County, TN
Call Frequency Crisis Center	Pearson Correlation	1	-0.612**
	Sig. (2-tailed)		0.000
	N	42	42
Estimated Population Hamilton County, TN	Pearson Correlation	-0.612**	1
	Sig. (2-tailed)	0.000	
	N	42	42

\*\* Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient ( $r = -0.612$ ;  $p < .01$ ) strongly suggests that the annual total of crisis center call frequency has statistically significantly decreased as the annual estimates of the resident population for Hamilton County, TN have increased and that this inverse relationship is highly statistically significant.

*Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population*

The annual total of crisis center call frequency was transformed into a ratio (%) of the annual estimates of resident population in Hamilton County, TN encompassing forty-two (42) complete years of the archival data (1970-2011). (US Department of Commerce: US Census Bureau, 2012) A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call frequency as a ratio (%) of the annual estimates of the resident population in Hamilton County, TN encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 214.18% for the annual total of the crisis center call frequency as a ratio (%) of the annual estimates of the resident population of Hamilton County, TN with a mean of 5.10%% and a standard deviation of 1.32%. Descriptive statistical analysis reported a minimum frequency of 2.00% and a maximum frequency of 7.41% for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of the resident population in Hamilton County, TN.

Descriptive statistical analysis results for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in Hamilton County, TN encompassing forty-two (42) complete years of archival data (1970-2011) are reported in Table 4.9. Figure 4.6 provides a visual representation for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of the resident population in Hamilton County, TN as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.7 provides a visual representation for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of the resident population in Hamilton County, TN as a simple bar chart

encompassing forty-two (42) complete years of the archival data (1970-2011). Black bars represent years reported to have highest (1988) and lowest (2010) frequency.

Table 4.9  
 Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual  
 Estimates of Resident Population in Hamilton County, TN of archival data (1970-2011)

Descriptive Statistics		Call Frequency as Ratio (%) of Resident Population
N	Valid	42
	Missing	0
Minimum		2.00%
Maximum		7.41%
Sum		214.18%
Mean		5.10%
Standard Deviation		1.32%





Figure 4.6 Simple Line Chart of Annual Total of Crisis Center Call Frequency as Ratio of Annual Estimates of Resident Population in Hamilton County, TN of archival data (1970-2011)

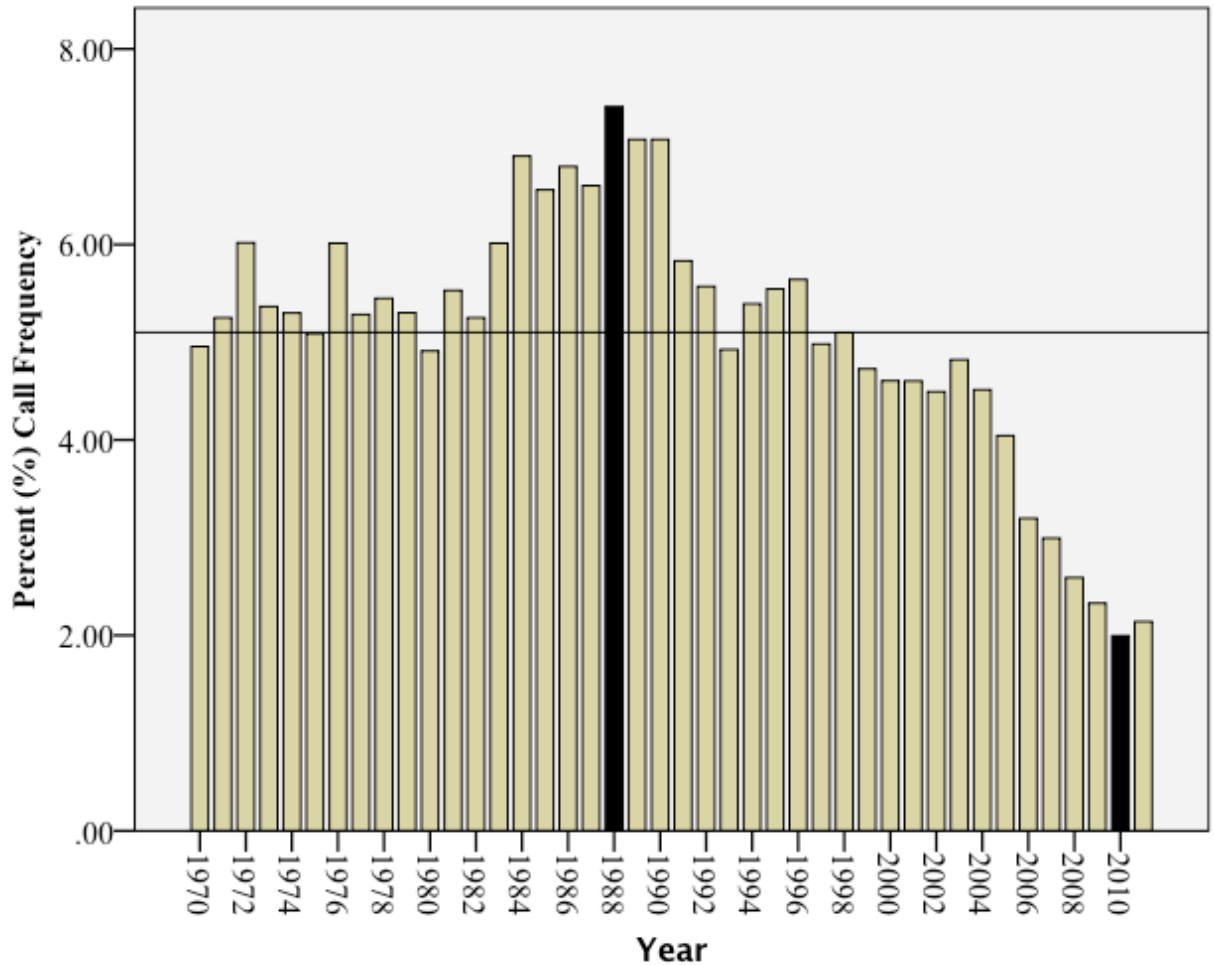


Figure 4.7 Simple Bar Chart of Annual Total of Crisis Center Call Frequency as Ratio of Annual Estimates of Resident Population in Hamilton County, TN with % Annual Total of Crisis Center Call Frequency Mean Line (5.10%) of archival data (1970-2011)

Examination of the descriptive statistical results for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in Hamilton County, TN report that the annual total of crisis center call frequency has decreased as the annual estimates of the resident population in Hamilton County, TN have increased.

*Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons*

A descriptive statistical analysis was conducted to evaluate the annual total of the crisis center call frequency and the annual number of unemployed persons (nsa) in Hamilton County, TN encompassing twenty-two (22) complete years of archival data (1990-2011) (US Department of Labor: Bureau of Labor Statistics, 2012). Results of the descriptive statistical analysis reported a sum of 299,368 for the annual total of the crisis center call frequency with a mean of 13,607.64 and a standard deviation of 3,580.95. Descriptive statistical analysis reported a minimum frequency of 6,722 and a maximum frequency of 21,292 for the annual total of crisis center call frequency.

The results of the descriptive statistical analysis reported a sum of 174,157 for the annual number of unemployed persons in Hamilton County, TN with a mean of 7,916.23 and a standard deviation of 2,749.82. Descriptive statistical analysis reported a minimum frequency of 5,077 and a maximum frequency of 14,693 for the annual number of unemployed person in Hamilton County, TN.

Descriptive statistical results for the annual total of crisis center call frequency and annual number of unemployed persons in Hamilton County, TN encompassing twenty-two (22) complete years of archival data (1990-2011) are reported in Table 4.10. Figure 4.8 provides a visual representation for the annual total of crisis center call frequency and the annual number of unemployed persons in Hamilton County, TN as a multiple line chart encompassing twenty-two (22) complete years of archival data (1990-2011).

Table 4.10  
 Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Number of  
 Unemployed Persons in Hamilton County, TN of archival data (1990-2011)

Descriptive Statistics			
		Call Frequency Crisis Center	Unemployed Persons Hamilton County, TN
N	Valid	22	22
	Missing	0	0
Minimum		6,733	5,077
Maximum		20,231	14,693
Sum		299,368.00	174,157.00
Mean		13,607.64	7,916.23
Standard Deviation		3,580.96	2,749.82

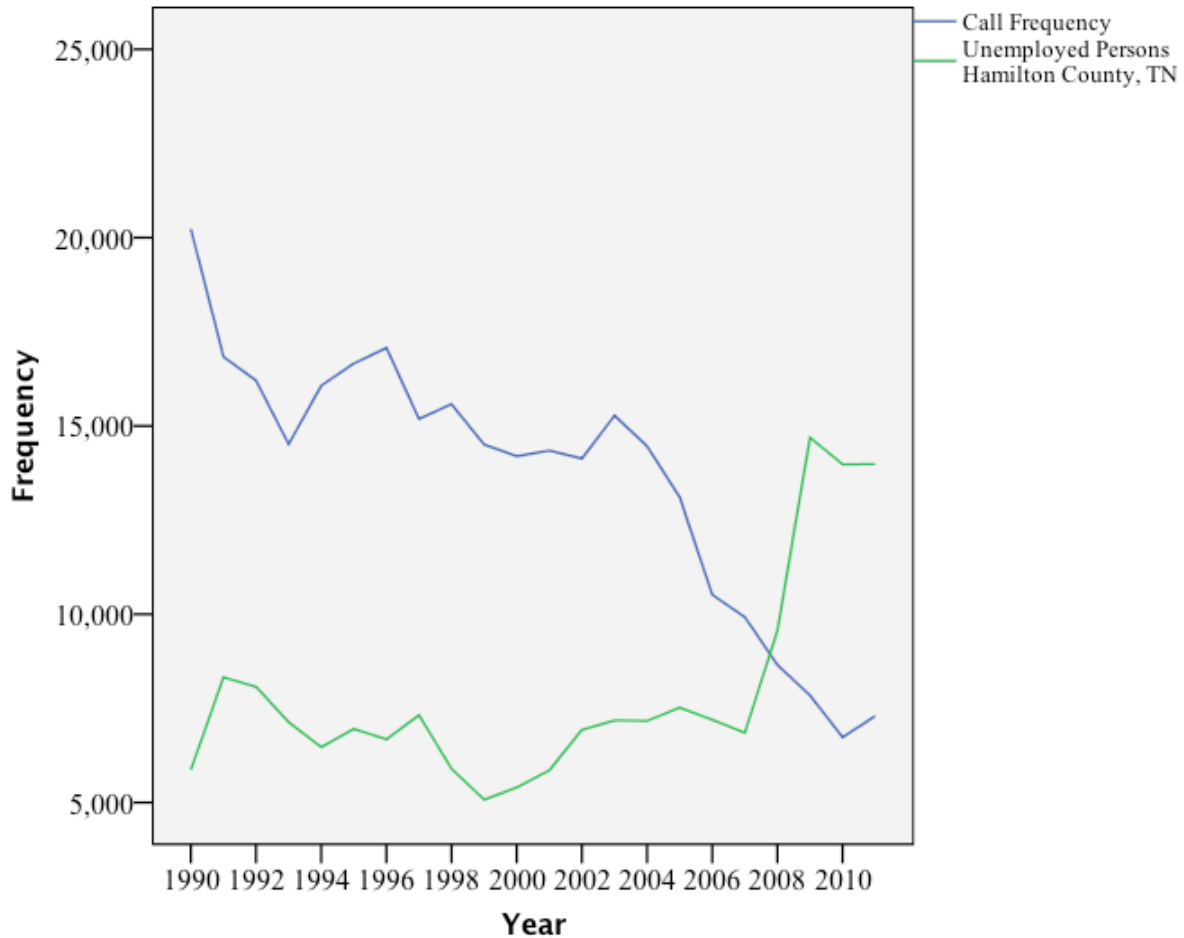


Figure 4.8 Multiple Line Chart for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons in Hamilton County, TN of archival data (1990-2011)

Examination of the descriptive statistical results for the annual total of crisis center call frequency and the annual number of unemployed persons in Hamilton County, TN report that the annual total of crisis center call frequency has decreased as the annual number of unemployed persons in Hamilton County, TN have increased. Computation of correlation coefficients is recommended to ascertain whether or not a statistical inverse correlation exists and the strength of that relationship, if it does.

*Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons*

Correlation coefficients were computed among the annual total of crisis center call frequency and the annual number of unemployed persons in Hamilton County, TN encompassing twenty-two (22) years of archival data (1990 to 2011) (US Department of Labor: Bureau of Labor Statistics, 2012). Results of the correlation analysis reported a  $r = -.760$  with a  $p < .001$ . Results strongly suggest a negative correlation when the annual total of crisis center call frequency is compared to the annual number of unemployed person in Hamilton County, TN and that reported strong negative correlation is highly statistically significant.

Correlation coefficients for annual total of crisis center call frequency and annual number of unemployed persons in Hamilton County, TN encompassing twenty-two (22) complete years of archival data (1990-2011) are reported in Table 4.11.

Table 4.11  
Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons in Hamilton County, TN of archival data (1990-2011)

Correlation Coefficients			
		Call Frequency Crisis Center	Unemployed Persons Hamilton County, TN
Call Frequency Crisis Center	Pearson Correlation	1	-0.760**
	Sig. (2-tailed)		0.000
	N	22	22
Unemployed Persons Hamilton County, TN	Pearson Correlation	-0.760**	1
	Sig. (2-tailed)	0.000	
	N	22	22

\*\* Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient ( $r = -.760$ ;  $p < .01$ ) strongly suggests that the annual total of crisis center call frequency has statistically significantly decreased as the annual number of unemployed persons in Hamilton County, TN have increased and that this statistically strong inverse relationship is highly statistically significant.

*Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population and Unemployment Rate (%)*

The archival data of the annual total of crisis center call frequency was transformed into a ratio (%) of the annual estimates of resident population in Hamilton County, TN (US Department of Commerce: Census Bureau, 2012) encompassing twenty-two years (1990-2011). A descriptive statistical analysis was conducted to evaluate the ratio (%) of the annual total of crisis center call frequency to the annual estimates of resident population in Hamilton County, TN encompassing twenty-two (22) years of archival data (1990-2011). The results of the descriptive statistical analysis reported a sum of 97.11% for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in Hamilton County, TN with a mean of 4.41% and a standard deviation of 1.34%. Descriptive statistical analysis reported a minimum frequency of 2.00% and a maximum frequency of 3.30% for the annual total of crisis center call frequency as a ratio (5) of the annual estimates of resident population in Hamilton County, TN.

A descriptive statistical analysis was conducted to evaluate the annual unemployment rate (%) in Hamilton County, TN encompassing twenty-two (22) year of archival data (1990-2011). (US Department of Labor: Bureau of Labor Statistics, 2012) The results of the descriptive statistical analysis reported a sum of 111.6% for the annual unemployment rate (%) in Hamilton County, TN with a mean of 5.07% with a standard deviation of 1.58%. Descriptive statistical analysis reported a minimum frequency of 7.08% and a maximum frequency of 9.00% for the annual unemployment rate (%) in Hamilton County, TN.

Descriptive statistical analysis results for the annual total of crisis center call frequency as a ratio (%) of annual estimates of resident population in Hamilton County, TN and the annual unemployment rate (%) in Hamilton County, TN encompassing twenty-two (22) complete years



of the archival data (1990-2011) are presented in Table 4.12. Figure 4.9 provides a visual representation of the annual total of crisis center call frequency as a ratio (%) of the annual estimates of the resident population in Hamilton County, TN and the annual unemployment rate (%) in Hamilton County, TN as a multiple line chart encompassing twenty-two (22) complete years of the archival data (1990-2011).

Table 4.12

Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in Hamilton County, TN and Annual Unemployment Rate (%) in Hamilton County, TN of archival data (1990-2011)

Descriptive Statistics			
		Call Frequency as Ratio (%) of Estimated Population Hamilton County, TN	Unemployment Rate (%) Hamilton County, TN
N	Valid	22	22
	Missing	0	0
Minimum		2.00%	7.08%
Maximum		3.30%	9.00%
Sum		97.11%	111.60%
Mean		4.41%	5.08%
Standard Deviation		1.34%	1.58%

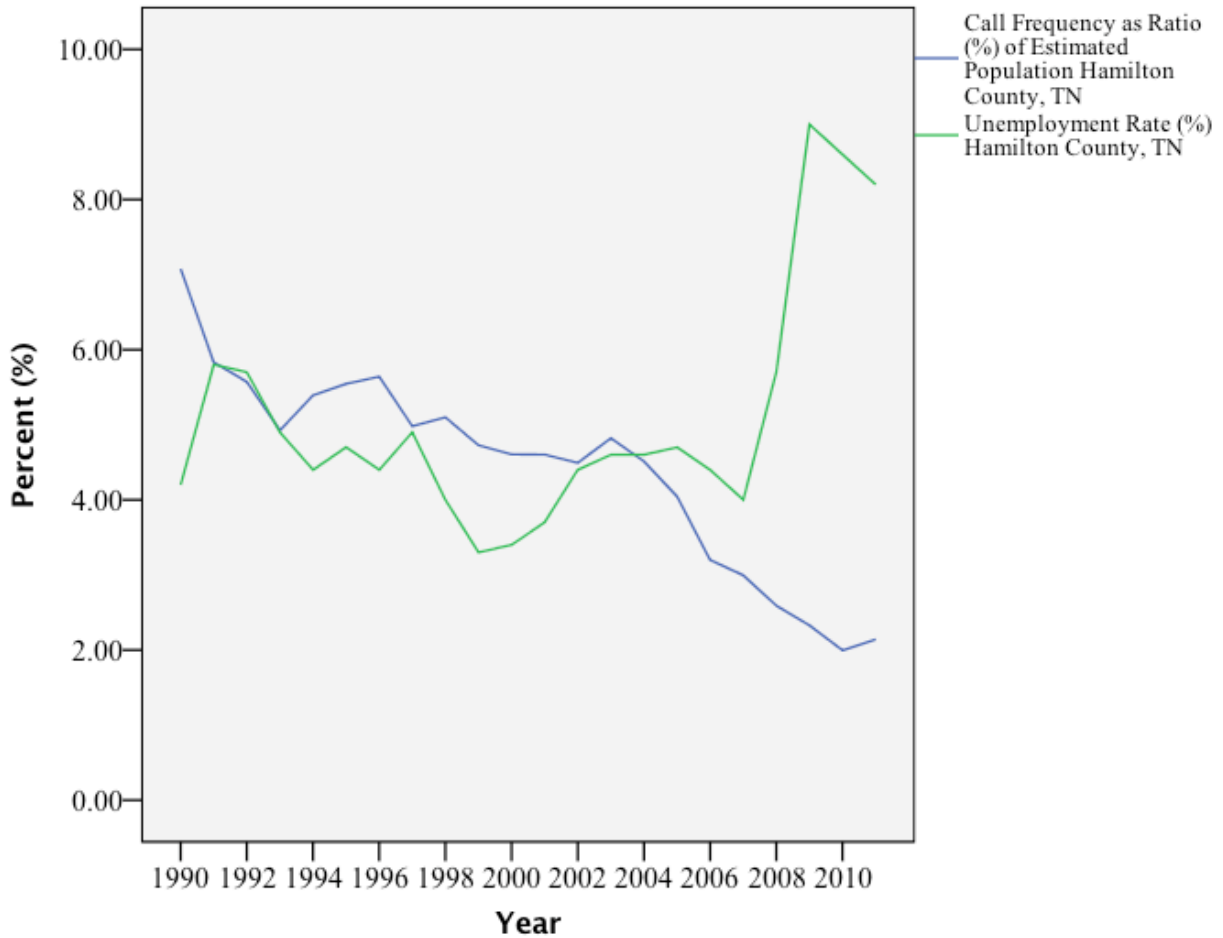


Figure 4.9 Multiple Line Chart for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in Hamilton County, TN and Annual Unemployment Rate (%) in Hamilton County, TN of archival data (1990-2011)

Examination of the descriptive statistical results for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in Hamilton County, TN and the annual number of unemployed persons in the State of TN suggest that the annual total of crisis center call frequency has decreased as the annual number of unemployed persons in Hamilton County, TN have increased. Computation of correlation coefficients is recommended

to determine whether or not a statistical inverse correlation exists and the strength of that relationship, if it does.

*Correlation Coefficients for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population and Annual Unemployment Rate (%)*

Correlation coefficients were computed among the archival data according to the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in Hamilton County, TN (US Department of Commerce: Census Bureau, 2012) and the annual unemployment rate (%) in Hamilton County, TN (US Department of Labor: Bureau of Labor Statistics, 2012) encompassing twenty-two (22) years of archival data (1990 to 2011). Results of the correlation analysis reported a  $r = -.613$  with a  $p < 0.01$ . Results strongly suggest a negative correlation when the annual total of crisis center call frequency as a ratio (%) of the annual estimates of the resident population in Hamilton County, TN is compared to the annual unemployment rate in Hamilton County, TN and that the reported negative correlation is statistically significant.

Correlation coefficients for the annual total of crisis center call frequency as a ratio (%) of annual estimates of resident population in Hamilton County, TN and annual unemployment rate (%) in Hamilton County, TN encompassing twenty-two (22) complete years of the archival data (1990-2011) are presented in Table 4.13.

Table 4.13

Correlation Results for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in Hamilton County, TN and Annual Unemployment Rate (%) in Hamilton County, TN of archival data (1990-2011)

Correlation Results			
		Call Frequency as Ratio (%) of Estimated Population Hamilton County, TN	Unemployment Rate (%) Hamilton County, TN
Call Frequency as Ratio (%) of Estimated Population Hamilton County, TN	Pearson Correlation	1	-0.613**
	Sig. (2-tailed)		0.002
	N	22	22
Unemployment Rate (%) Hamilton County, TN	Pearson Correlation	-0.613**	1
	Sig. (2-tailed)	0.002	
	N	22	22

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient ( $r = -0.613$ ;  $p < .01$ ) strongly suggest that the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in Hamilton County, TN has statistically significantly decreased as the annual unemployment rate (%) for Hamilton County, TN has increased and that this inverse relationship is highly statistically significant. These results are consistent with previous correlation coefficients computed with respect to annual total of crisis center call frequency and annual number of unemployed persons in Hamilton Count, TN encompassing twenty-two (22) complete years of the archival data (1970-2011).

*Correlation Coefficients for Annual Total of Crisis Center Call Frequency, Annual Estimates of Resident Population and Unemployed Persons*

Correlation coefficients were computed among the annual total of crisis center call frequency, the annual estimates of resident population (US Department of Commerce: Census Bureau, 2012) and the annual number of unemployed persons (US Department of Labor: Bureau of Labor Statistics, 2012) in Hamilton County, TN encompassing twenty-two (22) years of archival data (1990 to 2011).

When correlation coefficients were computed among the annual total of crisis center call frequency with the annual estimates of the resident population in Hamilton County, TN, results reported a  $r = -.924$  with a  $p < .001$ . Results strongly suggest a negative correlation when the annual total of crisis center call frequency is compared to the annual estimates of resident population in Hamilton County, TN and that reported strong negative correlation is highly statistically significant.

When correlation coefficients were computed among the annual total of crisis center call frequency with the annual number of unemployed persons in Hamilton County, TN, results reported a  $r = -.760$  with a  $p < .001$ . Results strongly suggest a negative correlation when the annual total of crisis center call frequency is compared to the annual number of unemployed person in Hamilton County, TN and that reported strong negative correlation is highly statistically significant.

When correlation coefficients were computed among the annual estimates of the resident population in Hamilton County, TN and the annual number of unemployed persons in Hamilton County, TN, results reported a  $r = .639$  with a  $p < .001$ . Results strongly suggest a positive correlation when the annual estimates of the resident population in Hamilton County, TN is

compared to the annual number of unemployed person in Hamilton County, TN and that reported positive correlation is highly statistically significant.

Correlation coefficients for annual total of the crisis center call frequency, annual estimates of resident population, and annual number of unemployed persons in Hamilton County, TN encompassing twenty-two (22) complete years of the archival data (1990-2011) are presented in Table 4.14.



Table 4.14

Correlation Coefficients for Annual Total of the Crisis Center Call Frequency, Annual Estimates of Resident Population and Annual Number of Unemployed Persons in Hamilton County, TN of archival data (1990-2011)

Correlation Coefficients				
		Call Frequency Crisis Center	Estimated Population Hamilton County TN	Unemployed Persons Hamilton County, TN
Call Frequency Crisis Center	Pearson Correlation	1	-.924**	-0.760*
	Sig. (2-tailed)		0.000	0.000
	N	22	22	22
Estimated Population Hamilton County, TN	Pearson Correlation	-.924**	1	.639**
	Sig. (2-tailed)	0.000		0.001
	N	22	22	22
Unemployed Persons Hamilton County, TN	Pearson Correlation	-0.760*	.639**	1
	Sig. (2-tailed)	0.000	0.001	
	N	22	22	22

\*\* Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficients strongly suggest that the annual total of crisis center call frequency has statistically significantly decreased as the annual number of unemployed persons in Hamilton County, TN have increased and the annual number of unemployed persons in Hamilton County, TN have increased and that this inverse relationship is highly statistically significant.

## Annual Total of Crisis Center Call Frequency and State of Tennessee

### *Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population*

The annual total of the crisis center call frequency was compared to the annual estimates of the resident population in the State of TN encompassing forty-one (41) years of archival data (1970-2010). (US Department of Commerce: Census Bureau, 2012) Results of the descriptive statistical analysis reported a sum of 618,550 for the annual total of crisis center call frequency with a mean of 15,085.59 and a standard deviation of 3,177.56. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call frequency.

Results of the descriptive statistical analysis reported a sum of 207,655,643 for the annual estimates of the resident population in the State of TN at with a mean of 5,064,771.78 and a standard deviation of 695,209.33. Descriptive statistical analysis reported a minimum frequency of 3,926,018 and a maximum frequency of 6,357,436 for the annual estimates of the resident population in the State of TN.

Descriptive statistical results for the for annual total of crisis center call frequency and annual estimates of resident population in State of TN encompassing forty-one (41) complete years of the archival data (1970-2010) are presented in Table 4.15. Figure 4.10 provides a visual representation for the annual total of the crisis center call frequency and the annual estimates of the resident population in the State of TN as a multiple line chart encompassing of forty-one (41) complete years of the archival data (1970-2010).

Table 4.15  
 Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population in State of TN of archival data (1970-2010)

Descriptive Statistics			
		Call Frequency Crisis Center	Estimated Population State of TN
N	Valid	41	41
	Missing	0	0
Minimum		6,733	3,926,018
Maximum		21,292	6,357,436
Sum		618,550.00	207,655,642.00
Mean		15,086.59	5,064,771.18
Standard Deviation		3,177.56	695,209.33

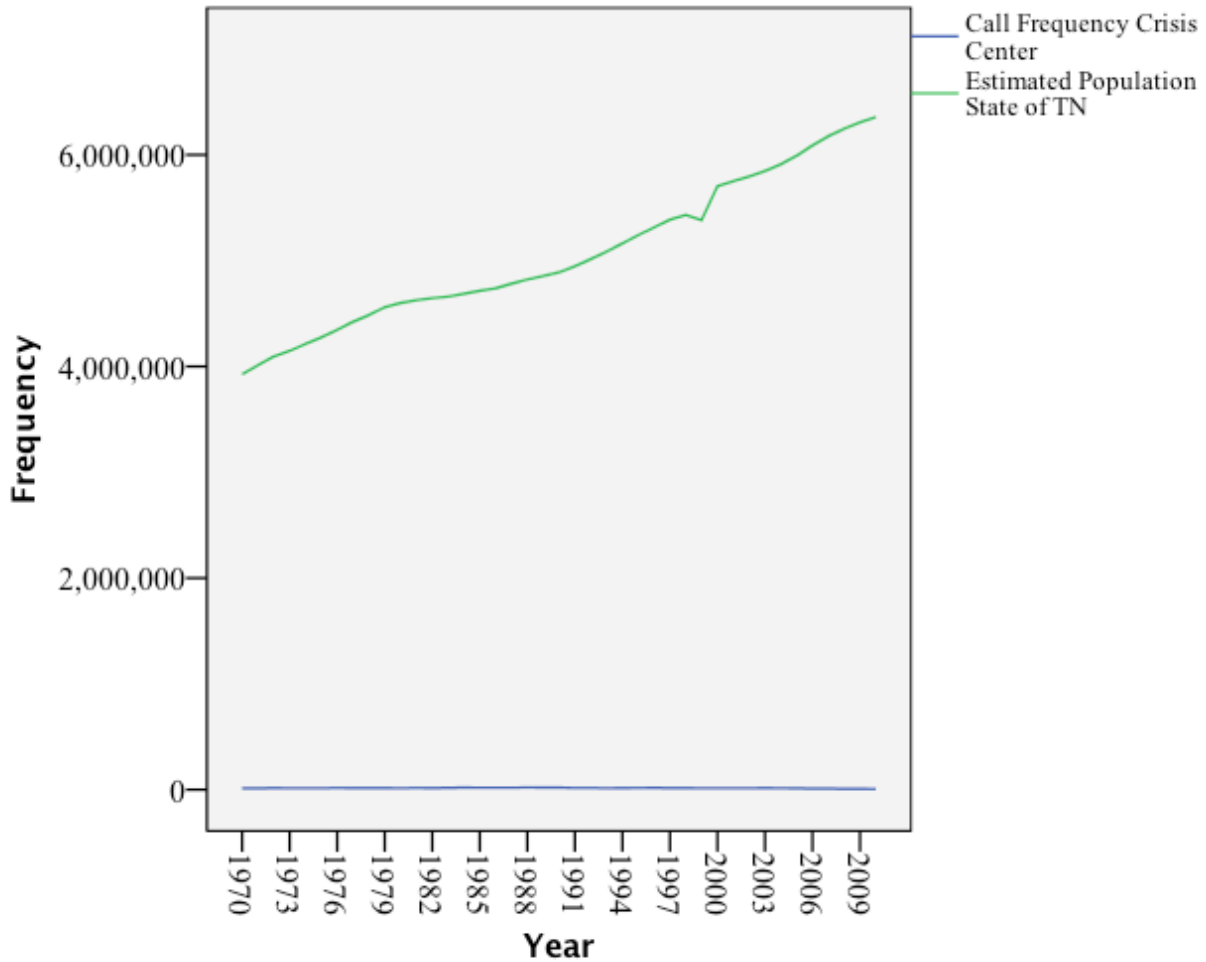


Figure 4.10 Multiple Line Chart for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population in State of TN of archival data (1970-2010)

Examination of the descriptive statistical results for the annual total of crisis center call frequency and the annual estimates of the resident population in the State of TN suggest that the annual total of crisis center call frequency has decreased as the annual estimates of resident population in the State of TN have increased. Computation of correlation coefficients is recommended to determine whether or not a true inverse correlation exists and the strength of that relationship, if it does.

*Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population*

Correlation coefficients were computed among the annual total of the crisis center call frequency and the annual estimates of the resident population in the State of TN encompassing forty-one (41) years of archival data (1970-2011) (US Department of Commerce: US Census Bureau, 2012) Results of the correlation analysis reported a  $r = -.520$  with a  $p < .01$  for the comparison between crisis center call frequency and the annual estimates of resident population in the State of TN. Results strongly suggest a strong negative correlation when crisis center call frequency is compared to the annual estimates of the resident population in the State of TN and that reported strong negative correlation is statistically significant.

Correlation coefficients for the annual total of crisis center call frequency and annual estimates of resident population in State of TN encompassing forty-one (41) complete years of the archival data (1970-2010) are presented in Table 4.16.

Table 4.16  
Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Estimates of Resident Population in State of TN of archival data (1970-2010)

Correlation Coefficients			
		Call Frequency Crisis Center	Estimated Population State of TN
Call Frequency Crisis Center	Pearson Correlation	1	-0.520**
	Sig. (2-tailed)		0.000
	N	41	41
Estimated Population State of TN	Pearson Correlation	-0.520 **	1
	Sig. (2-tailed)	0.000	
	N	41	41

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient ( $r = -0.520$ ;  $p < .01$ ) strongly suggests that the annual total of crisis center call frequency has decreased as the annual estimates of the resident population for the State of TN have increased and that this inverse relationship is highly statistically significant.

*Descriptive Statistics Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons*

A descriptive statistical analysis was conducted to evaluate the archival data according to the annual total of crisis center call frequency and the annual number of unemployed persons in the State of TN encompassing thirty-six (36) years of archival data (1976 to 2011) (US Department of Labor: Bureau of Labor Statistics, 2012) Results of the descriptive statistics analysis reported a sum of 541,014 for the annual total of crisis center call frequency with a mean of 15,028.17 and a standard deviation of 3,598.85 Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call frequency.

Results of the descriptive statistics analysis reported a sum of 6,044,787 for the annual number of unemployed persons for the State of TN with a mean of 167,910.75 and a standard deviation of 53,243.44. Descriptive statistical analysis reported a minimum frequency of 115,041 and a maximum frequency of 318,267 for the annual number of unemployed persons in State of TN.

Descriptive statistical results for the annual total of crisis center call frequency and the annual number of unemployed persons in State of TN encompassing thirty-six (36) complete years of the archival data (1976-2011) are reported in Table 4.17. Figure 4.11 provides a visual representation for the annual total of crisis center call frequency and the annual number of unemployed persons in the State of TN as a multiple line chart encompassing thirty-six (36) complete years of archival data (1976-2011)

Table 4.17  
 Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Number of  
 Unemployed Persons in State of TN of archival data (1976-2011)

Descriptive Statistics			
		Call Frequency Crisis Center	Unemployed Persons State of TN
N	Valid	36	36
	Missing	0	0
Minimum		6,733	115,041
Maximum		21,292	318,267
Sum		541,014	6,044,787
Mean		15,028.17	167,910.75
Standard Deviation		3,598.85	53,243.44



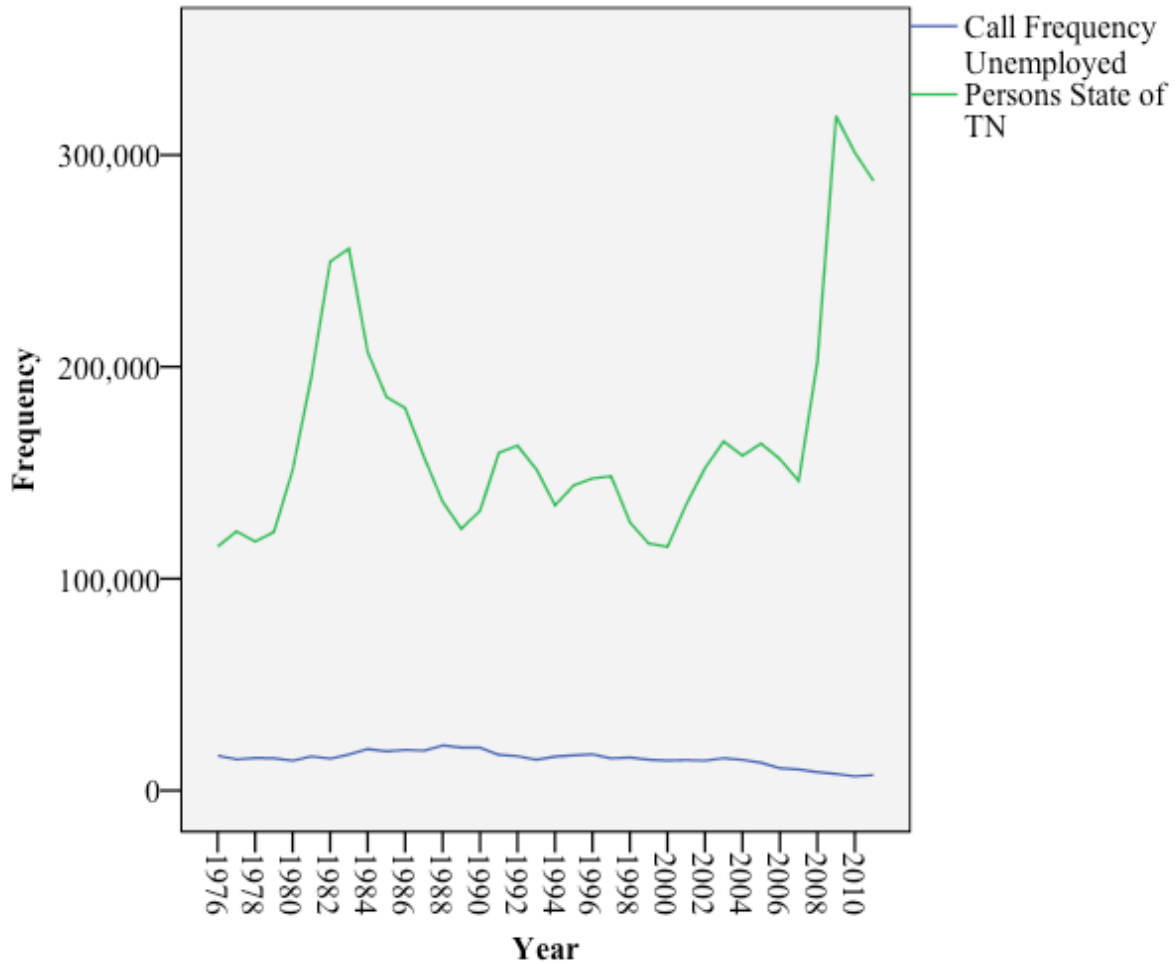


Figure 4.11 Multiple Line Chart for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons in State of TN of archival data (1976-2011)

Examination of the descriptive statistical results for the annual total of crisis center call frequency and the annual number of unemployed persons in the State of TN report that the annual total of crisis center call frequency has decreased as the annual number of unemployed persons in the State of TN have increased. Further statistical evaluation is necessary to determine whether or not a statistical inverse correlation exists and the strength of that relationship, if it does.

*Correlation Coefficients for Annual Total of Crisis Center Call Frequency and Annual Estimates of Unemployed Persons*

Correlation coefficients were computed among the annual total of crisis center call frequency and the annual estimate of unemployed persons in the State of TN encompassing thirty-six (36) years of archival data (1976 to 2011). (US Department of Labor: Bureau of Labor Statistics, 2012) Results of the correlation analysis reported a  $r = -.511$  with a  $p < .001$ . Results suggest a negative correlation when the annual total of crisis center call frequency is compared to the annual number of unemployed persons in the State of TN and that reported negative correlation is statistically significant.

Correlation coefficients for the annual total of crisis center call frequency and the annual number of unemployed persons in State of TN encompassing thirty-six (36) complete years of the archival data (1976-2011) are presented in Table 4.18.

Table 4.18  
Correlation Coefficient for Annual Total of Crisis Center Call Frequency and Annual Number of Unemployed Persons in State of TN of archival data (1976-2011)

Correlation Results			
		Call Frequency Crisis Center	Unemployed Persons State of TN
Call Frequency Crisis Center	Pearson Correlation	1	-0.511**
	Sig. (2-tailed)		0.010
	N	36	36
Unemployed Persons State of TN	Pearson Correlation	-0.511**	1
	Sig. (2-tailed)	0.010	
	N	36	36

\*\* . Correlation is significant at the 0.01 level (2-tailed)

The correlation coefficient ( $r = -0.511$ ;  $p < .01$ ) suggests that the annual total of crisis center call frequency has statistically significantly decreased as the annual estimate of unemployed persons in the State of TN has increased and that this inverse relationship is statistically significant. Results are consistent with previous computations of correlation coefficients when annual total of crisis center call frequency is compared with annual estimates for unemployed persons in Hamilton County, TN.

*Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population and Annual Unemployment Rate (%)*

The archival data of the annual total of crisis center call frequency was transformed into a ratio (%) of the annual estimates of the resident population in the State of TN (US Department of Commerce: Census Bureau, 2012) encompassing thirty (30) years of archival data (1981-2011). A descriptive statistical analysis was conducted to evaluate the archival data according to the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in State of TN encompassing thirty (30) years (1981-2010). The results of the descriptive statistical analysis reported the sum of 8.83% for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in the State of TN with a mean of 0.30% and a standard deviation of .09%. Descriptive statistical analysis reported a minimum frequency of 0.11% and a maximum frequency of 0.44% for annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in the State of TN.

A descriptive statistical analysis was conducted to evaluate the archival data according to the annual unemployment rate (%) in the State of TN (TN Department of Labor and Workforce, 2011) encompassing thirty (30) years (1981-2010). The results of the descriptive statistical analysis reported a sum of 198% for the annual unemployment rate (%) in the State of TN with a mean of 5.07% with a standard deviation of 1.58%.

Descriptive statistical results for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of the resident population in the State of TN and the annual unemployment rate (%) in the State of TN encompassing thirty (30) years of archival data (1981-2011) are presented in Table 4.19. Figure 4.12 provides a visual representation for the

annual total of crisis center call frequency as a ratio (5) of the annual estimates of the resident population in the State of TN as a simple line chart encompassing thirty (30) years of archival data (1981-2011). Figure 4.13 provides a visual representation for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of the resident population in the State of TN and the annual unemployment rate (%) in the State of TN as a multiple line chart encompassing thirty (30) years of archival data (1981-2011).

Table 4.19

Descriptive Statistics for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in State of TN and Annual Unemployment Rate (%) in State of TN of archival data (1981-2010)

Descriptive Statistics			
		Call Frequency as Ratio (%) of Estimated Population Hamilton County, TN	Unemployment Rate (%) Hamilton County, TN
N	Valid	30	30
	Missing	0	0
Minimum		0.11%	4.00%
Maximum		0.44%	12.00%
Sum		8.83%	198.00%
Mean		0.29%	6.59%
Standard Deviation		0.09%	2.18%

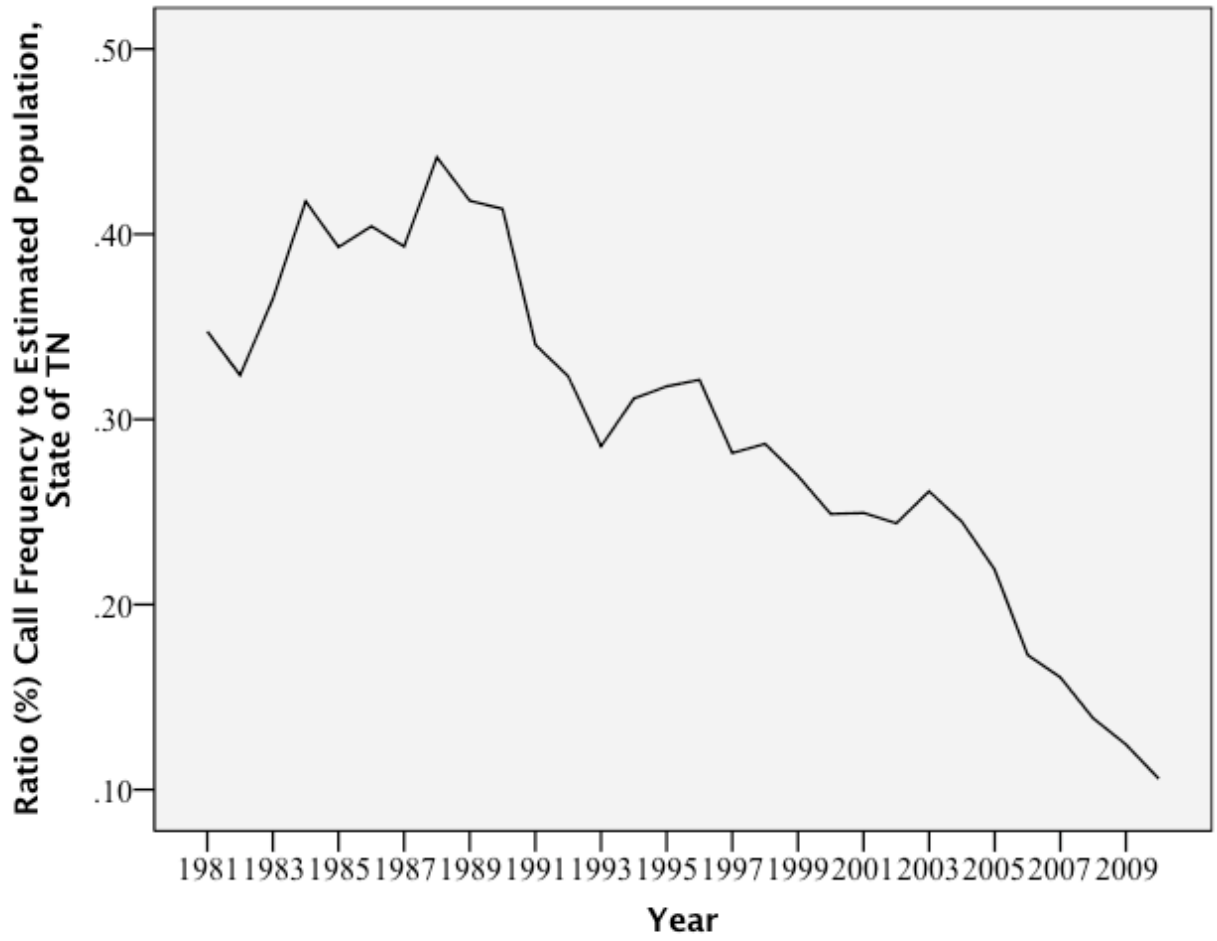


Figure 4.12 Simple Line Chart of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in State of TN of archival data (1981-2010)

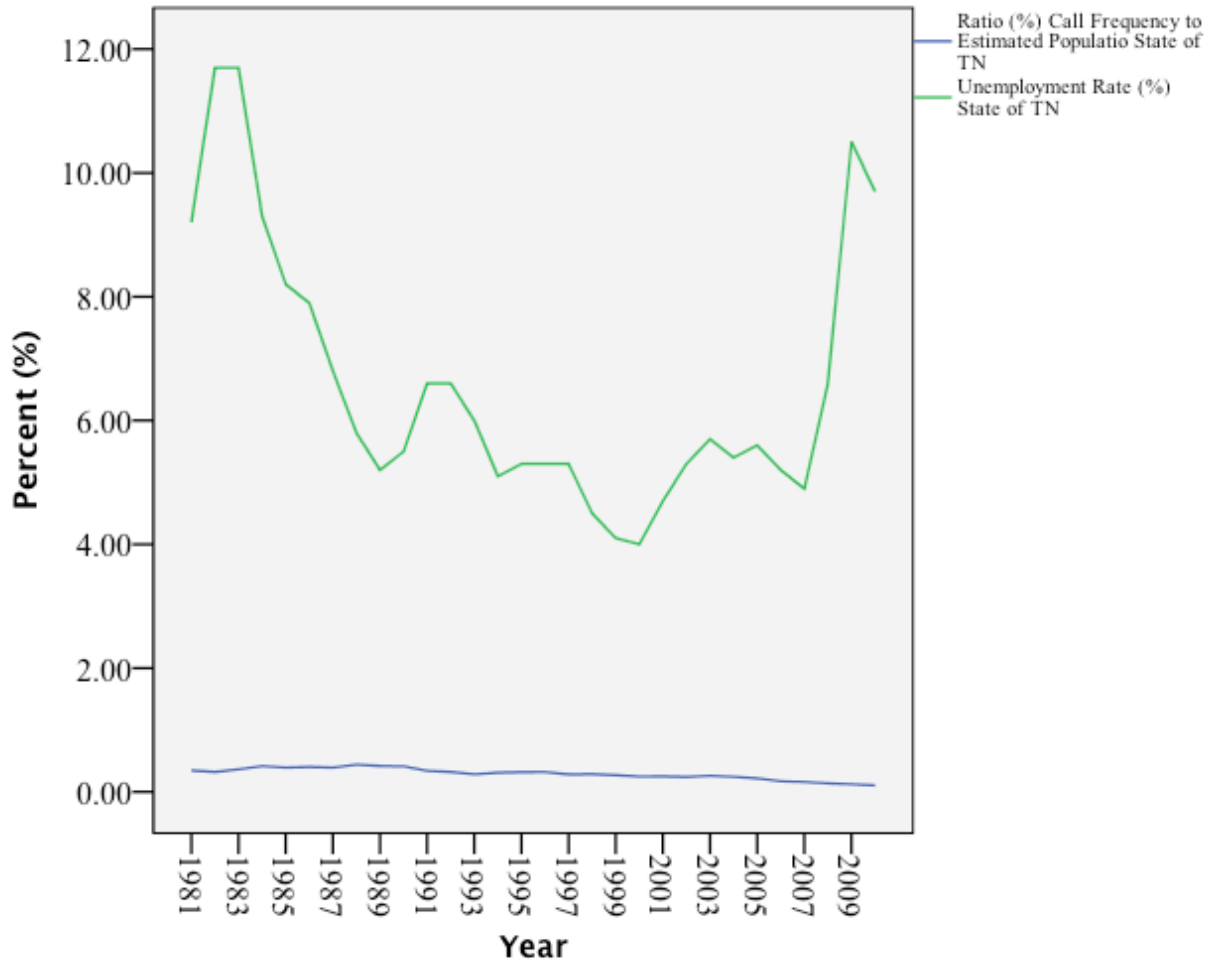


Figure 4.13 Multiple Line Chart of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population in State of TN and Annual Unemployment Rate (%) in State of TN of archival data (1981-2010)

Examination of the descriptive statistical results for the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in the State of TN and the annual unemployment rate in the State of TN suggest that the annual total of crisis center call frequency has decreased as the annual unemployment rate in the State of TN have increased.



Computation of correlation coefficients is recommended to determine whether or not a statistical inverse correlation exists and the strength of that relationship, if it does.

*Correlation Coefficients for Annual Total of Crisis Center Call Frequency as Ratio of Annual Estimates of Resident Population and Annual Unemployment Rate*

Correlation coefficients were computed among the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in the State of TN (US Department of Commerce: Census Bureau, 2012) and the annual unemployment rate (%) in the State of TN (US Department of Labor: Bureau of Labor Statistics, 2012) encompassing thirty (30) years of archival data (1981-2010). Results of the correlation analysis reported a  $r = 0.081$  with a  $p > .001$ . Results do not suggest that the annual total of crisis center call frequency as a ratio (%) of the annual estimates of the resident population in Hamilton County, TN has a correlation with the annual unemployment rate in Hamilton County, TN and that the lack of correlation is not statistically significant.

Correlation coefficient for the annual total of crisis center call frequency as ratio (%) of annual estimates of resident population State of TN and the annual unemployment rate (%) in the State of TN encompassing thirty (30) complete years of the archival data (1981-2009) are presented in Table 4.20.

Table 4.20  
 Correlation Results for Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Estimates of Resident Population State of TN and Annual Unemployment Rate (%) in State of TN of archival data (1981-2009)

Correlation Results			
		Call Frequency as Ratio (%) of Estimated Population State of TN	Unemployment Rate (%) State of TN
Call Frequency as Ratio (%) of Estimated Population State of TN	Pearson Correlation	1	0.081
	Sig. (2-tailed)		0.670
	N	30	30
Unemployment Rate (%) State of TN	Pearson Correlation	0.081	1
	Sig. (2-tailed)	0.670	
	N	30	30

The correlation coefficient ( $r = -0.081$ ;  $p > .05$ ) strongly suggests a lack of relationship when the annual total of crisis center call frequency as a ratio (%) of the annual estimates of resident population in the State of TN is compared to the annual unemployment rate (%) in the State of TN and that the lack of correlation is not statistically significant. This lack of statistical relationship may be due to a nonlinear association among the annual unemployment rate (%) data rather than a true non-covariance. Statistical evaluation of nonlinear association would be required to determine what, if any, correlation exists among the data.

## Annual Total of Crisis Center Call Frequency and Age

### *Descriptive Statistics for Annual Total of Crisis Center Call Age Frequency per Age Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. The archival data encompasses the years of 1969-2011. From 1969 to 1976, volunteers did not document the VCLs by designating an age category for each crisis center call. Beginning in January of 1977, volunteers began to code VCLs by assigning a designation of age pre-teen, age 13-17, age 18-35, age 36-64, age 65+ or age unknown category for each crisis center call. Inclusion of years when volunteers did not designate an age category in statistical analyses would have reported skewed results. Therefore, the years of 1969-1976 are excluded from statistical analyses.

In the tabulation of VCLs, some inconsistencies in the frequency totals were noted; reported annual total of crisis center call age frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in any longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify totals for age category ensuring results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call age frequency.

A descriptive statistical analysis was conducted to evaluate the age pre-teen frequency of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 4,376 for the age pre-teen category of the annual total of crisis center call age frequency with a mean of

125.03 and a standard deviation of 188.35. Descriptive statistical analysis reported a minimum frequency of 0.00 and a maximum frequency of 587 for the age pre-teen category of the annual total of crisis center call age frequency.

A descriptive statistical analysis was conducted to evaluate the age 13-17 frequency of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 24,275 for the age 13-17 category of the annual total of crisis center call age frequency with a mean of 693.57 and a standard deviation of 820.88. Descriptive statistical analysis reported a minimum frequency of 13 and a maximum frequency of 2,765 for the age 13-17 category of the annual total of crisis center call age frequency.

A descriptive statistical analysis was conducted to evaluate the age 18-35 frequency of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 178,864 for the age 18-35 category of the annual total of crisis center call age frequency with a mean of 5,110.40 and a standard deviation of 2489.13. Descriptive statistical analysis reported a minimum frequency of 1,347 and a maximum frequency of 9,483 for the age 18-35 category of the annual total of crisis center call age frequency.

A descriptive statistical analysis was conducted to evaluate the age 36-64 frequency of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 242,738 for the age 36-64 category of the annual total of crisis center call age frequency with a mean of 6,935.37 and a standard deviation of 574.84. Descriptive statistical analysis reported a minimum

frequency of 3,535 and a maximum frequency of 10,394 for the age 36-64 category of the annual total of crisis center call age frequency.

A descriptive statistical analysis was conducted to evaluate the age 65+ frequency of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 41,439 for the age 65+ category of the annual total of crisis center call age frequency with a mean of 1,188.97 and a standard deviation of 574.84. Descriptive statistical analysis reported a minimum frequency of 405 and a maximum frequency of 2,267 for the age 65+ category of the annual total of crisis center call age frequency.

A descriptive statistical analysis was conducted to evaluate the age unknown frequency of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 32,559 for the age unknown category of the annual total of crisis center call age frequency with a mean of 930.26 and a standard deviation of 968.76. Descriptive statistical analysis reported a minimum frequency of 0 and a maximum frequency of 3,300 for the age unknown category of the annual total of crisis center call age frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 524,251 for the annual total of crisis center call age frequency with a mean of 14,978.60 and a standard deviation of 3,640.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call age frequency.

Descriptive statistical analyses results age category frequencies of the annual total of crisis center call age frequency and the annual total of crisis center call age frequency are presented in Table 4.21. Figure 4.14 provides a visual representation for the age category frequencies of the annual total of crisis center call age frequency as a multiple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.15 provides a visual representation for the age category frequencies of the annual total of crisis center call age frequency as a stacked bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011)

Table 4.21  
 Descriptive Statistics for Age Category Frequencies of Annual Total of Crisis Center Call Age  
 Frequency of archival data (1977-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
Pre-teen	35	0	587	4,376	125.03	188.34
13-17	35	13	2,765	24,275	693.57	820.88
18-35	35	1,347	9,483	178,864	5,110.40	2,489.13
36-64	35	3,535	10,394	242,738	6,935.37	1,907.07
65+	35	405	2,267	41,439	1,183.97	574.84
Unknown	35	0	3,300	32,559	930.26	968.76
Age Frequency	35	6,733	21,292	524,251	14,978.60	3,640.44
Valid N (listwise)	35					



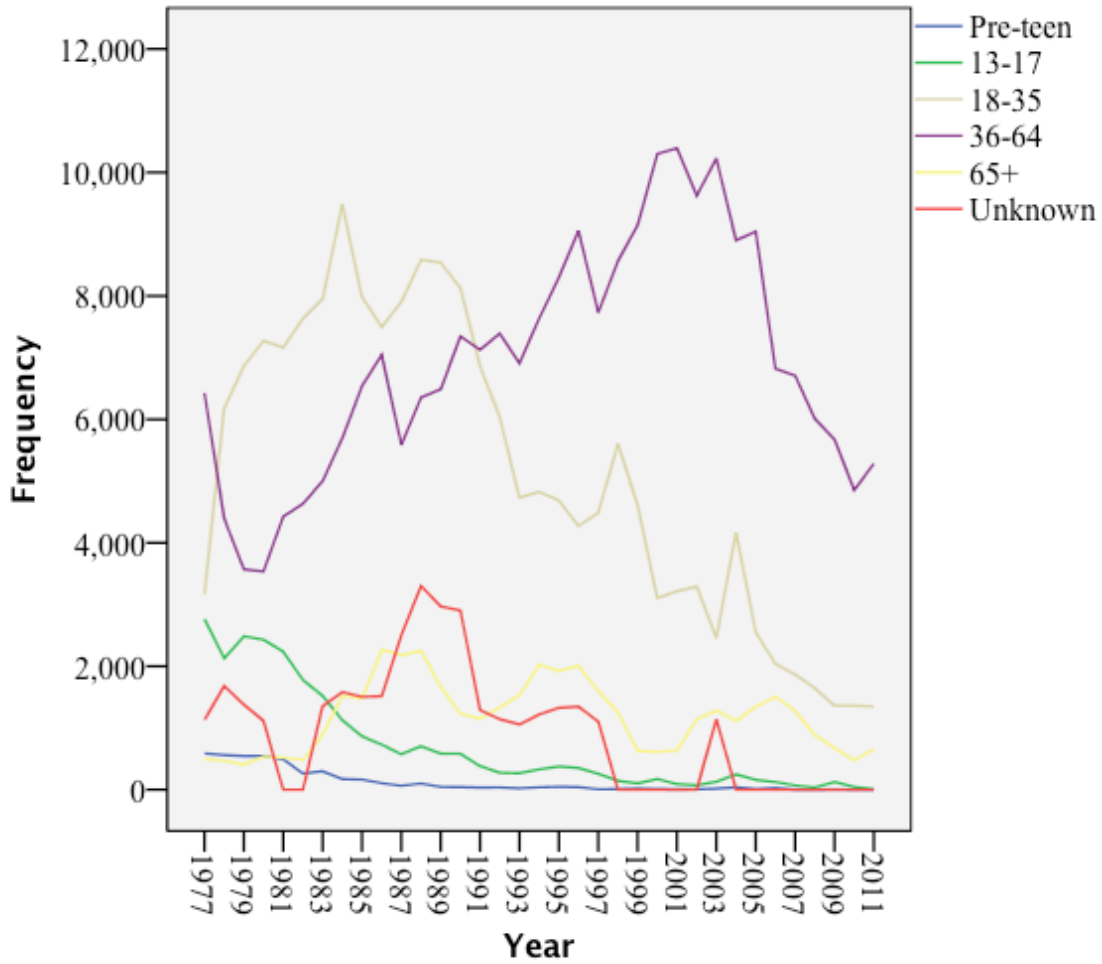


Figure 4.14 Multiple Line Chart for Age Category Frequencies of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011)

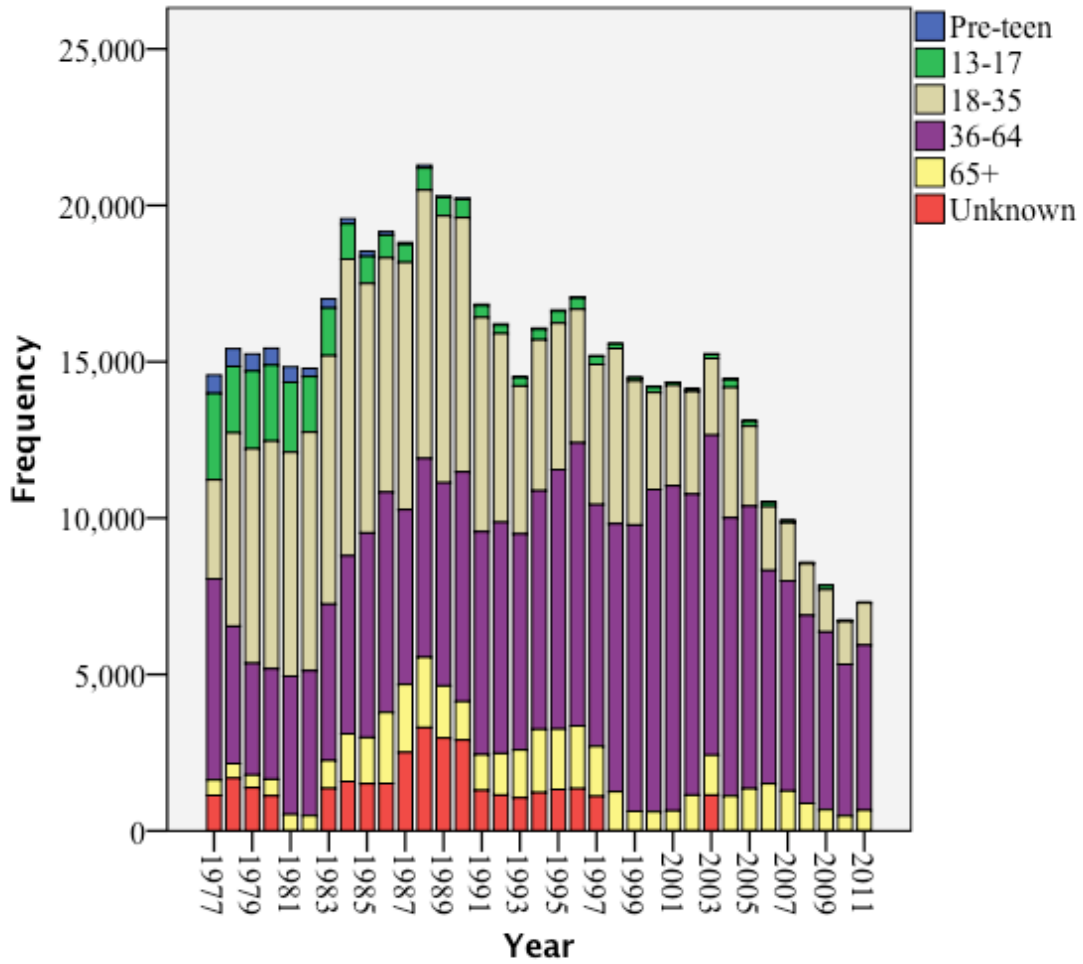


Figure 4.15 Stacked Bar Chart for Age Category Frequencies of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011)

*Descriptive Statistics for Age Category Frequency of Annual Total of Crisis Center Call Age Frequency as Ratio of Annual Total of Crisis Center Call Age Frequency*

Age category frequencies of the annual total of crisis center call age frequency were transformed into a ratio (%) of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011).

A descriptive statistical analysis was conducted to evaluate the age pre-teen frequency of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 27.83% for the age pre-teen category for the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency with a mean of 0.80% and a standard deviation of 1.24%.

A descriptive statistical analysis was conducted to evaluate the age 13-17 frequency of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 153.53% for the age 13-17 category of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency with a mean of 32.35% and a standard deviation of 11.02%.

A descriptive statistical analysis was conducted to evaluate the age 18-35 age frequency of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 1,132.17% for

the age 28-35 category of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency with a mean of 32.35% and a standard deviation of 11.02%.

A descriptive statistical analysis was conducted to evaluate the age 36-65 frequency of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 1,723.23% for the age 36-64 category of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency with a mean of 49.24% and a standard deviation of 17.23%.

A descriptive statistical analysis was conducted to evaluate the age 65+ frequency of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 278.30% for the age 65+ category of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency with a mean of 7.95% and a standard deviation of 3.26%.

A descriptive statistical analysis was conducted to evaluate the age unknown frequency of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 184.93% for the age unknown category of the annual total of crisis center call age frequency as a ratio (%) of the

annual total of crisis center call age frequency with a mean of 5.28% and a standard deviation of 5.10%.

Descriptive statistical analysis results for the age category frequencies of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency are reported in Table 4.22. Figure 4.16 provides a visual representation for the age category frequencies of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency as a multiple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.17 provides a visual representation of the age category frequencies of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency as a stacked bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011).

Table 4.22  
 Descriptive Statistics for Age Category Frequencies of Annual Total of Crisis Center Call Age  
 Frequency as Ratio (%) of Annual Total of Crisis Center Call Age Frequency of archival data  
 (1977-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
% Pre-teen	35	0.00%	4.03%	27.83%	0.80%	1.24%
% 13-17	35	0.18%	18.97%	153.53%	4.39%	5.40%
% 18-35	35	16.12%	51.61%	1,132.17%	32.35%	11.02%
% 36-64	35	22.91%	72.55%	1,723.23%	49.24%	17.23%
% 65+	35	2.66%	14.31%	278.30%	7.95%	3.26%
% Unknown	35	0.00%	15.50%	184.93%	5.28%	5.10%
Valid N (listwise)	35					

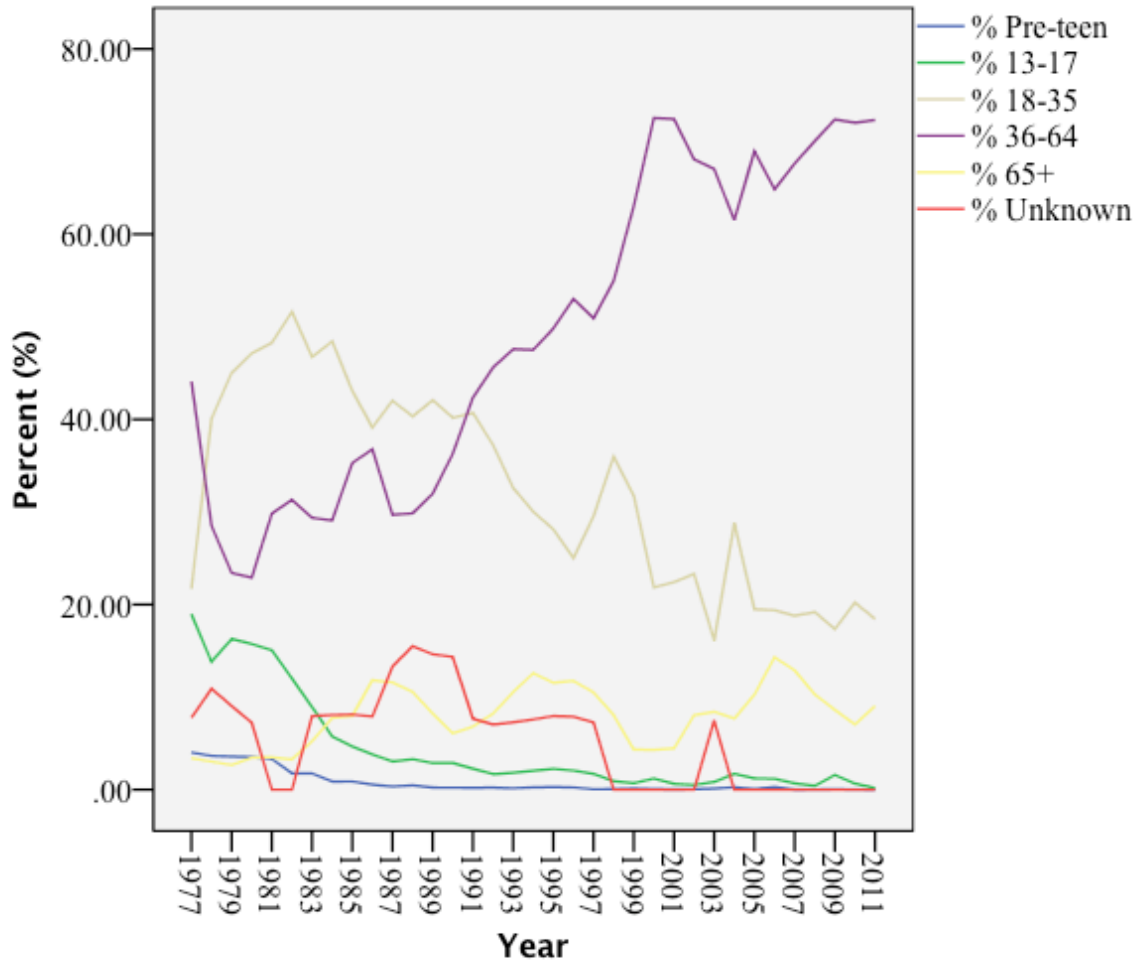


Figure 4.16 Multiple Line Chart for Age Category Frequencies of Annual Total of Crisis Center Call Age Frequency as Ratio (%) of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011)

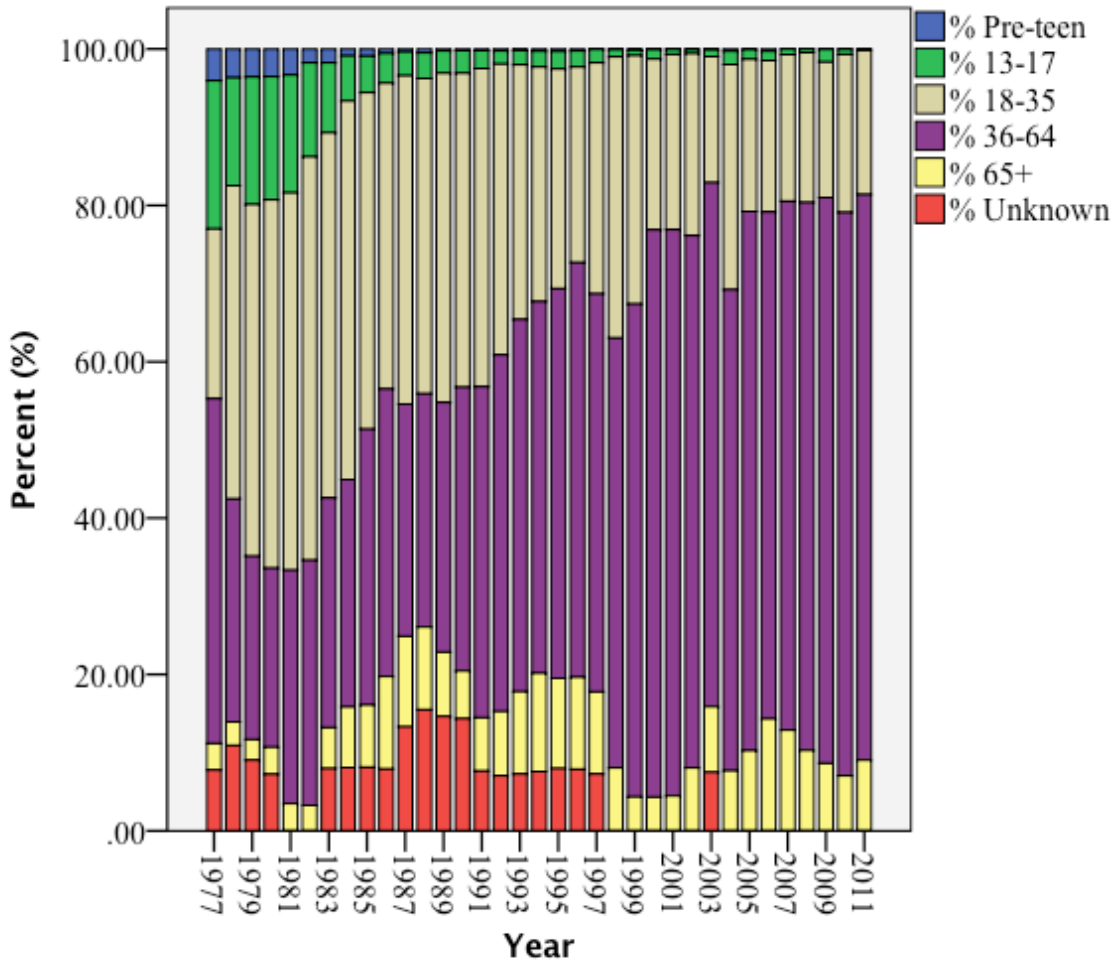


Figure 4.17 Stacked Bar Chart of Age Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011)

Examination of the descriptive statistical results for the age category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency has reported the % 18-35 age category has decreased as the % 36-64 age category has increased. Further statistical evaluation is necessary to determine whether or not a statistical inverse correlation exists and the strength of that relationship, if it does



*Correlation Coefficients for 18-35 Age Category Frequency as Ratio of Annual Total of Crisis Center Age Frequency and 36-64 Age Category Frequency of the Annual Total of Crisis Center Call Age Frequency*

Correlation coefficients were computed among the 18-35 age category of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call age frequency and the 36-64 age category of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency encompassing thirty-five (35) complete years of archival data (1981-2010). Results of the correlation analysis reported a  $r = 0.981$  with a  $p < 0.01$ . Results strongly suggest that the 18-35 age category of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call age frequency has decreased as the 36-64 age category of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency has increased and that the strong inverse correlation is statistically significant.

Correlation coefficient for the 18-35 age category of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call age frequency and the 36-64 age category of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency encompassing thirty-five (35) complete years of the archival data (1977-2009) is presented in Table 4.23.

Table 4.23

Correlation Results for 18-35 Age Category of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency and 36-64 Age Category of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

Correlation Results			
		18-35 Age Category as Ratio (%) of Age Frequency	36-64 Age Category as Ratio (%) of Age Frequency
18-35 Age Category as Ratio (%) of Age Frequency	Pearson Correlation	1	-0.918**
	Sig. (2-tailed)		0.000
	N	35	35
36-64 Age Category as Ratio (%) of Age Frequency	Pearson Correlation	-0.918**	1
	Sig. (2-tailed)	0.000	
	N	35	35

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient ( $r = -0.981$ ;  $p < .01$ ) suggests a strong statistical relationship when the 18-35 age category of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call age frequency is compared to the 36-64 age category of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency and that statistically strong inverse relationship is statistically significant. With the correlation suggesting a nearly perfect inverse relationship, the changes in frequencies for 18-35 age category and the 36-64 age category suggest that this is the same population over time.

Figure 4.18 provides a visual representation for the 18-35 age category frequency of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center

call age frequency and the 36-64 age category frequency of the annual total of crisis center call age frequency as a ratio (%) of the annual total of crisis center call age frequency as a multiple line chart encompassing the thirty-five (35) complete years of the archival data (1977-2011).

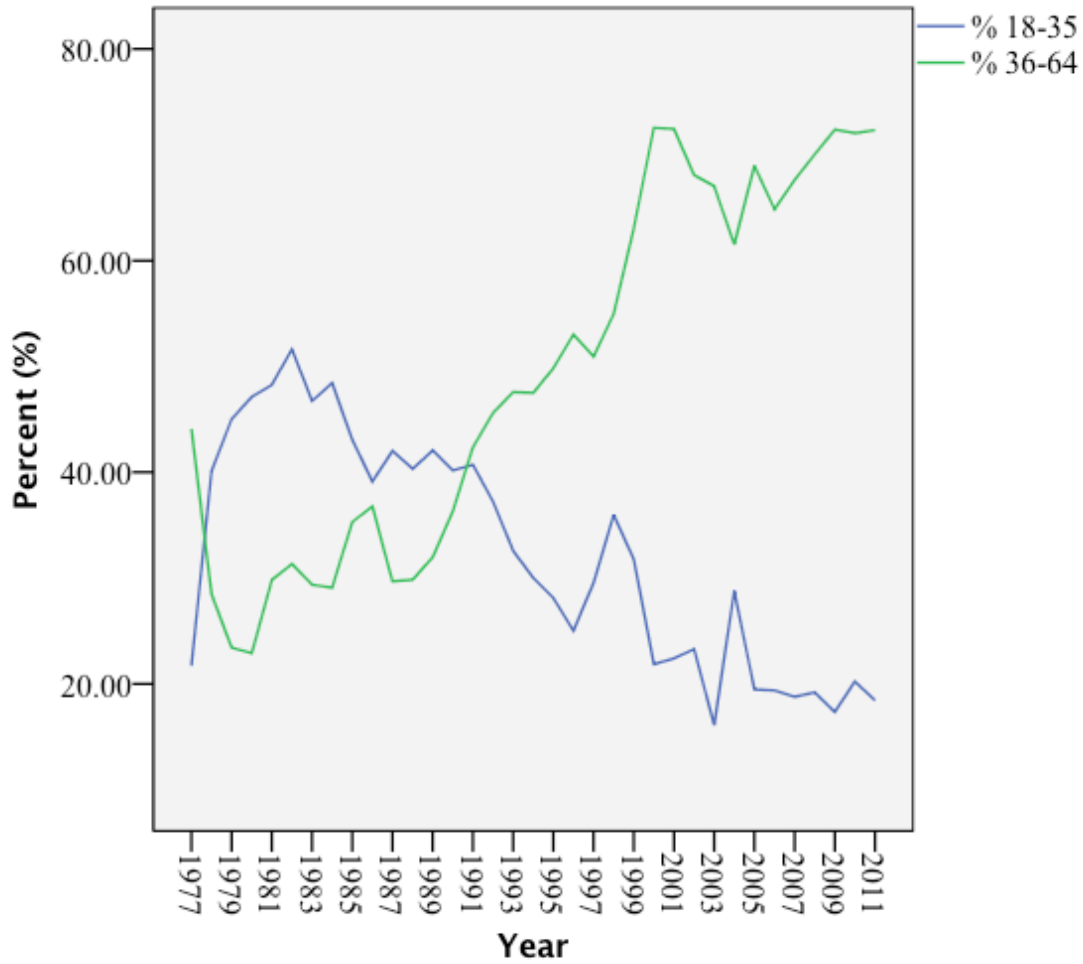


Figure 4.18 Multiple Line Chart for 18-35 Age Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Age Frequency and 36-64 Age Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Age Frequency of archival data (1977-2011)

## Annual Total of Crisis Center Call Frequency and Anonymity

### *Descriptive Statistics Annual Total of Crisis Center Call Frequency per Anonymity Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. The archival data encompasses the years of 1969-2011. From 1969 to 1976, volunteers did not document the VCLs by designating an anonymity category. In 1977, volunteers began to code VCLs by assigning a designation of name given category or no name given category for each crisis center call. Inclusion of years when volunteers did not designate an anonymity category in descriptive statistical analyses would have reported skewed results. Therefore, the years of 1969-1976 are excluded from descriptive statistical analyses.

In the tabulation of VCLs, some inconsistencies in the frequency totals were noted; reported annual total of crisis center call anonymity frequency was inconsistent with reported annual total of crisis center call frequency. In the process of reviewing annual statistical reports, it was noted that while the reporting of name give category of the annual total of crisis center call frequency was consistent, the reporting of no name given category of the annual total of crisis center call frequency was inconsistent. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies contained within the archival data. All data contained within the annual statistical reports are represented in any longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify totals for the anonymity category ensuring results accurately report the archival data.

With the lack of consistent data for no name given category of the annual total of crisis center call anonymity frequency, it was impossible to determine an annual total of crisis center

call anonymity frequency based on the information provided in the annual statistical reports. To determine the data for no name given category, the name given category was subtracted from the annual total of crisis center call frequency and the result of the transformation of the data was assigned to the no name given category. Therefore, all descriptive statistical analyses with respect to the no name given category are based on the annual total of crisis center call frequency.

A descriptive statistical analysis was conducted to evaluate the name given category of the annual total of crisis center call frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 65,031 for the name given category of the annual total of crisis center call anonymity frequency with a mean of 1,858.03 and a standard deviation of 1,361.73. Descriptive statistical analysis reported a minimum frequency of 460 and a maximum frequency of 4,717 for the name give category of the annual total of crisis center call anonymity frequency.

A descriptive statistical analysis was conducted to evaluate the no name given category of the annual total of crisis center call frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 459,496 for the no name given category of the annual total of crisis center call frequency with a mean of 13,128.46 and a standard deviation of 3,314.81. Descriptive statistical analysis reported a minimum frequency of 6,273 and a maximum frequency of 19,562 for the no name given category of the annual total of crisis center call frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call frequency encompassing thirty-five (35) complete years of the archival data

(1977-2011). Results of the descriptive statistical analysis reported a sum of 524,527 for the annual total of crisis center call frequency with a mean of 14,986.49 and a standard deviation of 3,642.57. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call frequency.

Descriptive statistical analysis results are reported in Table 4.24. Figure 4.19 provides a visual representation for the anonymity category frequencies of the annual total of crisis center call frequency as a simple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.20 provides a visual representation for anonymity category frequencies of the annual total of crisis center call frequency as a stacked bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.21 provides a visual representation for the anonymity category frequencies of the annual total of crisis center call frequency as a multiple line chart encompassing thirty-five (35) complete years of archival data (1977-2011). Figure 4.22 provides a visual representation for the anonymity category frequencies of the annual total of crisis center call frequency as a stacked bar chart encompassing thirty-five (35) complete years of archival data.

Table 4.24  
 Descriptive Statistics for Anonymity Category Frequencies of Annual Total of Crisis Center Call  
 Frequency of archival data (1977-2011)

Descriptive Statistics				
		Name Given Frequency	No Name Given Frequency	Call Frequency
N	Valid	35	35	35
	Missing	0	0	0
Minimum		460	6,273	6,733
Maximum		4,717	19,562	21,292
Sum		65,031	459,496	524,527
Mean		1,858.03	13,128.46	14,986.49
Standard Deviation		1,361.730	3,314.81	3,642.57





Figure 4.19 Simple Line Chart for Name Given Frequency of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

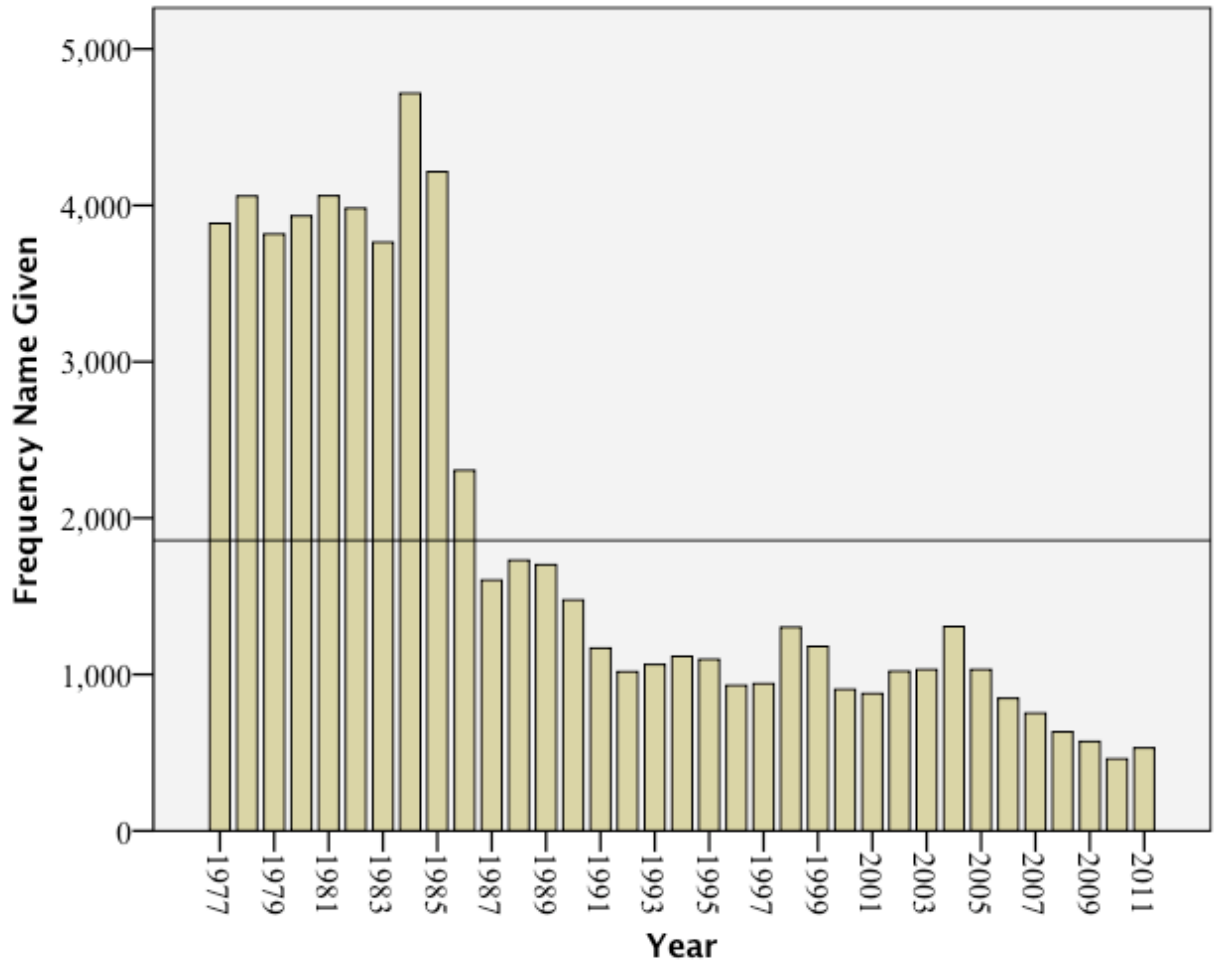


Figure 4.120 Simple Bar Chart for Name Given Frequency of Annual Total of Crisis Center Call Frequency with Name Given Mean Line (1,858.03) of archival data (1977-2011)

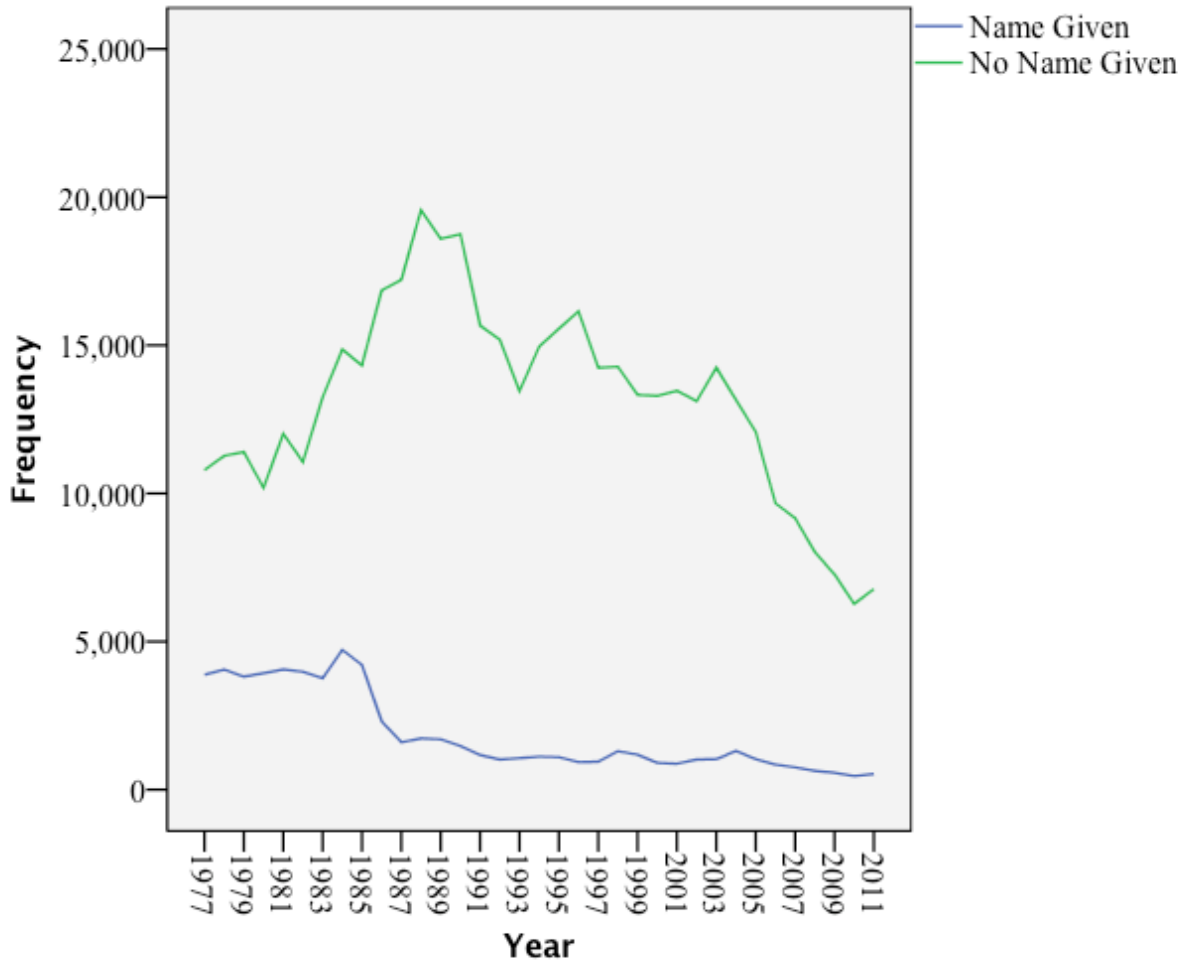


Figure 4.21 Multiple Line Chart for Anonymity Category Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

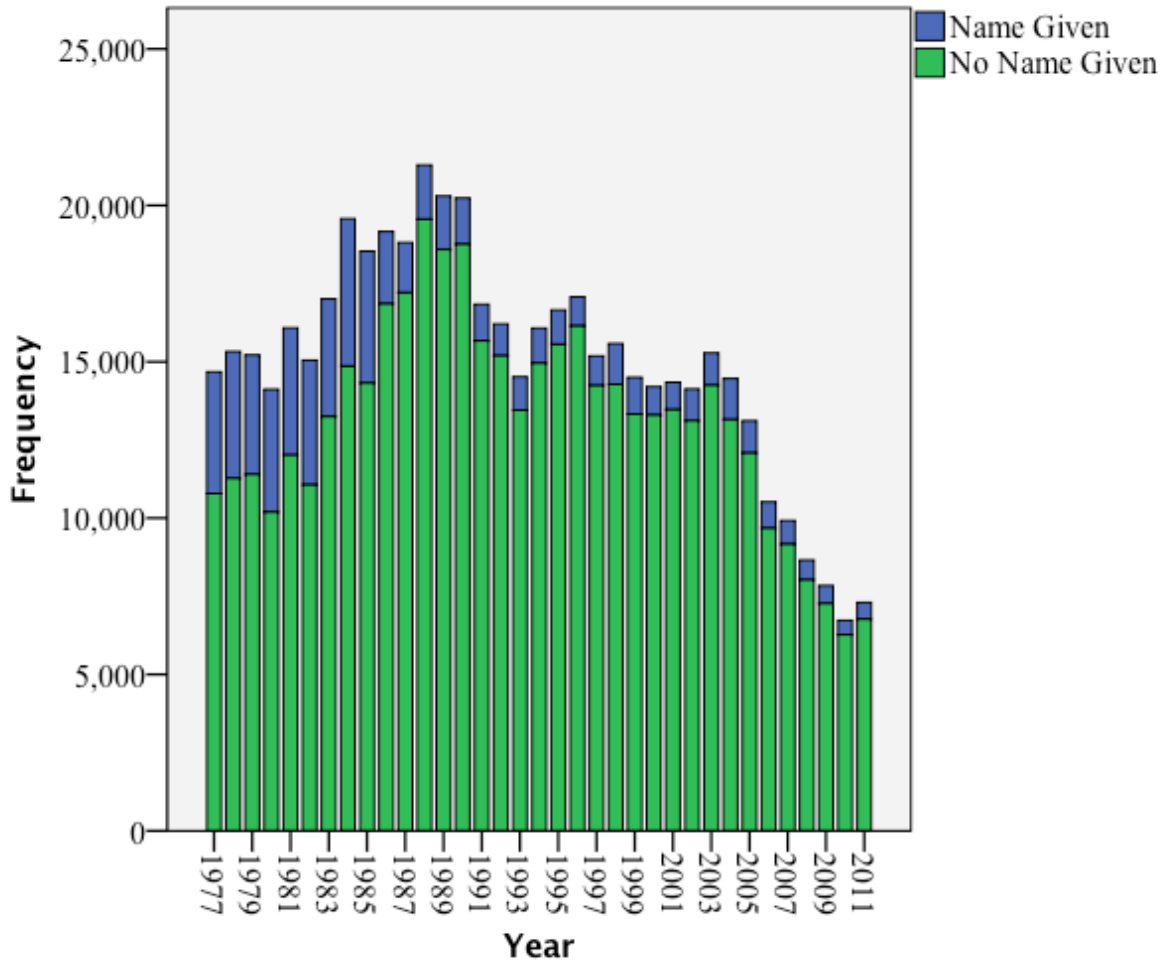


Figure 4.22 Stacked Bar Chart for Anonymity Category Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

*Descriptive Statistics for Anonymity Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency*

The anonymity category frequencies of the annual total of crisis center call frequency were transformed into a ratio (%) of the annual total of crisis center call frequency encompassing thirty-five (35) anonymity category years of the archival data (1977-2011). A descriptive statistical analysis was conducted to evaluate the name given category of the annual total of crisis center call anonymity frequency as a ratio (%) of the annual total of crisis center call frequency encompassing thirty-five (35) anonymity category years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 420.82% for name given category of the annual total of crisis center call anonymity frequency with a mean of 12.02% and a standard deviation of 7.98%. Descriptive statistical analysis reported a minimum frequency of 5.45% and a maximum frequency of 27.85% for the name give category of the annual total of crisis center call anonymity frequency.

A descriptive statistical analysis was conducted to evaluate the no name given category of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency encompassing all thirty-five (35) anonymity category years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 3,079.18% for no name given category of the annual total of crisis center call frequency with a mean of 87.98% and a standard deviation of 7.98%. Descriptive statistical analysis reported a minimum frequency of 72.15% and a maximum frequency of 94.55% for the no name give category of the annual total of crisis center call frequency.

Descriptive statistical analyses results for the anonymity category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call

frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are presented in Table 4.25. Figure 4.23 provides a visual representation for the name given category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency as a single line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.24 provides a visual representation for the name given category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency as a simple bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.25 provides a visual representation for the anonymity category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency as a multiple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.26 provides a visual representation for the anonymity category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency as a stacked bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011).

Table 4.25  
 Descriptive Statistics of Anonymity Category Frequencies of Annual Total of Crisis Center Call  
 Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data  
 (1977-2011)

Descriptive Statistics			
		Name Given Frequency as Ratio (%) of Call Frequency	No Name Given Frequency as Ratio (%) of Call Frequency
N	Valid	35	35
	Missing	0	0
Minimum		5.45%	72.15%
Maximum		27.85%	94.55%
Sum		420.82%	3,079.18%
Mean		12.02%	87.98%
Standard Deviation		7.98%	7.98%

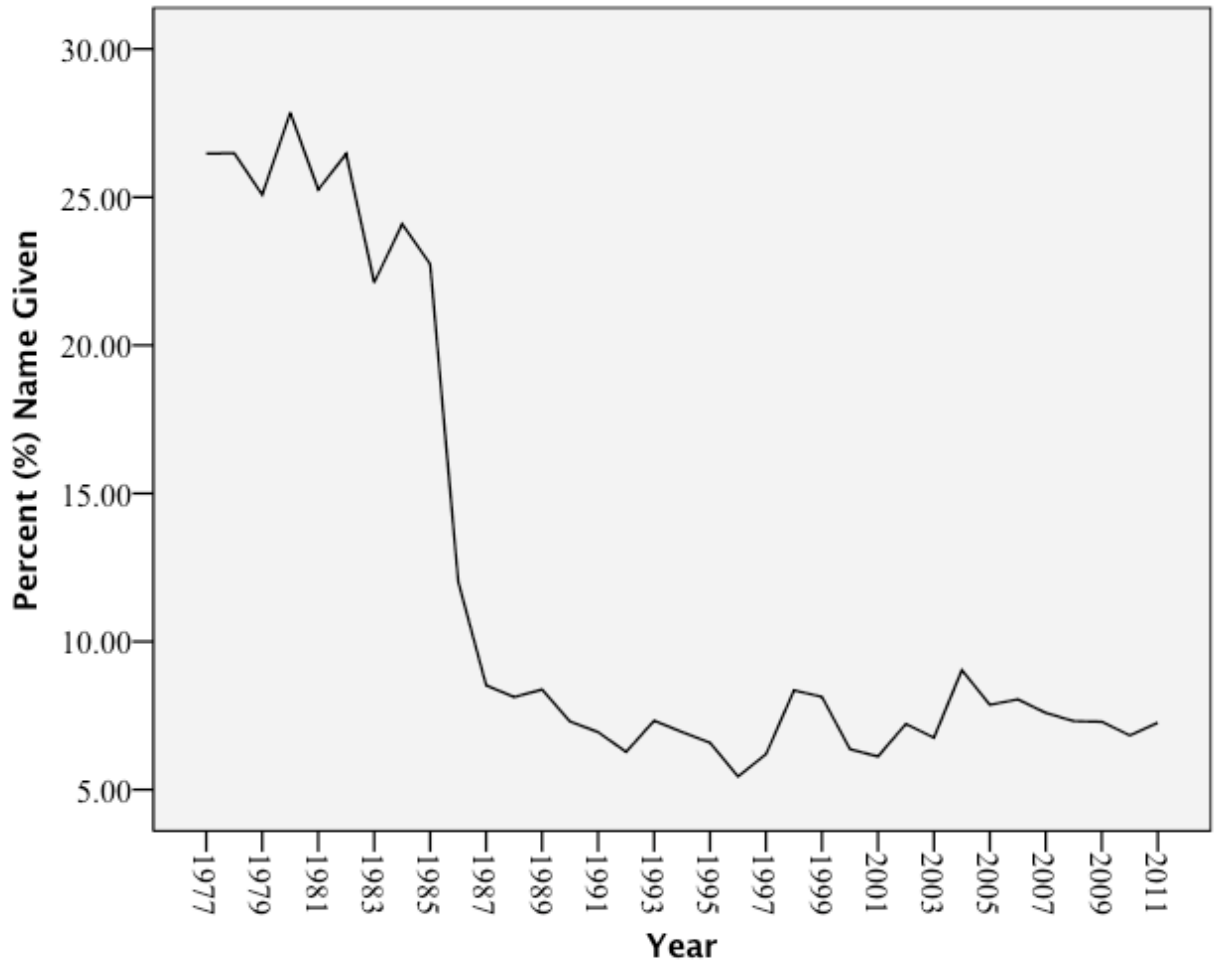


Figure 4.23 Simple Line Graph for Name Given Category Frequency of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)



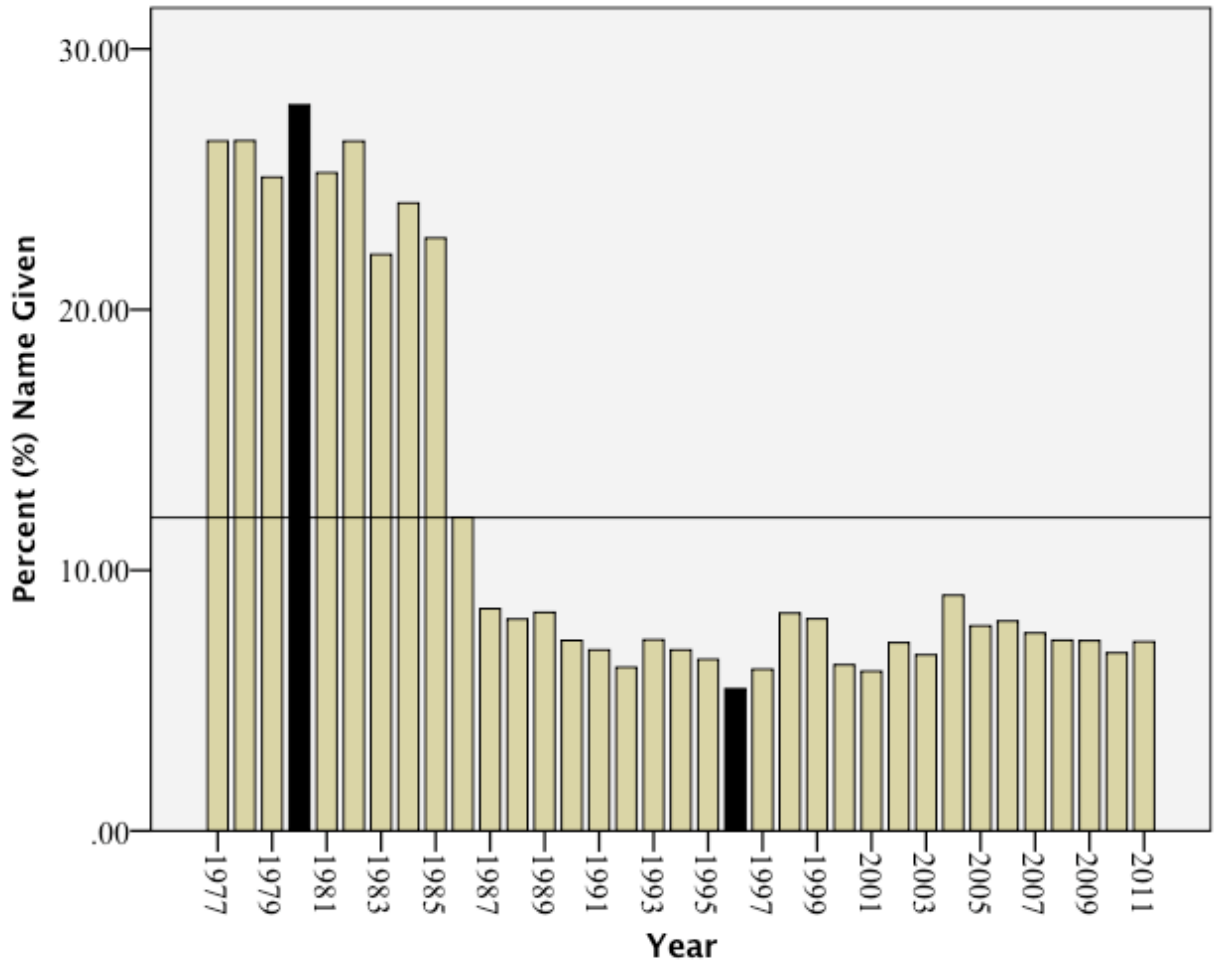


Figure 4.24 Simple Bar Chart for Name Given Category Frequency of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency with Name Given Mean Line (12.02%) of archival data (1977-2011)

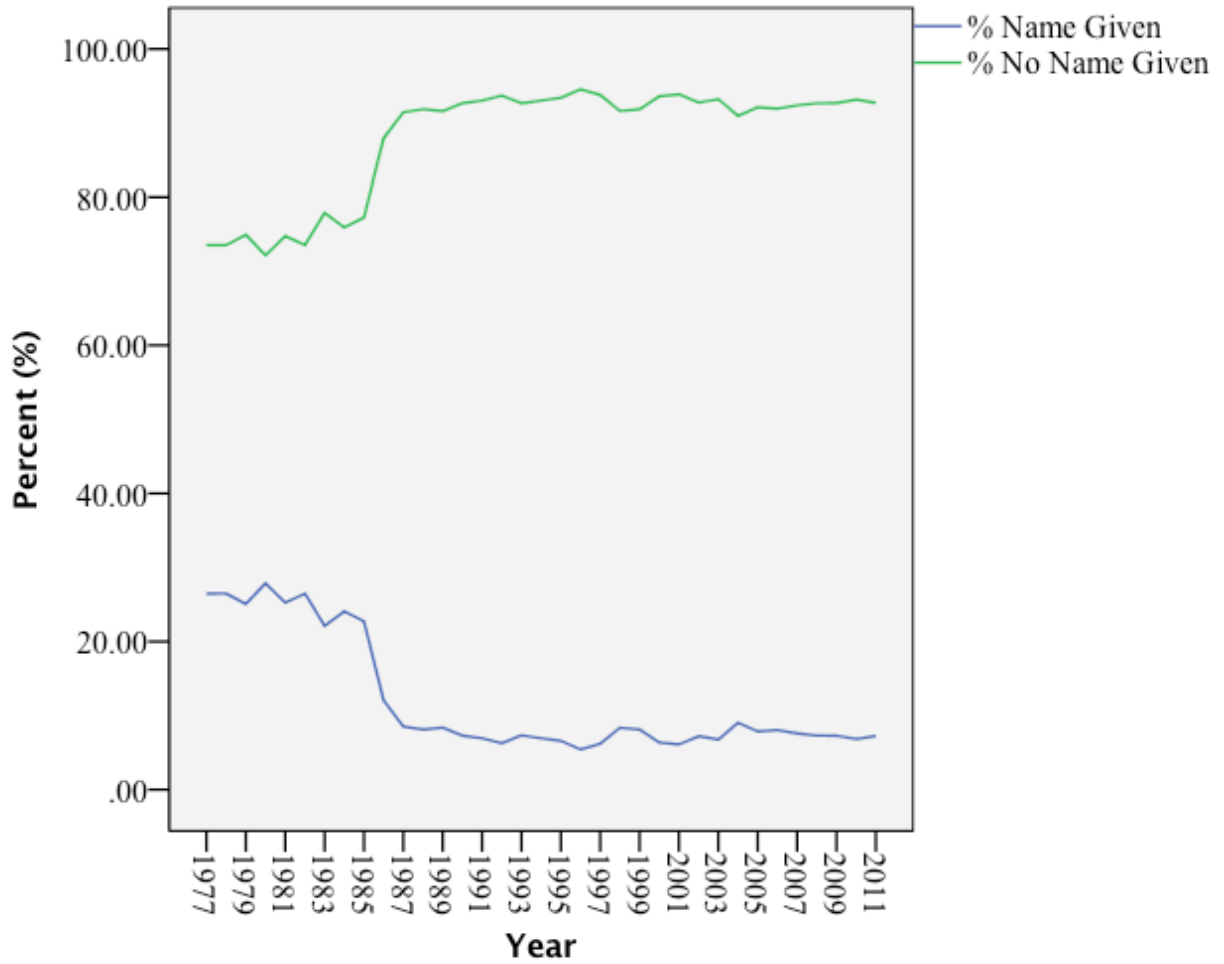


Figure 4.25 Multiple Line Chart for Anonymity Category Frequencies as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

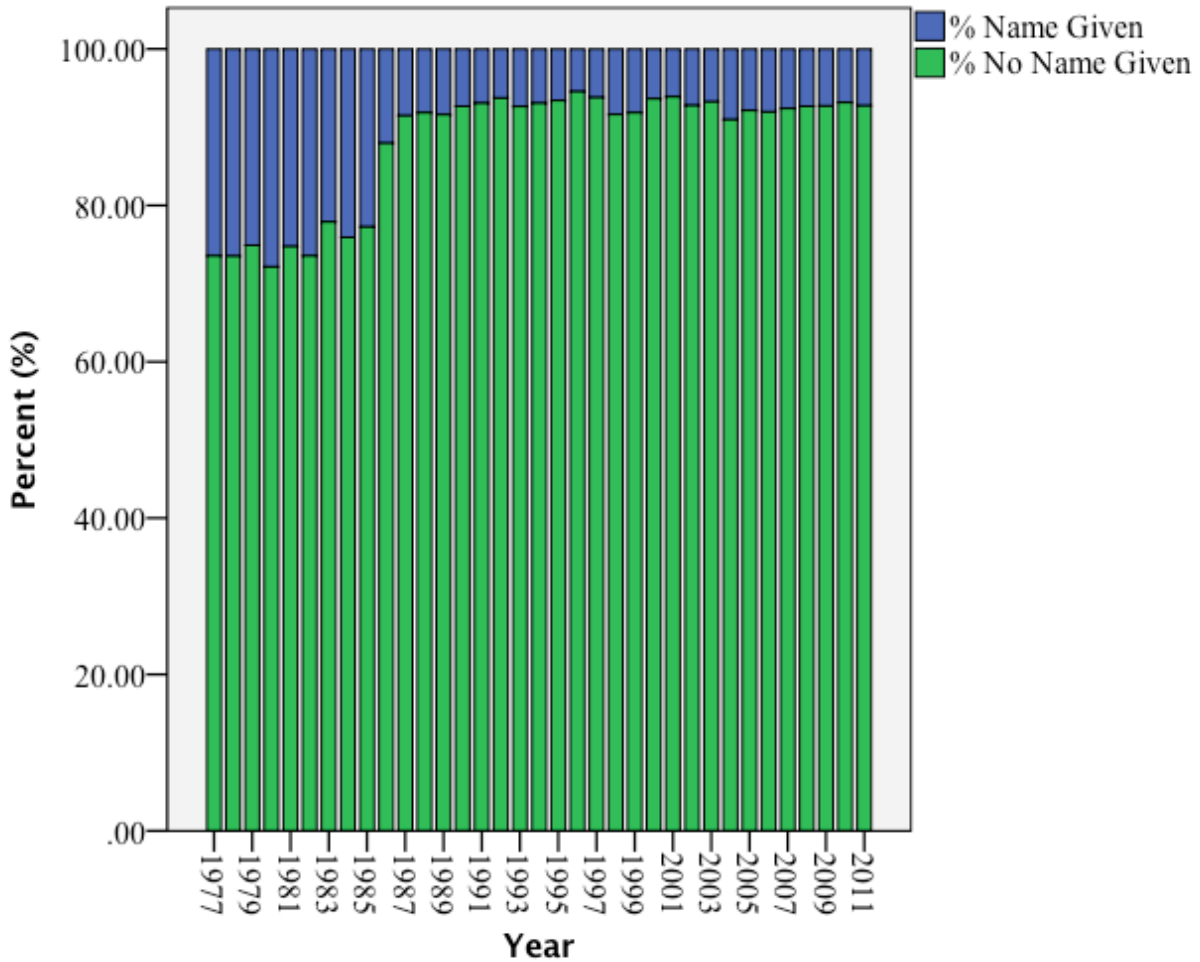


Figure 4.26 Stacked Bar Chart for Anonymity Category Frequencies as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

Examination of the descriptive statistical results for the anonymity category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency does not suggest a significant change in frequency distribution since 1987. No further statistical evaluation is recommended.

## Annual Total of Crisis Center Call Frequency and Gender

### *Descriptive Statistics for Annual Total of Crisis Call Frequency per Gender Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. The archival data encompasses the years of 1969-2011. From 1969 to 1976, volunteers did not document the VCLs by designating a gender category. In 1977, volunteers began to code VCLs by assigning a designation of male gender, female gender, or unknown gender category for each crisis center call. Inclusion of years when volunteers did not assign a gender category in statistical analyses would have reported skewed results. Therefore, the years of 1969-1976 are excluded from descriptive statistical analyses.

In the tabulation of VCLs, some inconsistencies in the frequency totals were noted; reported annual total of crisis center call gender frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies contained within the archival data. All data contained within the annual statistical reports are represented in any longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify totals for the gender category ensuring results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call gender frequency.

A descriptive statistical analysis was conducted to evaluate the male gender category of the annual total of crisis center call gender frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 179,262 for the male gender category of the annual total of crisis center call gender

frequency with a mean of 5,121.77 and a standard deviation of 1,262.79. Descriptive statistical analysis reported a minimum frequency of 2,768 and a maximum frequency of 8,030 for the male gender category of the annual total of crisis center call gender frequency.

A descriptive statistical analysis was conducted to evaluate the female gender category frequency of the annual total of crisis center call gender frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 343,087 for the female gender frequency of the crisis center call frequency with a mean of 9,802.49 and a standard deviation of 2,559.40. Descriptive statistical analysis reported a minimum frequency of 3,965 and a maximum frequency of 14,698 for the female gender category of the annual total of crisis center call gender frequency.

A descriptive statistical analysis was conducted to evaluate the unknown gender frequency of the annual total of crisis center call gender frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 2,178 for the unknown gender frequency of the crisis center call gender frequency with a mean of 62.23 and a standard deviation of 115.59. Descriptive statistical analysis reported a minimum frequency of 0 and a maximum frequency of 329 for the unknown gender category of the annual total of crisis center call gender frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call gender frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 524,527 for the annual total of crisis center call gender frequency with a mean of 14,986.49 and a standard

deviation of 3,642.57. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call gender frequency.

Descriptive statistical analysis results for gender category frequencies of the annual total of crisis center call gender frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are reported in Table 4.26. Figure 4.27 provides a visual representation for gender category frequencies of the annual total of crisis center call gender frequency as a multiple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.28 provides a visual representation for gender category frequencies of the annual total of crisis center call gender frequency as a stacked bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011).

Table 4.26  
 Descriptive Statistics for Gender Category Frequencies of Annual Total of Crisis Center Call  
 Gender Frequency and Annual Total of Crisis Center Call Gender Frequency of archival data  
 (1977-2011)

Descriptive Statistics					
		Male Frequency	Female Frequency	Unknown Frequency	Gender Frequency
N	Valid	35	35	35	35
	Missing	0	0	0	0
Minimum		2,768	3,965	0	6,733
Maximum		8,030	14,698	329	21,292
Sum		179,262	343,087	2,178	524,527
Mean		5,121.77	9,802.49	62.23	14,986.50
Standard Deviation		1,262.79	2,522.40	115.59	3,642.57

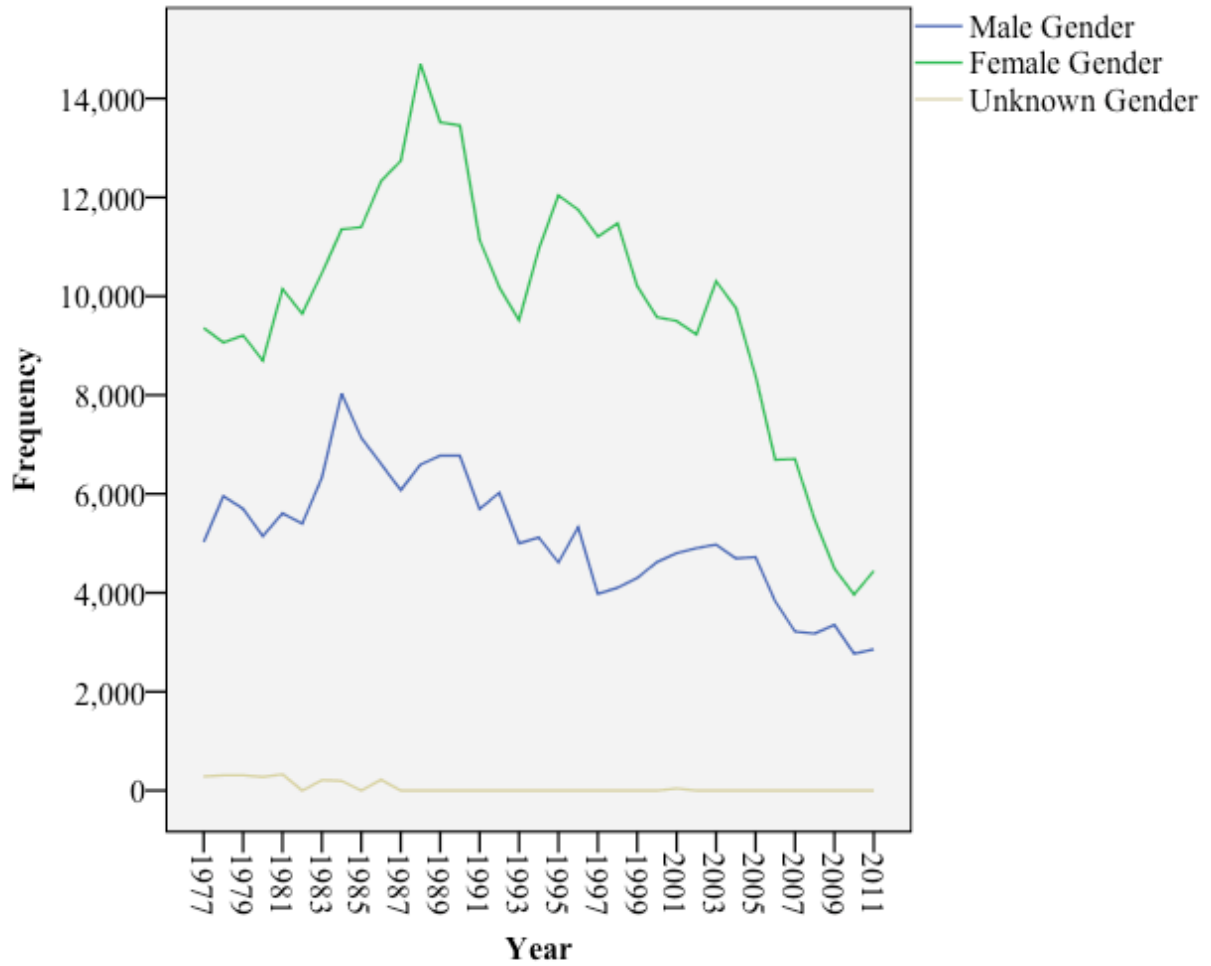


Figure 4.27 Multiple Line Chart for Gender Category Frequencies of Annual Total of Crisis Center Call Gender Frequency of archival data (1977-2011)



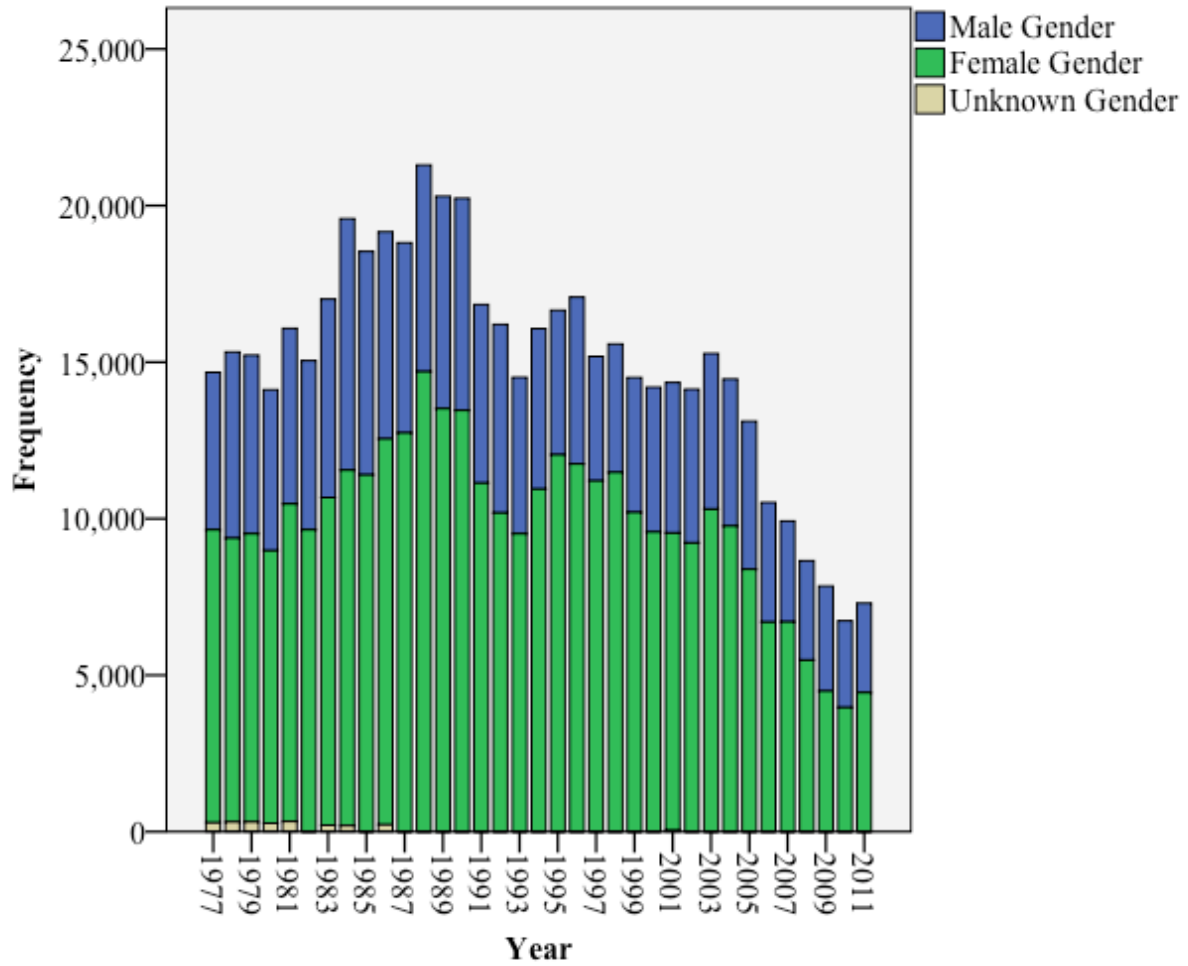


Figure 4.28 Stacked Bar Chart for Gender Category Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

*Descriptive Statistics for Gender Category Frequencies of Annual Total of Crisis Center Call Gender Frequency as Ratio (%) of Annual Total of Crisis Center Call Gender Frequency*

Gender category frequencies of the annual total of crisis center call gender frequency were transformed into a ratio (%) of the annual total of crisis center call gender frequency encompassing thirty-five (35) complete years of the archival data (1977-2011).

A descriptive statistical analysis was conducted to evaluate the male gender category of the annual total of crisis center call gender frequency as a ratio (%) of the annual total of crisis center call gender frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 1,207.87% for the male gender frequency of the annual total of crisis center call gender frequency with a mean of 34.51% and a standard deviation of 3.87%. Descriptive statistical analysis reported a minimum frequency of 26.20% and a maximum 42.72% frequency for the male gender category of the annual total of crisis center call gender frequency

A descriptive statistical analysis was conducted to evaluate the female gender category of the annual total of crisis center call gender frequency as a ratio (%) of the annual total of crisis center call gender frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 2,278.45% for the female gender frequency of the annual total of crisis center call gender frequency with a mean of 65.10% and a standard deviation of 4.15%. Descriptive statistical analysis reported a minimum frequency of 57.28% and a maximum frequency of 73.805% for the female gender category of the annual total of crisis center call gender frequency.

A descriptive statistical analysis was conducted to evaluate the unknown gender category of the annual total of crisis center call gender frequency as a ratio (%) of the annual total of crisis

center call gender frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 13.68% for the unknown gender frequency of the annual total of crisis center call gender frequency with a mean of 0.39% and a standard deviation of 0.74%. Descriptive statistical analysis reported a minimum frequency of 0.00% and a maximum frequency of 2.05% for the unknown gender category of the annual total of crisis center call gender frequency.

Descriptive statistical analyses results for the gender category frequencies of the annual total of crisis center call gender frequency as a ratio (%) of the annual total of crisis center call gender frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are reported in Table 4.27. Figure 4.29 provides a visual representation for the gender category frequencies of the annual total of crisis center call gender frequency as a ratio (%) of the annual total of crisis center call gender frequency as a multiple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.30 provides a visual representation for the gender category frequencies of the annual total of crisis center call gender frequency as a ratio (%) of the annual total of crisis center call gender frequency as a stacked bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011).

Table 4.27  
 Descriptive Statistics for Gender Frequencies of Annual Total of Crisis Center Call Gender  
 Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data  
 (1977-2011)

Descriptive Statistics				
		Male Gender as Ratio (%) of Call Frequency	Female Gender as Ratio (%) of Call Frequency	Unknown Gender as Ratio (%) of Call Frequency
N	Valid	35	35	35
	Missing	0	0	0
Minimum		26.20%	57.28%	0.00%
Maximum		42.72%	73.80%	2.05%
Sum		1,207.87%	2,278.45%	13.68%
Mean		34.51%	65.1%	0.39%
Standard Deviation		3.87%	4.15%	0.74%

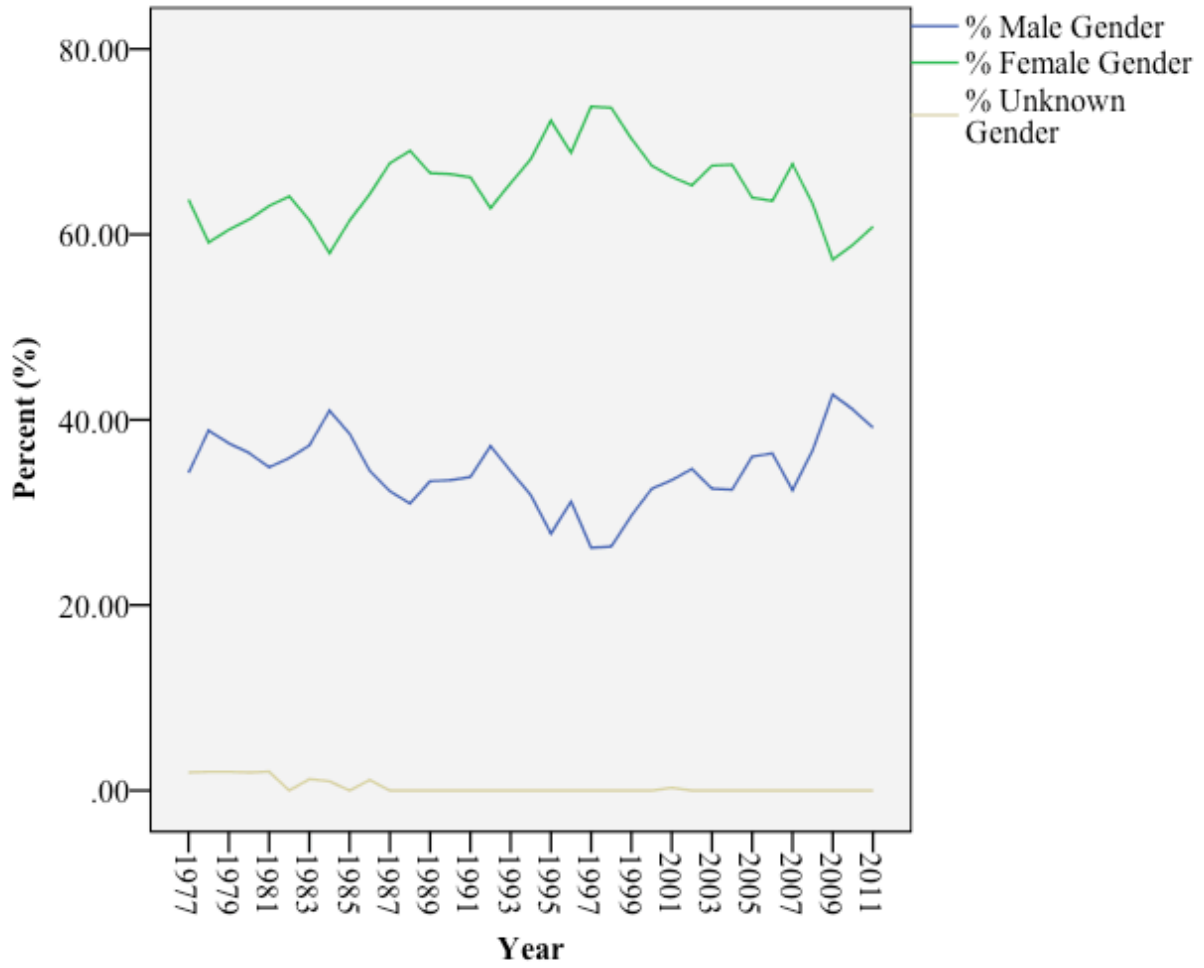


Figure 4.29 Multiple Line Chart for Gender Category Frequencies of Annual Total of Crisis Center Call Gender Frequency as Ratio (%) of Annual Total of Crisis Center Call Gender Frequency of archival data (1977-2011)

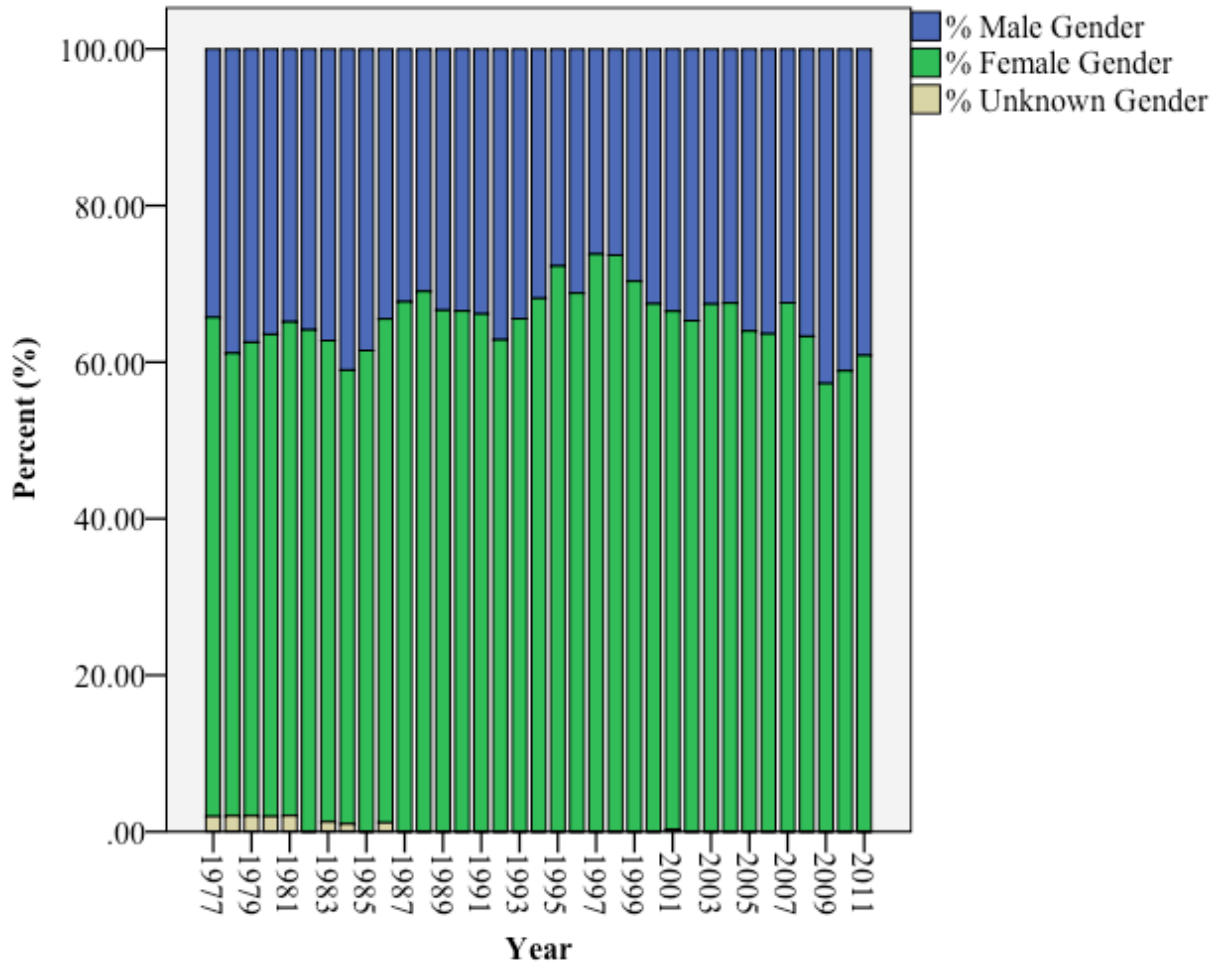


Figure 4.30 Stacked Bar Chart for Gender Category Frequencies of Annual Total of Crisis Center Call Gender Frequency as Ratio (%) of Annual Total of Crisis Center Call Gender Frequency of archival data (1977-2011)

Examination of the descriptive statistical results for the gender category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency does not suggest a significant change in frequency distribution encompassing the forty-two (42) complete years of archival data (1970-2011). No further statistical evaluation is recommended.

## Annual Total of Crisis Center Call Frequency and Marital Status

### *Descriptive Statistics for Annual Total of Crisis Center Call Marital Status Frequency per Marital Status Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. The archival data encompasses the years of 1969-2011. From 1969 to 1976, volunteers did not document the VCLs by designating a marital status category for each crisis center call. In 1977, volunteers began to code VCLs by assigning a designation of single category, married category, divorced category, widowed category, separated category or unknown marital status category for each crisis center call. Inclusion of years when volunteers did not assign a marital status category in the statistical analyses would have resulted in skewed results. Therefore, the years of 1969-1976 are excluded from the statistical analyses.

In the tabulation of VCLs, some inconsistencies in the frequency totals were noted; reported annual total of crisis center call marital status frequency was inconsistent with the reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for crisis center call marital status category ensuring the annual totals results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the single category frequency of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a

sum of 121,920 for the single category of the annual total of crisis center call marital status frequency with a mean of 3,483.43 and a standard deviation of 1,641.80. Descriptive statistical analysis reported a minimum frequency of 1,301 and a maximum frequency of 7,007 for the single category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the married category frequency of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 86,535 for the married category of the annual total of crisis center call marital status frequency with a mean of 2,472.43 and a standard deviation of 1,202.50. Descriptive statistical analysis reported a minimum frequency of 781 and a maximum frequency of 3,950 for the married category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the divorced category frequency of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 86,006 for the divorced category of the annual total of crisis center call marital status frequency with a mean of 2,457.31 and a standard deviation of 1,049.48. Descriptive statistical analysis reported a minimum frequency of 436 and a maximum frequency of 4,460 for the divorced category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the widowed category of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 25,356 for the widowed category of the annual total of crisis center call marital status frequency



with a mean of 724.46 and a standard deviation of 467.99. Descriptive statistical analysis reported a minimum frequency of 212 and a maximum frequency of 2,274 for the widowed category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the separated category frequency of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 16,434 for the separated category of the annual total of crisis center call marital status frequency with a mean of 469.54 and a standard deviation of 677.41. Descriptive statistical analysis reported a minimum frequency of 125 and a maximum frequency of 4,242 for the separated category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the unknown marital status category frequency of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 191,244 for the unknown marital status category with a mean of 5,464.11 and a standard deviation of 2,075.03. Descriptive statistical analysis reported a minimum frequency of 2,198 and a maximum frequency of 10,524 for the unknown marital status category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call marital status frequency encompassing thirty-five (35) marital status category years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 527,495 for the annual total of crisis center call marital status frequency with a mean of 15,701.29 and a standard deviation of 3,761.56. Descriptive statistical analysis reported a

minimum frequency of 6,733 and a maximum frequency of 21,512 for the annual total of crisis center call marital status frequency.

Descriptive statistical analysis results for marital status category frequencies of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are reported in Table 4.28. Figure 4.31 provides a visual representation for marital status category frequencies of the annual total of crisis center call marital status frequency as a multiple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.32 provides a visual representation for marital status category frequencies of the annual total of crisis center call marital status frequency as a stacked bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011).

Table 4.28  
 Descriptive Statistics for Marital Status Category Frequencies of Annual Total of Crisis Center  
 Call Marital Status Frequency of archival data (1977-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
Single		1,305	7,007	121,920	3,483.43	1,641.79
Married	35	781	3,950	86,535	2,472.43	1,020.50
Divorced	35	436	4,460	86,006	2,457.31	1,049.48
Widowed	35	212	2,274	25,356	724.46	467.99
Separated	35	125	4,242	16,434	469.54	677.41
Unknown	35	2,198	10,524	191,244	5,464.11	2,075.03
Marital Status Frequency	35	6,733	21,512	527,495	15,071.29	2,075.03
Valid N (listwise)	35					

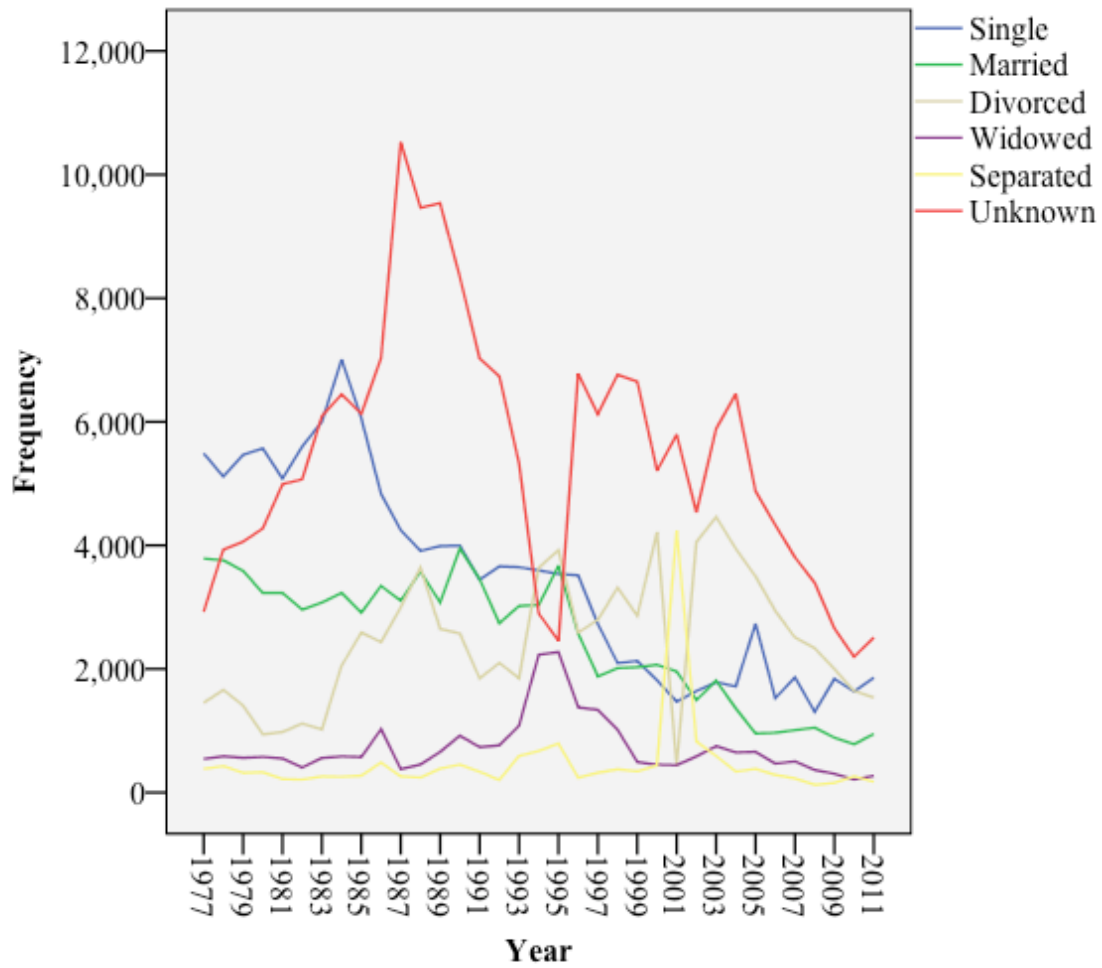


Figure 4.31 Multiple Line Chart for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency of archival data (1977-2011)

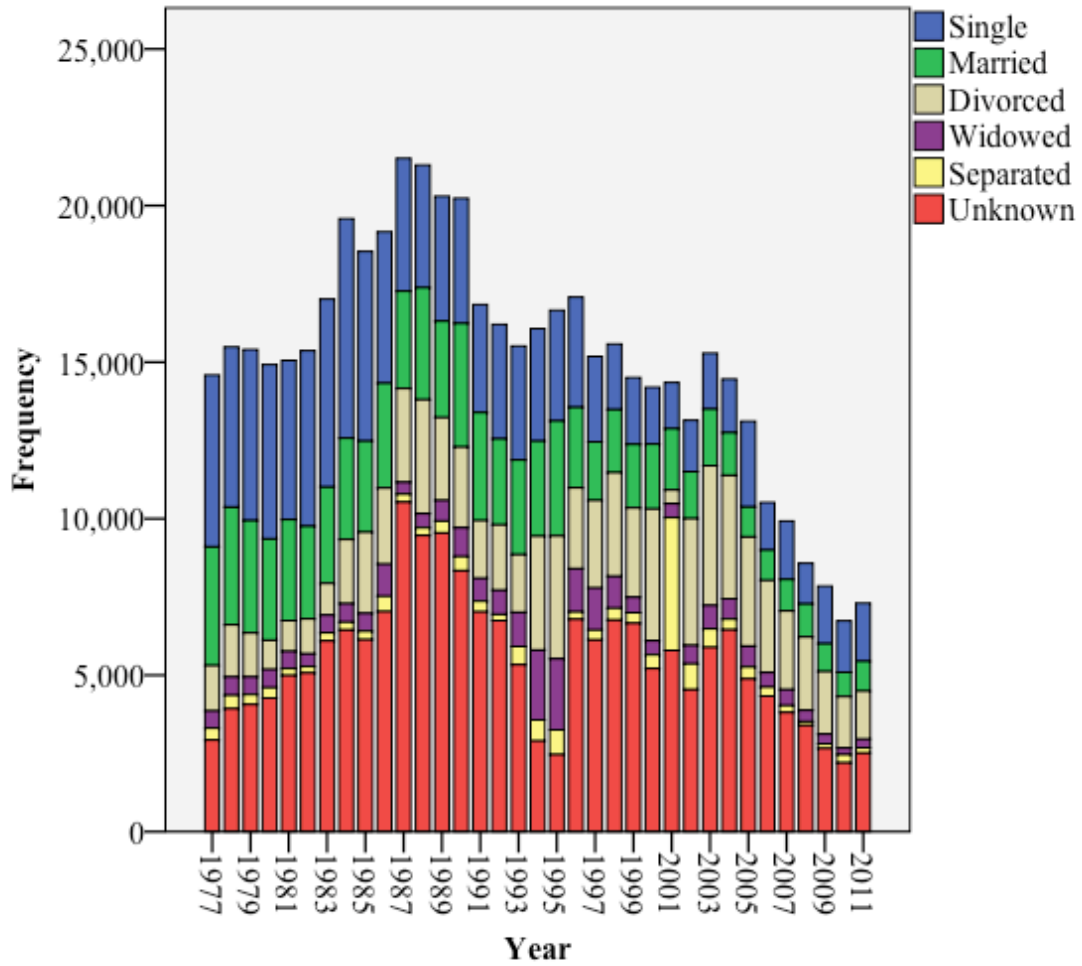


Figure 4.32 Stacked Bar Chart for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency of archival data (1977-2011)

*Descriptive Statistics for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency*

Marital status category frequencies of the annual total of crisis center call marital status frequency were transformed into a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011).

A descriptive statistical analysis was conducted to evaluate the single category frequency of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 798.76% for the single category of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency with a mean of 22.82% and a standard deviation of 8.46% . Descriptive statistical analysis reported a minimum frequency of 10.26% and a maximum frequency of 37.63% for the single category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the married category frequency of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 557.42% for the married category of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency with a mean of 15.92% and a standard deviation of 4.64%. Descriptive statistical analysis reported a

minimum frequency of 7.30% and a maximum frequency of 25.97% for the married category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the divorced category frequency of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 604.63% for the divorced category of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency with a mean of 17.28% and a standard deviation of 8.08%. Descriptive statistical analysis reported a minimum frequency of 3.04% and a maximum frequency of 30.87% for the divorced category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the widowed category frequency of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 112.97% for the widowed category of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency with a mean of 3.23% and a standard deviation of 4.72%. Descriptive statistical analysis reported a minimum frequency of 1.76% and a maximum frequency of 13.89% for the widowed category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the separated category frequency of the annual total of crisis center call marital status frequency as a ratio (%) of the

annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 112.97% for the separated category of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency with a mean of 3.28% and a standard deviation of 4.72% . Descriptive statistical analysis reported a minimum frequency of 1.14%% and a maximum frequency of 29.57% for the separated category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the unknown marital status category frequency of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 1,258.42% for the unknown marital status category of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency with a mean of 35.95% and a standard deviation of 7.91% . Descriptive statistical analysis reported a minimum frequency of 14.76% and a maximum frequency of 48.92% for the unknown marital status category of the annual total of crisis center call marital status frequency.

Descriptive statistical analyses results for marital status category frequencies of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are reported in Table 4.29. Figure 4.33 provides a visual representation for marital status category frequencies of the annual total of crisis center call marital status



frequency as a ratio (%) of the annual total of the crisis center call marital status frequency as a multiple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.34 provides a visual representation for marital status category frequencies of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency as a stack bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011).

Table 4.29

Descriptive Statistics for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of archival data (1977-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
% Single	35	10.26%	37.63%	798.76%	22.82%	8.46%
% Married	35	7.30%	25.97%	557.42%	15.93%	4.64%
% Divorced	35	3.04%	30.87%	604.63%	17.28%	8.08%
% Widowed	35	1.76%	13.89%	167.80%	4.79%	2.69%
% Separated	35	1.14%	29.57%	112.97%	3.23%	4.72%
% Unknown	35	14.76%	48.92%	1,258.42%	35.95%	7.91%
Valid N (listwise)	35					

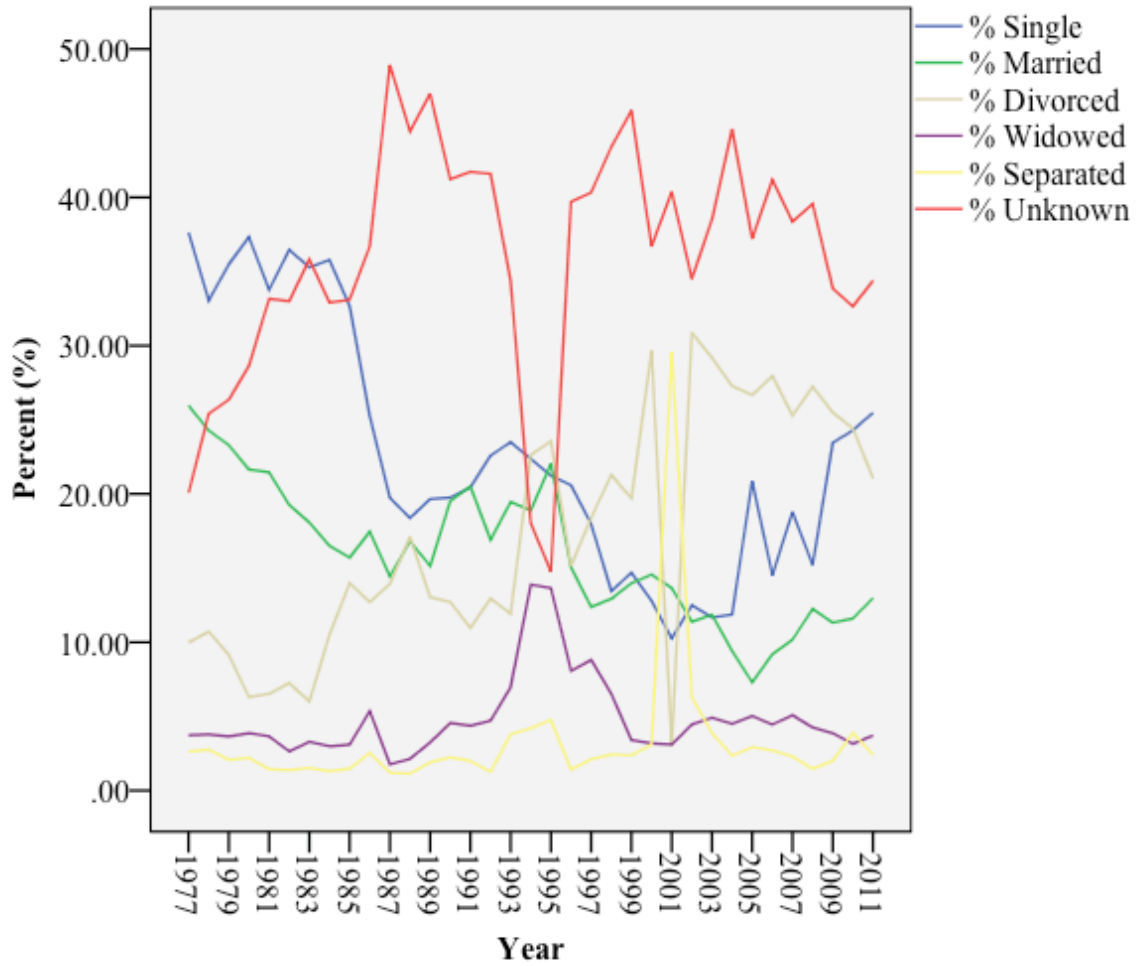


Figure 4.33 Multiple Line Chart for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of archival data (1977-2011)

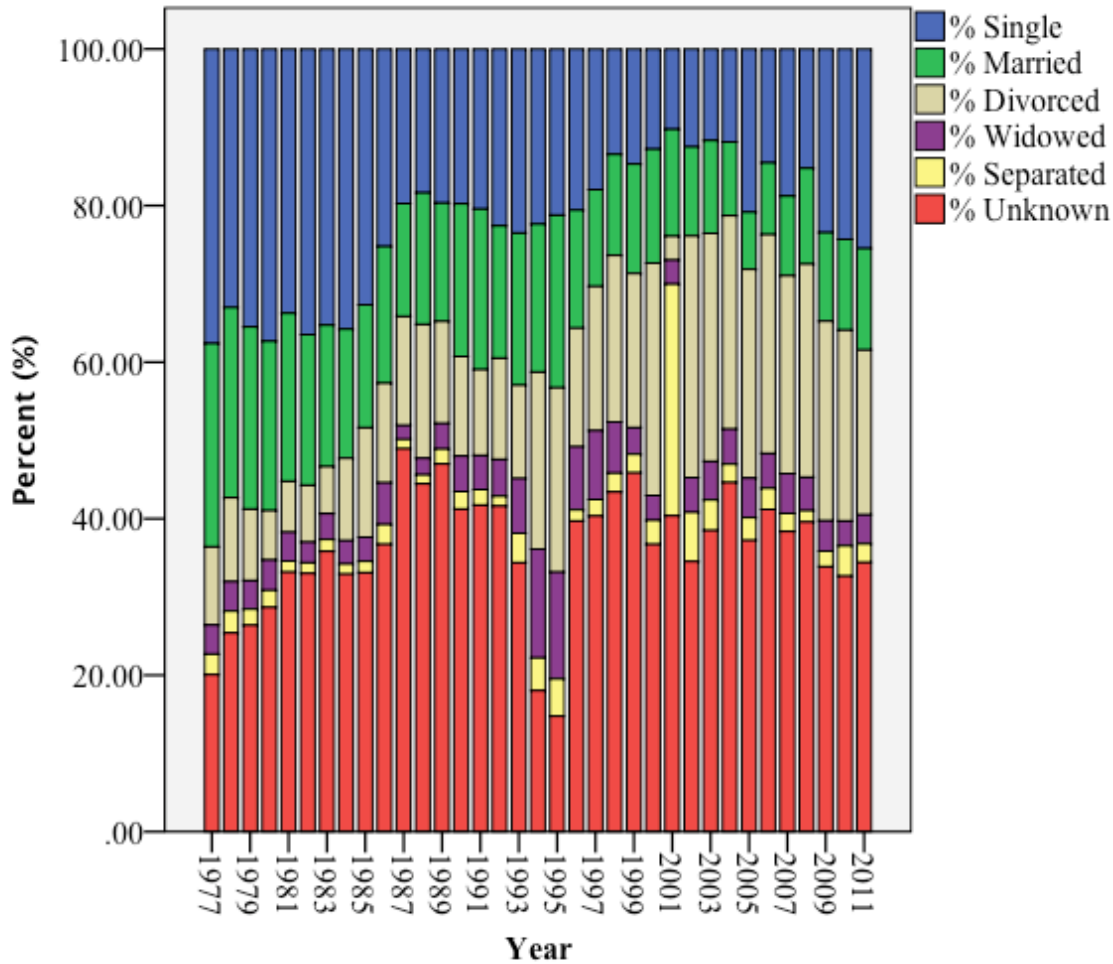


Figure 4.34 Stack Bar Chart for Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of archival data (1977-2011)

Examination of the descriptive statistical results for the marital status category frequencies as a ratio (%) of the annual total of crisis center call marital status frequency suggests that the marital status categories representing individuals living alone may have a statistically significant difference than the marital status categories representing individuals

living with others. Further descriptive statistical evaluation is necessary to determine a statistical difference exists and the strength of that relationship, if it does

*Descriptive Statistics for Living Arrangement Category of Marital Status Category Frequencies of Annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency*

Marital status category frequencies of the annual total of crisis center call marital status frequency were transformed into a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011).

Additionally, marital status category frequencies of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency were grouped per living arrangement category encompassing thirty-five (35) complete years of the archival data (1977-2011). Assumptions were made regarding the living arrangements of individuals assigned when grouped per living arrangement category of the marital status categories. The living alone category of the marital status category frequency included the marital status categories of single, separated, divorced and widowed. The living with family marital status category frequency included the married category of the marital status category. The unknown living category frequency included the unknown category of the marital status category.

A descriptive statistical analysis was conducted to evaluate the living alone category frequency of the marital status category of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 1,684.16% for the live alone category of the marital status category of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency with a mean of 48.12% and a

standard deviation of 6.46% . Descriptive statistical analysis reported a minimum frequency of 36.64% and a maximum frequency of 63.21% for the live alone marital status category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the live with family category frequency of the marital status category f of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 557.42% for the live with family category of the marital status category of the annual total of crisis center call marital status frequency as a ratio (%)of the annual total of crisis center call marital status frequency with a mean of 15.92% and a standard deviation of 4.64%. Descriptive statistical analysis reported a minimum frequency of 7.30% and a maximum frequency of 25.97% for the married category of the annual total of crisis center call marital status frequency.

A descriptive statistical analysis was conducted to evaluate the unknown category frequency of the martial status category frequency of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 1,258.42% for the unknown category of the marital status category of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency with a mean of 35.95% and a standard deviation of 7.91% . Descriptive statistical analysis reported a minimum frequency of

14.76% and a maximum frequency of 48.92% for the unknown category frequency of the marital status category of the annual total of crisis center call marital status frequency.

Descriptive statistical analyses results for living arrangement category frequencies of the marital status category of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are reported in Table 4.30. Figure 4.35 provides a visual representation for the living arrangement category frequencies of the marital status category frequency of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of the crisis center call marital status frequency as a multiple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.36 provides a visual representation for living arrangement category frequencies of the marital status category frequency of the annual total of crisis center call marital status frequency as a ratio (%) of the annual total of crisis center call marital status frequency as a stack bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011).



Table 4.30

Descriptive Statistics for Living Arrangement Category Frequencies of Marital Status Category Frequency of annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of the archival data (1977-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
% Living Alone	35	36.64%	63.21%	1,684.16%	48.12%	6.46%
% Living with Family	35	7.30%	25.97%	557.42%	15.93%	4.64%
% Unknown	35	14.76%	48.92%	1,258.42%	35.95%	7.91%
Valid N (listwise)	35					

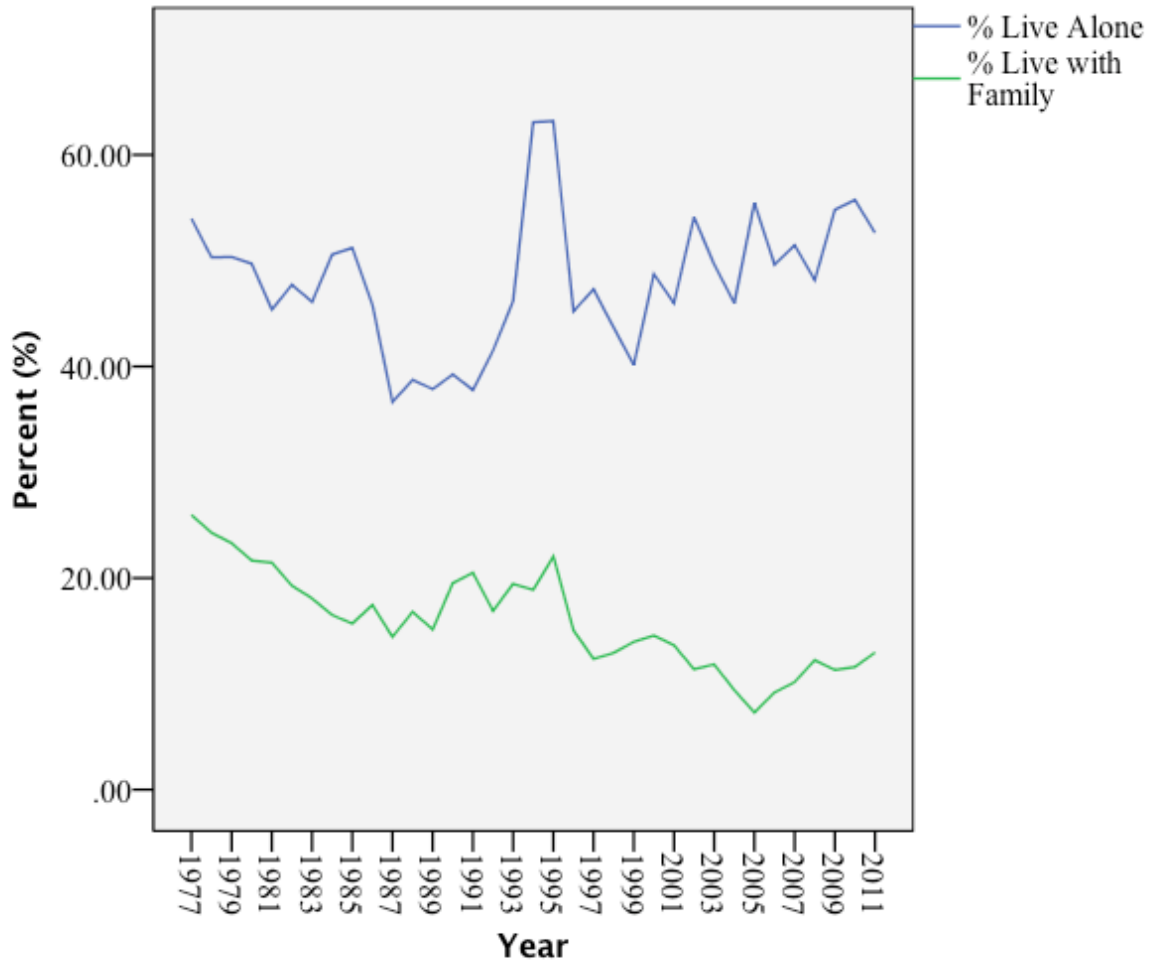


Figure 4.35 Multiple Line Chart for Living Arrangement Category Frequencies of Marital Status Category Frequency of annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of the archival data (1977-2011)

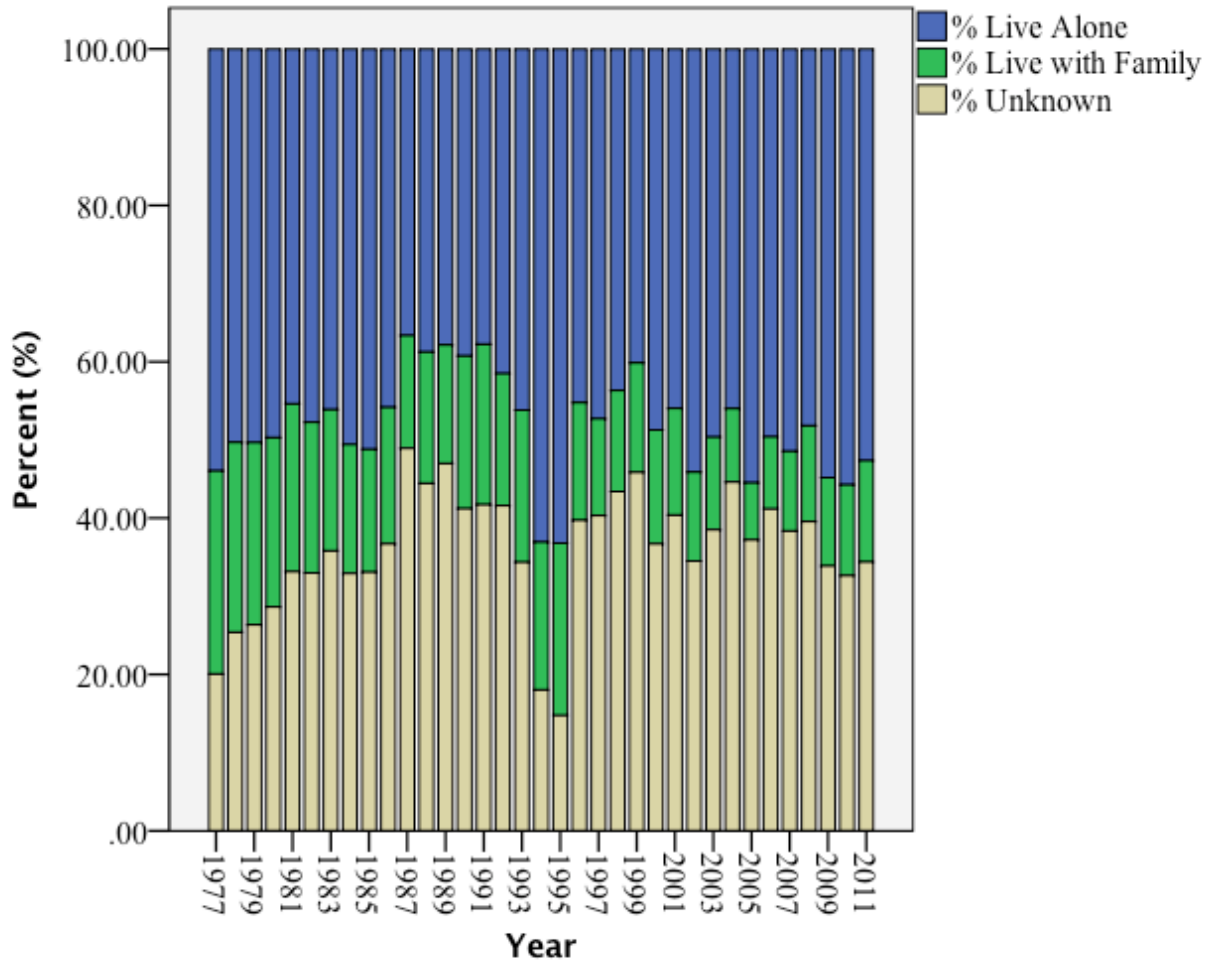


Figure 4.36 Stacked Bar Chart for Living Arrangement Category Frequencies of Marital Status Category Frequency of annual Total of Crisis Center Call Marital Status Frequency as Ratio (%) of Annual Total of Crisis Center Call Marital Status Frequency of the archival data (1977-2011)

Examination of the descriptive statistical results for the living arrangement category frequencies of the marital status categories of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency has reported the living alone category frequency statistically similar to the combined frequency of living with family and unknown categories of the marital status categories. However interesting the suggestion may be, a more

rigorous data collection method would be necessary for further statistical evaluation to determine whether or not a statistical relationship that exists among the living arrangement categories and the strength of that relationship, if it does exist.

## Annual Total of Crisis Center Call Frequency and Repeat Call

### *Descriptive Statistics for Annual Total of Crisis Center Call Frequency per Repeat Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. The archival data encompasses the years of 1969-2011. From 1969 to 1976, volunteers did not document the VCLs by assigning a repeat category. In 1977, volunteers began to code VCLs by assigning a designation of repeat call category or first time call category for each crisis center call. Inclusion of years when volunteers did not assign a repeat category in statistical analyses would have reported skewed results. Therefore, the years of 1969-1976 are excluded from statistical analyses.

In the tabulation of VCLs, some inconsistencies in the frequency totals were noted; reported annual total of crisis center call repeat category was inconsistent with reported annual total of crisis center call frequency. In the process of reviewing annual statistical reports, it was noted that while the reporting of repeat call category of the annual total of crisis center call frequency was consistent, the reporting of first time call category of the annual total of crisis center call frequency was inconsistent. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies contained within the archival data. All data contained within the annual statistical reports are represented in any longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify totals for the anonymity category ensuring results accurately report the archival data.

With the lack of consistent data for repeat category of the annual total of crisis center call frequency, it was impossible to determine an annual total of crisis center call repeat frequency

based on the information provided in the annual statistical reports. To determine the data for first time call category, the repeat call category was subtracted from the annual total of crisis center call frequency and the result of the transformation of the data was assigned to the first time call category. Therefore, all descriptive statistical analyses with respect to the repeat call category are based on the annual total of crisis center call frequency.

A descriptive statistical analysis was conducted to evaluate the repeat call category of annual total of crisis center call frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 186,901 for the repeat call frequency of the annual total of crisis center call frequency with a mean of 5,340.03 and a standard deviation of 2,078.25. Descriptive statistical analysis reported a minimum frequency of 658 and a maximum frequency of 8,846 for the repeat call category of the annual total of crisis center call frequency.

A descriptive statistical analysis was conducted to evaluate the first time call category of annual total of crisis center call frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 337,626 for the first time call frequency of the annual total of crisis center call frequency with a mean of 9,646.46 and a standard deviation of 3,685.40. Descriptive statistical analysis reported a minimum frequency of 3,162 and a maximum frequency of 14,639 for the first time call category of the annual total of crisis center call frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 524,527 for annual

total of crisis center call frequency with a mean of 14,986.49 and a standard deviation of 3,642.57. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call frequency.

Descriptive statistical analysis results for the repeat category frequencies of the annual total of crisis center call frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are reported in Table 4.31. Figure 4.37 provides a visual representation for the repeat category frequencies of the annual total of crisis center call frequency as a multiple line graph encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.38 provides a visual representation for the repeat category frequencies of the annual total of crisis center call frequency as a stacked bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011).

Table 4.31  
 Descriptive Statistics for Repeat Category Frequencies of Annual Total of Crisis Center Call  
 Frequency and Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

Descriptive Statistics				
		Repeat Call Frequency	First Time Call Frequency	Call Frequency
N	Valid	35	35	35
	Missing	0	0	0
Minimum		658	3,162	6,733
Maximum		8,846	14,639	21,292
Sum		186,901	337,626	524,527
Mean		5,340.03	9,645.46	14,986.49
Standard Deviation		2,078.25	3,685.40	3,642.57



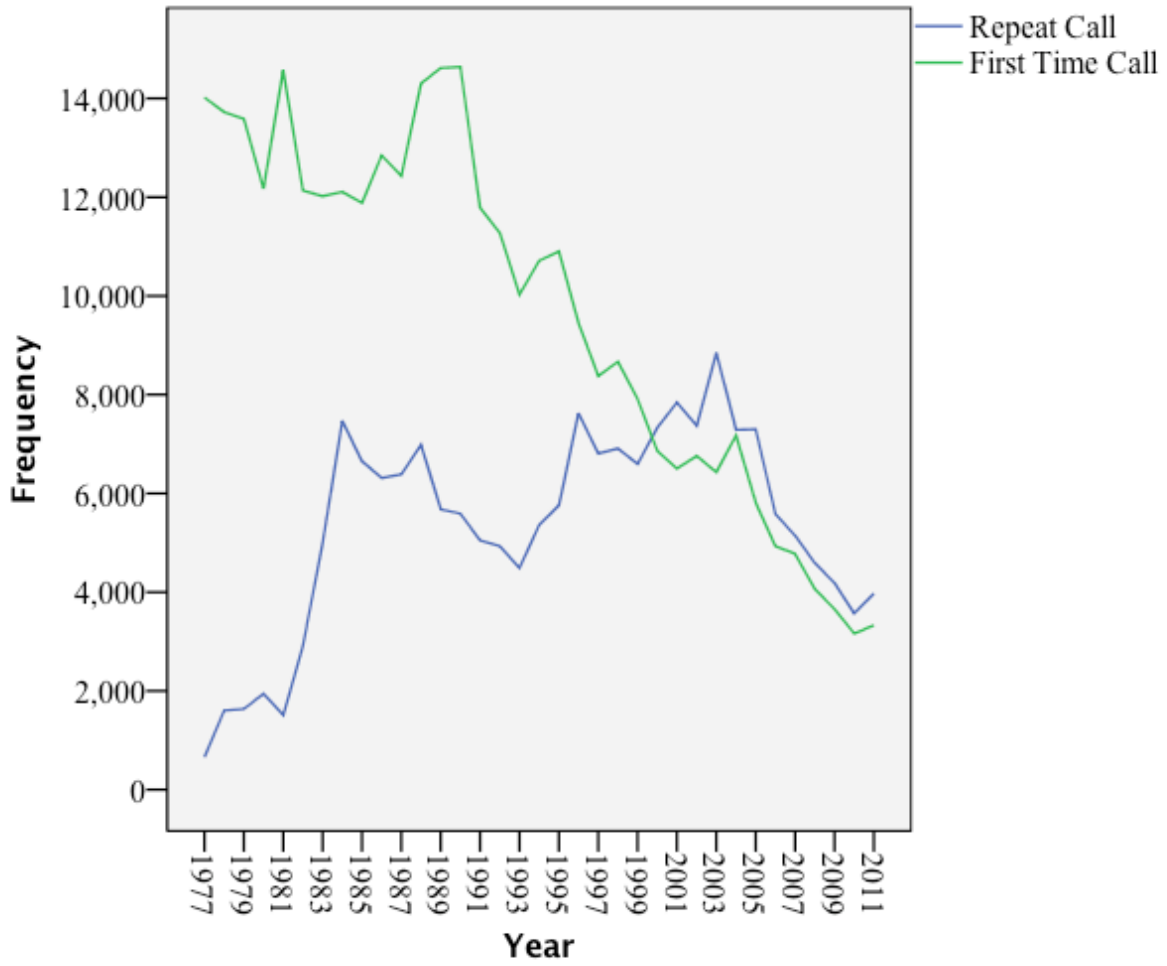


Figure 4.37 Multiple Line Chart for Repeat Category Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

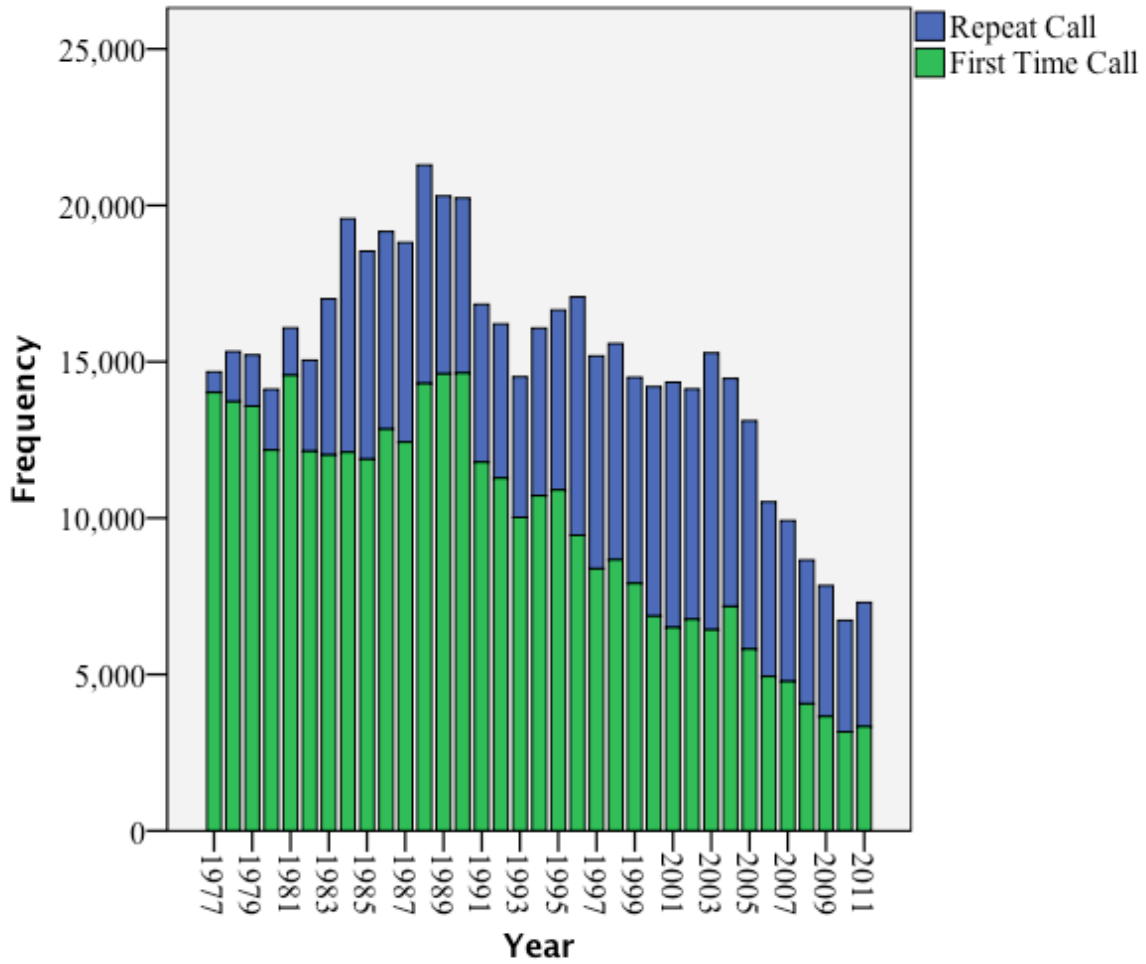


Figure 4.38 Stacked Bar Chart for Repeat Category Frequencies of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

*Descriptive Statistics for Repeat Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency*

The repeat category frequencies of the annual total of crisis center call frequency were transformed into a ratio (%) of the annual total of crisis center call frequency encompassing thirty-five (35) years of the archival data (1977-2011). A descriptive statistical analysis was conducted to evaluate the repeat call category of the annual total of crisis center call frequency when transformed into a ratio (%) of the annual total of crisis center call frequency encompassing thirty-five (35) years of archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 1,306.80% for the repeat call category of the annual total of crisis center call frequency with a mean of 37.34% and a standard deviation of 15.35%. Descriptive statistical analysis reported a minimum frequency of 4.48% and a maximum frequency of 57.80% for the repeat call category of the annual total of crisis center call frequency.

A descriptive statistical analysis was conducted to evaluate the first time call category of the annual total of crisis center call frequency when transformed into a ratio (%) of the annual total of crisis center call frequency encompassing thirty-five (35) years of archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 2,193.20% for the first time call category of the annual total of crisis center call frequency with a mean of 62.66%% and a standard deviation of 15.35%. Descriptive statistical analysis reported a minimum frequency of 42.10% and a maximum frequency of 95.52% for the first time call category of the annual total of crisis center call frequency.

Descriptive statistical analysis results or the repeat category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call

frequency encompassing thirty-five (35) years of archival data (1977-2011) are presented in Table 4.32. Figure 4.39 provides a visual representation for the repeat category frequencies of annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency as a multiple line chart encompassing thirty-five (35) years of the archival data (1977-2011). Figure 4.40 provides a visual representation for the repeat category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency as a stacked bar chart encompassing thirty-five (35) years of archival data (1977-2011).

Table 4.32  
 Descriptive Statistics for Repeat Category Frequencies Annual Total of Crisis Center Call  
 Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data  
 (1977-2011)

Descriptive Statistics			
		Repeat Call Frequency as Ratio (%) of Call Frequency	First Time Call Frequency as Ratio (%) of Call Frequency
N	Valid	35	35
	Missing	0	0
Minimum		4.48%	42.10%
Maximum		57.90%	95.52%
Sum		1,306.80%	2,193.20%
Mean		37.34%	62.66%
Standard Deviation		15.35%	15.35%



Figure 4.39 Multiple Line Chart for Repeat Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

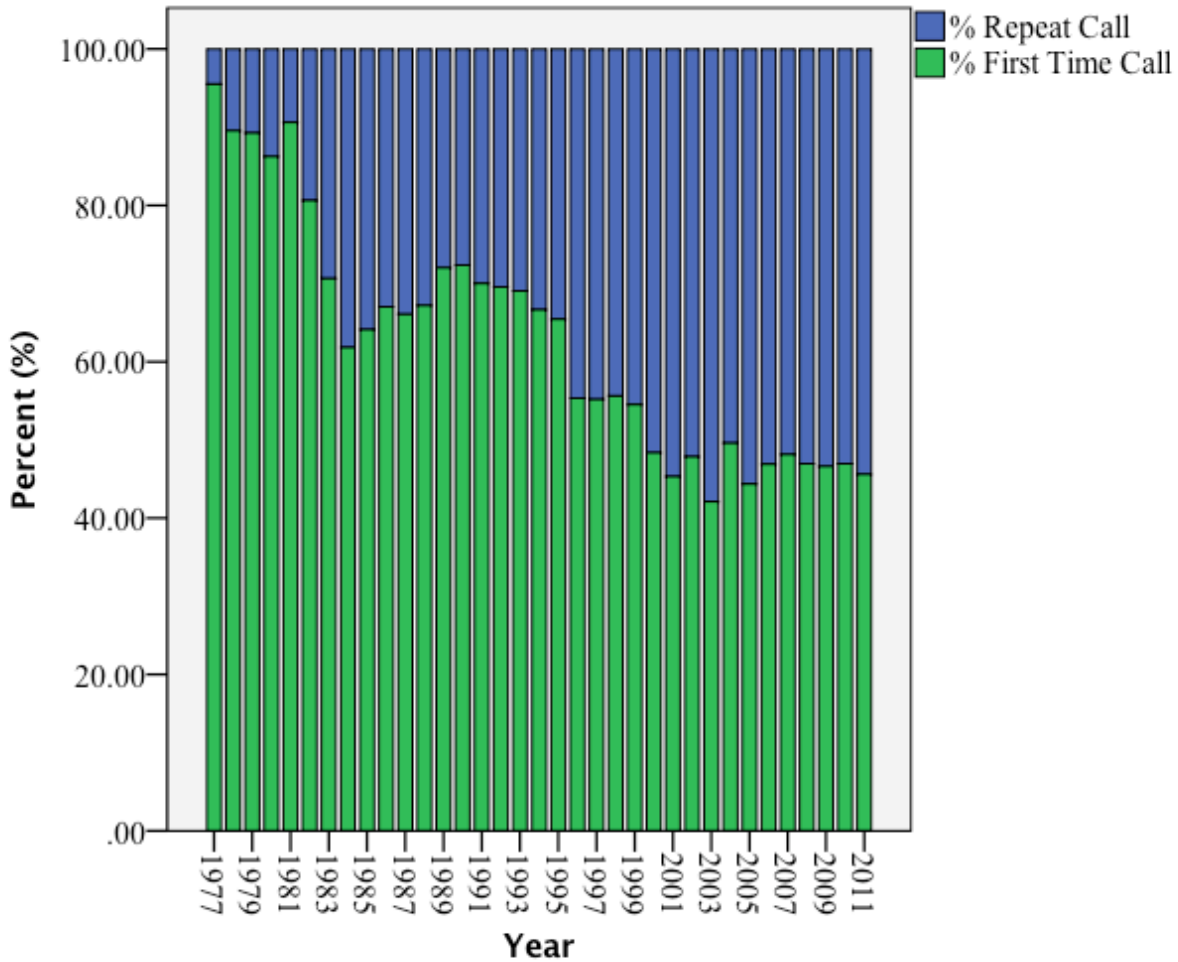


Figure 4.40 Stacked Bar Chart for Repeat Call Category Frequencies of Annual Total of Crisis Center Call Frequency as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1977-2011)

Examination of the descriptive statistical results for the repeat call category frequencies of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call frequency has reported a statistically similar distribution for the name given and name unknown category frequencies since 2000. However interesting the suggestion may be, a more rigorous data collection method would be necessary for further statistical evaluation to determine

whether or not a statistical relationship exists among the repeat call category frequencies and the strength of that relationship, if it does exist.



## Annual Total of Crisis Center Call Frequency and Call Category

### *Descriptive Statistics for Annual Total of Crisis Center Call Frequency and Annual Total of Crisis Center Call Category Frequency*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by assigning a designation of a call category for each crisis center call. The reported call categories in alphabetical order are: (1) Abortion, (2) Alcohol, (3) Appreciation, (4) Dating, (5) Deaf, (6) Depression, (7) Desertion, (8) Drugs, (9) Emotional/Mental, (10) Employment, (11) Family, (12) Finances, (13) Food/Shelter, (14) Grief, (15) Health, (16) Homosexual, (17) Information, (18) Juvenile, (19) Legal, (20) Lonely, (21) Marital, (22) Mental, (23) Miscellaneous, (24) Other, (25) Other Family, (26) Physical Abuse, (27) Reassurance, (28) Relationships, (29) Religious, (30) School, (31) Sex, (32) Silent, (33) Suicide, and (34) Unwed Parent.

Call category (27) Reassurance represents calls made by CONTACT of Chattanooga volunteers to check-in on an individual at the request of a family member or friend. Reassurance calls are a secondary service provided by CONTACT of Chattanooga and frequency totals for this call category are omitted from the annual total of crisis center call category frequency. While the category is acknowledged as a component of the archival data, its frequency is not included in statistical evaluations unless otherwise noted.

In the tabulation of the annual statistical reports, some inconsistencies were noted; some call categories were added or omitted in the archival data. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any call category inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. The resulting

thirty-four call categories reflect a longitudinal tabulation of all call categories. The scope of data for each call category will vary depending on the duration of use of a particular call category and is addressed in the section pertaining to each category.

In the tabulation of VCLs, some inconsistencies in the frequency totals were noted; the reported annual total of crisis center call category frequency was inconsistent with the reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for crisis center call category frequency ensuring the annual totals results accurately report the archival data. All statistical analysis in the call category section is based on the annual total of crisis center call category frequency.

The archival data for the annual total of crisis center call category frequency encompasses the years of 1969-2011. Inclusion of incomplete years ( $n \neq 12$ ) in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call frequency encompassing all forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 625,850 for the annual total of crisis center call frequency with a mean of 14,901.19 and a standard deviation of 3,360.686.

Descriptive statistical analyses results for the annual total of crisis center call category frequency and annual total of crisis center call frequency encompassing forty-two (42) complete years of archival data (1970-2011) are reported in Table 4.33.

Table 4.33  
 Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency and Annual  
 Total of Crisis Center Call Frequency (1970-2011)

Descriptive Statistics			
		Category Frequency	Call Frequency
N	Valid	42	42
	Missing	0	0
Minimum			
Maximum			
Sum		639,102	625,850
Mean		15,216.71	14,901.19
Standard Deviation		3,470.437	3,360.69

A descriptive statistical analysis was conducted to evaluate the category frequencies of the annual total of crisis center call frequency encompassing forty-two(42) complete years of the archival data (1970-2011). In depth examination of the descriptive statistical analysis results are reported in the section pertaining to the specific call category.

The category frequencies of the annual total of crisis center call category frequency were transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the category groups of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). An overview of the call category data is provided in Table 4.34 and Table 4.35; descriptive statistics for crisis center call categories in alphabetical order are reported in Table 4.34 and descriptive statistics for crisis center call categories in descending order by mean are reported in Table 4.35

It is important to note that what is known on the motives behind a person's reason for making the crisis center call is based on opinions formed by the volunteer's interpretation of the person's statement of reason for making the crisis center call. The volunteer's opinion is subject to further interpretation by the administrative personnel who interprets the VCL and codes the reason for call into a specific call category. While the call category classification is purely subjective and does not meet the requirements of a rigorous experimental design, the use of sensory perceptions by a trained observer is a valid method of collecting data. The administrative personnel who codes the VCL has been a long time employee suggesting some internal consistency in the coding process.

It is impossible to know the precise cause behind a person's call to the crisis center and it would be inappropriate to make any substantive conclusions about those causes. Nonetheless, every person who calls the crisis center is reaching out to another person for interpersonal contact under the specific circumstances pertaining to their situation. The archival data establishes a framework for suggesting possible causes for the underlying reasons for the crisis center call.

Table 4.34  
 Descriptive Statistics for Call Category Frequencies as Ratio (%) of Annual Total of Crisis  
 Center Call Category Frequency per Alphabetical order of archival data (1970-2011)

	<b>Category</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Sum</b>	<b>Mean</b>	<b>Standard Deviation</b>
1	Abortion	42	0.00%	1.66%	11.53%	0.27%	0.32%
2	Alcohol	42	0.68%	4.21%	83.73%	1.99%	0.95%
3	Appreciation	42	0.33%	1.31%	27.71%	0.66%	0.20%
4	Dating	42	0.00%	6.50%	58.10%	1.38%	1.48%
5	Deaf	2	7.01%	8.64%	15.65%	7.82%	1.15%
6	Depression	9	0.68%	4.91%	18.80%	2.09%	1.19%
7	Desertion	8	0.12%	0.75%	2.21%	0.28%	0.20%
8	Drugs	42	0.63%	4.14%	62.68%	1.49%	0.94%
9	Emotional/Mental	42	2.72%	28.17%	602.87%	14.35%	6.15%
10	Employment	42	0.79%	4.50%	65.44%	1.56%	0.71%
11	Family	8	8.47%	12.94%	83.65%	10.46%	1.52%
12	Finance	42	1.19%	4.27%	82.64%	1.97%	0.63%
13	Food/Shelter	34	0.57%	2.04%	40.20%	1.18%	0.31%
14	Grief	9	0.61%	2.33%	9.00%	1.00%	0.53%
15	Health	42	1.69%	6.90%	173.89%	4.14%	1.47%
16	Homosexual	42	0.15%	3.38%	42.73%	1.02%	0.67%
17	Information	42	4.88%	18.61%	454.24%	10.82%	3.31%
18	Juvenile	8	7.04%	24.13%	101.80%	12.72%	5.71%
19	Legal	42	0.38%	1.74%	35.21%	0.84%	0.42%
20	Lonely	42	5.26%	25.10%	675.00%	16.07%	4.98%
21	Marital	34	1.56%	6.52%	135.50%	3.98%	1.31%

	<b>Category</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Sum</b>	<b>Mean</b>	<b>Standard Deviation</b>
22	Mental	8	1.46%	4.70%	18.96%	2.37%	1.06%
23	Miscellaneous	8	2.82%	13.90%	57.06%	7.13%	3.72%
24	Other	34	9.14%	24.90%	428.51%	12.60%	3.06%
25	Other Family	34	4.30%	7.23%	196.03%	5.77%	0.80%
26	Physical Abuse	34	0.77%	3.38%	55.55%	1.63%	0.79%
27	Reassurance	6	----	----	----	----	----
28	Relationship	42	0.00%	9.35%	255.09%	6.07%	1.81%
29	Religious	42	1.29%	6.17%	121.90%	2.90%	1.09%
30	Sex	42	0.00%	8.69%	163.29%	3.89%	1.72%
31	School	42	0.00%	2.25%	17.30%	0.41%	0.40%
32	Silent	35	0.05%	6.44%	28.55%	0.82%	1.07%
33	Suicide	42	0.49%	1.63%	36.81%	0.88%	0.30%
34	Unwed Parent	42	0.13%	3.99%	38.58%	0.92%	1.09%



Table 4.35

Descriptive Statistics for Call Category Frequencies as Ratio (%) of Annual Total of Crisis Center Call Category Frequency in Descending Order per Mean of archival data (1970-2011)

	<b>Category</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Sum</b>	<b>Mean</b>	<b>Standard Deviation</b>
20	Lonely	42	5.26%	25.10%	675.00%	16.07%	4.98%
9	Emotional/Mental	42	2.72%	28.17%	602.87%	14.35%	6.15%
18	Juvenile	8	7.04%	24.13%	101.80%	12.72%	5.71%
24	Other	34	9.14%	24.90%	428.51%	12.60%	3.06%
17	Information	42	4.88%	18.61%	454.24%	10.82%	3.31%
11	Family	8	8.47%	12.94%	83.65%	10.46%	1.52%
5	Deaf	2	7.01%	8.64%	15.65%	7.82%	1.15%
23	Miscellaneous	8	2.82%	13.90%	57.06%	7.13%	3.72%
28	Relationships	42	0.00%	9.35%	255.09%	6.07%	1.81%
25	Other Family	34	4.30%	7.23%	196.03%	5.77%	0.80%
15	Health	42	1.69%	6.90%	173.89%	4.14%	1.47%
21	Marital	34	1.56%	6.52%	135.50%	3.98%	1.09%
30	Sex	42	0.00%	8.69%	163.27%	3.89%	1.72%
29	Religious	42	1.29%	6.17%	121.90%	2.90%	1.09%
22	Mental	8	1.46%	4.70%	18.96%	2.37%	1.06%
6	Depression	9	0.68%	4.91%	18.80%	2.09%	1.19%
2	Alcohol	42	0.68%	4.21%	83.73%	1.99%	0.95%
12	Finances	42	1.19%	4.27%	86.64%	1.97%	0.64%
26	Physical Abuse	34	0.77%	3.38%	55.55%	1.63%	0.79%
10	Employment	42	0.79%	4.50%	65.44%	1.56%	0.71%
8	Drugs	42	0.63%	4.14%	62.68%	1.49%	0.94%

	<b>Category</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Sum</b>	<b>Mean</b>	<b>Standard Deviation</b>
4	Dating	42	0.00%	6.50%	58.10%	1.38%	1.48%
13	Food/Shelter	34	0.57%	2.04%	40.20%	1.18%	0.31%
16	Homosexual	42	0.15%	3.38%	42.73%	1.02%	0.67%
14	Grief	9	0.61%	2.33%	9.00%	1.00%	0.53%
34	Unwed Parent	42	0.13%	3.99%	38.58%	0.92%	1.09%
33	Suicide	42	0.49%	1.63%	36.81%	0.88%	0.30%
19	Legal	42	0.38%	1.74%	35.21%	0.84%	0.42%
32	Silent	35	0.05%	6.44%	28.55%	0.82%	1.07%
3	Appreciation	42	0.33%	1.31%	27.71%	0.66%	0.20%
31	School	42	0.00%	2.25%	17.30%	0.41%	0.40%
7	Desertion	8	0.12%	0.75%	2.21%	0.28%	0.32%
1	Abortion	42	0.00%	1.66%	11.53%	0.27%	0.32%
27	Reassurance	6	----	----	----	----	----

## Annual Total of Crisis Center Call Category Frequency and Abortion

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Abortion Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (1) Abortion was coded on VCLs throughout forty-three (43) years of archival data (1969-2011). When zero (0) is reported in abortion frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the abortion category rather than the absence of data for the abortion category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the abortion frequency of the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 1,767 for the abortion category of the annual total of crisis center call category frequency with a mean of 42.07 and a standard deviation of 49.25. Descriptive statistical analysis reported a minimum frequency of 0 and a maximum frequency of 239 for the abortion category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.437. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the abortion category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.36. Figure 4.41 provides a visual representation for the abortion category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.42 provides a visual representation for the abortion category frequency of the annual total of crisis

center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with an abortion category mean line (42.07). Figure 4.43 provides a visual representation for the abortion category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.36

Descriptive Statistics for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Abortion Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		0	6,733
Maximum		239	21,292
Sum		1,767	639,102
Mean		42.07	15,216.71
Standard Deviation		49.25	3,470.44

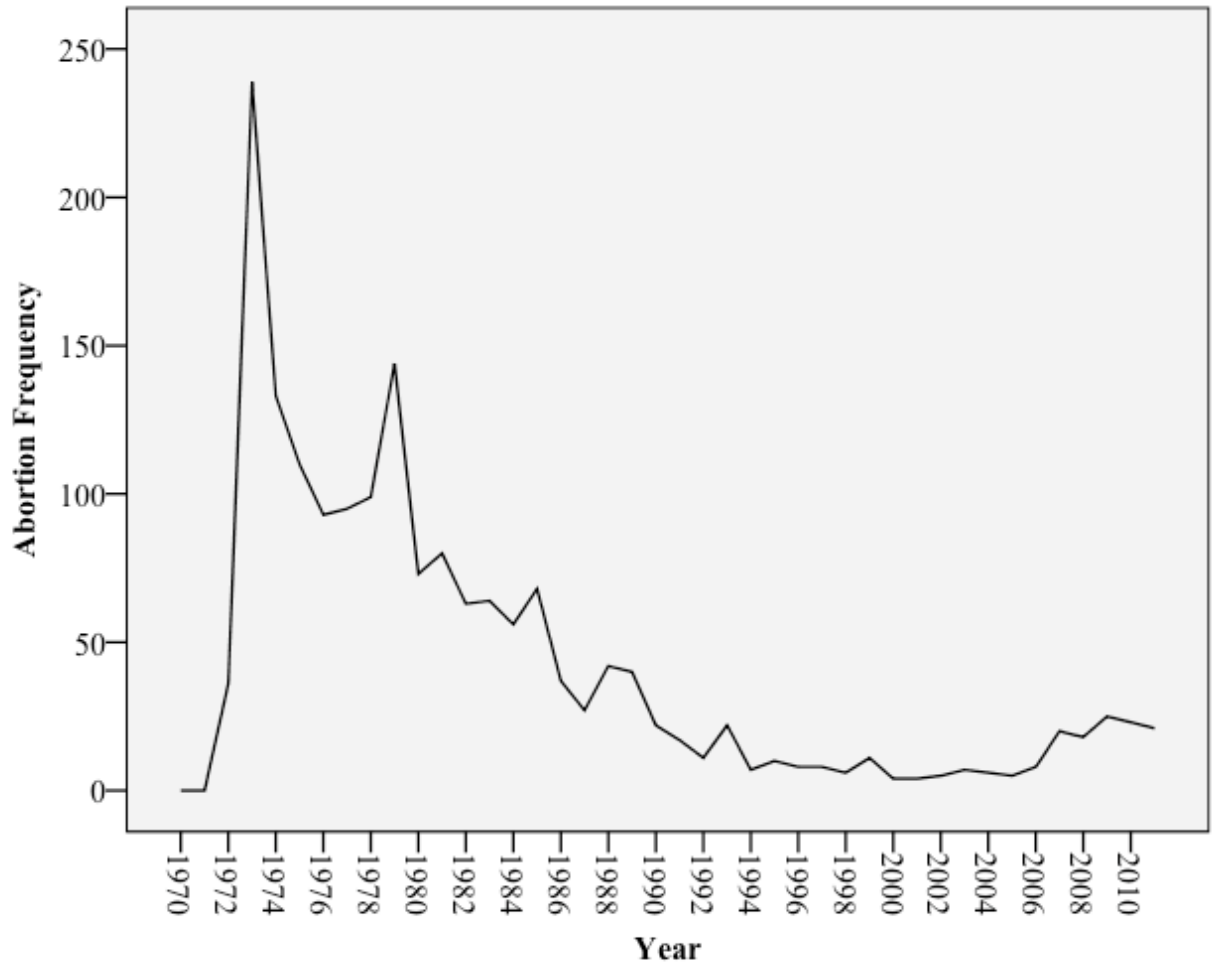


Figure 4.41 Simple Line Chart for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

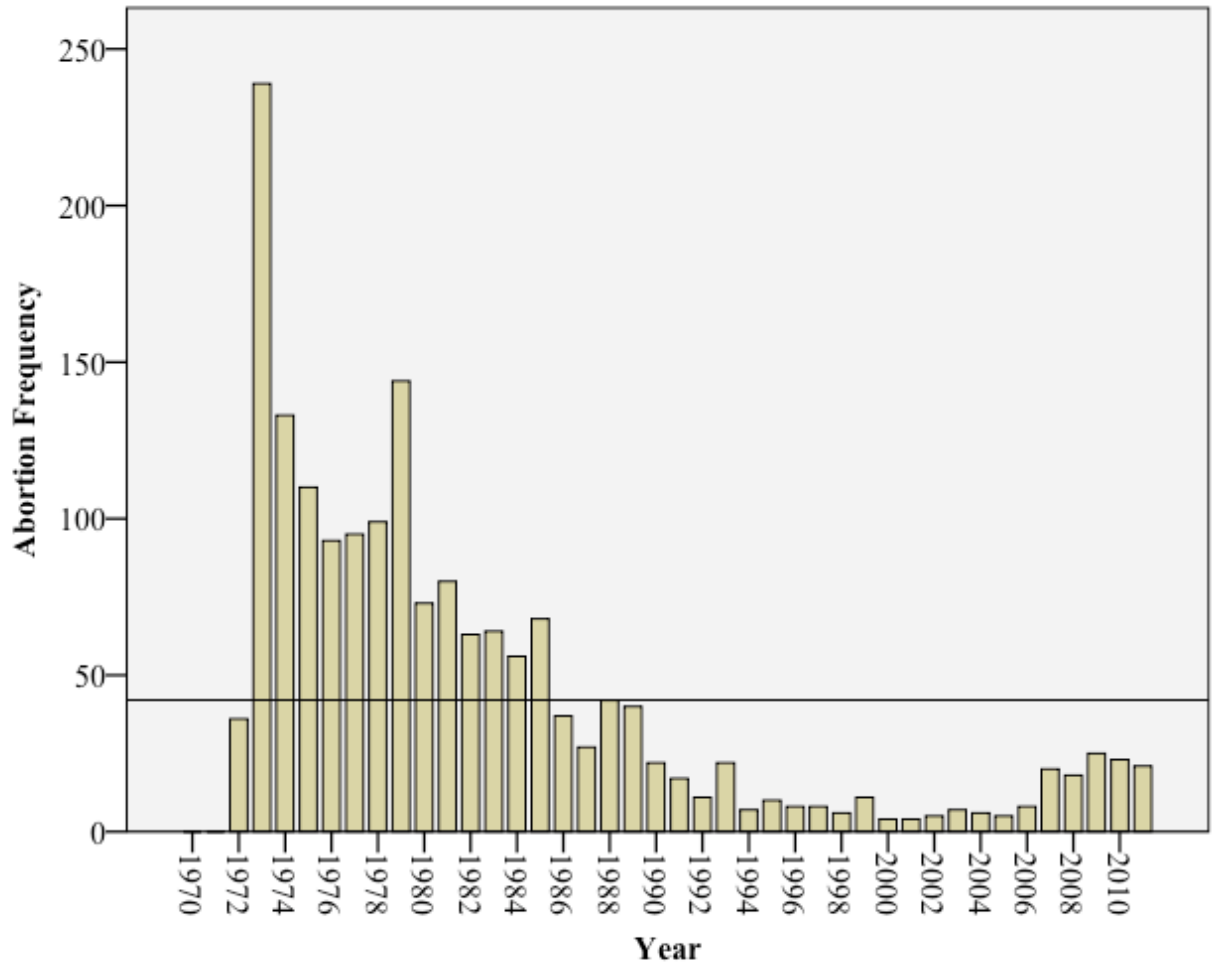


Figure 4.42 Simple Bar Chart for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency with Abortion Category Mean Line (42.07) of archival data (1970-2011)



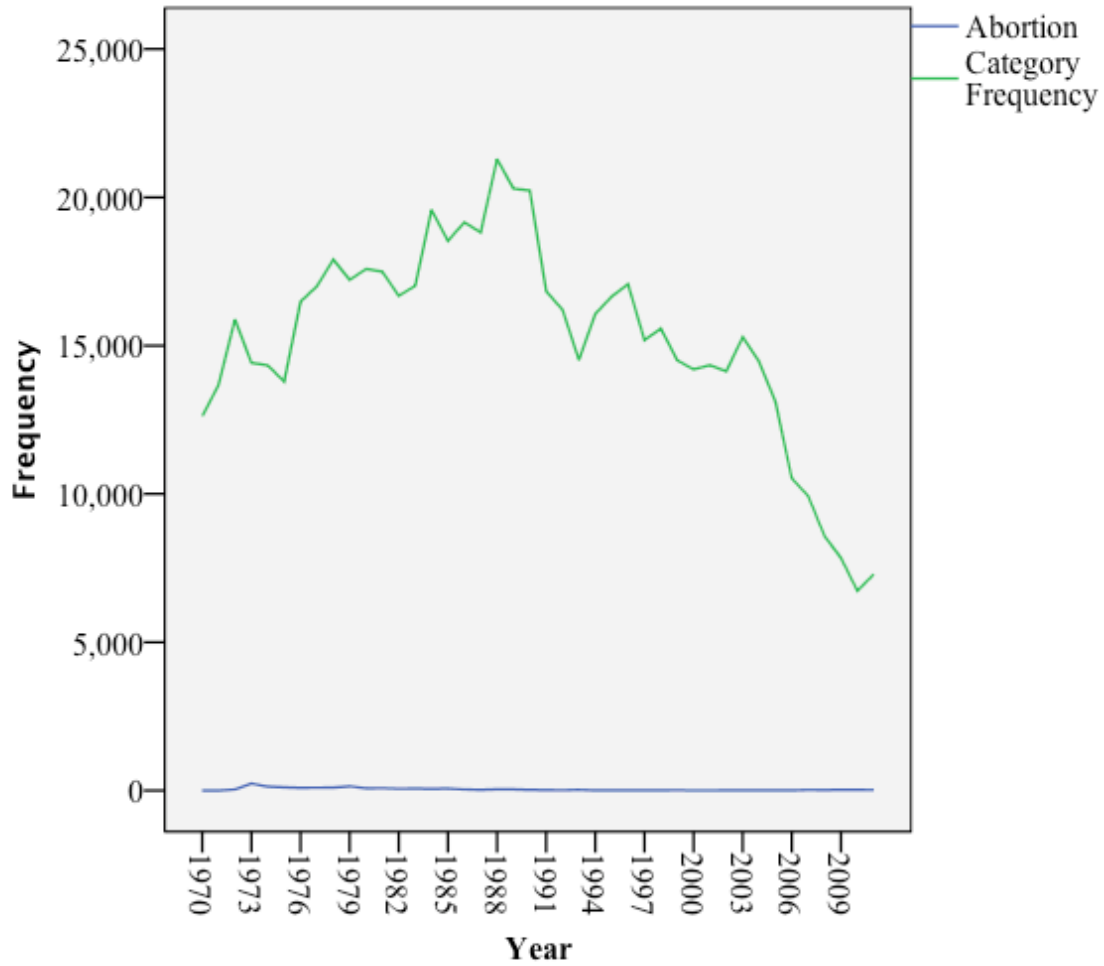


Figure 4.43 Multiple Line Chart for Abortion Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The abortion category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the abortion frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 11.53% for the abortion category of the annual total of the crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 0.27% and a standard deviation of 0.32%. Descriptive statistical analysis reported a minimum frequency of 0.00% and a maximum frequency of 1.66% for the abortion category of the annual total of crisis center call category frequency.

While it is difficult to make any assertions regarding the abortion frequency data, it is worthy of note that on January 22, 1973, the Supreme Court decision in *Roe v. Wade* reaffirmed a woman's right to access of safe, legal abortions from well-trained medical practitioners. Evaluation of the archival data reports the year of 1973 as the year of highest frequency of abortion related calls to the crisis center. While no assumptions are made as to the content of the abortion frequency, it is impossible not to notice the frequency increase.

A descriptive statistical analysis was conducted to evaluate the abortion frequency of the annual total of crisis center call category frequency between the years of 1972 and 1973. Descriptive statistical analysis reported a sum of 36 for the abortion frequency of the annual total

of crisis center call category frequency for the year of 1972 which is 0.12 standard deviations below the mean ( $z = 36 - 42.07 / 49.25 = -0.123$ ). Converting the z to a T score ( $T = 50 + (10)(-0.123)$ ) results in a T score of 48.77 for the year 1992

Descriptive statistical analysis reported a sum of 239 for the abortion frequency of the annual total of crisis center call category frequency for the year of 1973 which is 4.0 standard deviations above the mean ( $z = 239 - 42.07 / 49.25 = 4.00$ : value is not included in statistical tables.) Converting the z to a T score ( $T = 50 + (10)(4)$ ) results in a T score of 450 for the year 1993

The variance in T scores between the years of 1972 and 1973 is 401.23. This suggests that the increase in abortion call frequency between the years of 1972 and 1973 cannot be due to chance.

Descriptive statistical analyses results for the abortion category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.37. Figure 4.44 provides a visual representation for the abortion category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.45 provides a visual representation for the abortion category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with an abortion category mean line (0.2745%). Black bar represents reported year with highest frequency (239).

Table 4.37

Descriptive Statistics for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Abortion Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.00%
Maximum		1.66%
Sum		11.53%
Mean		0.27%
Standard Deviation		0.32%

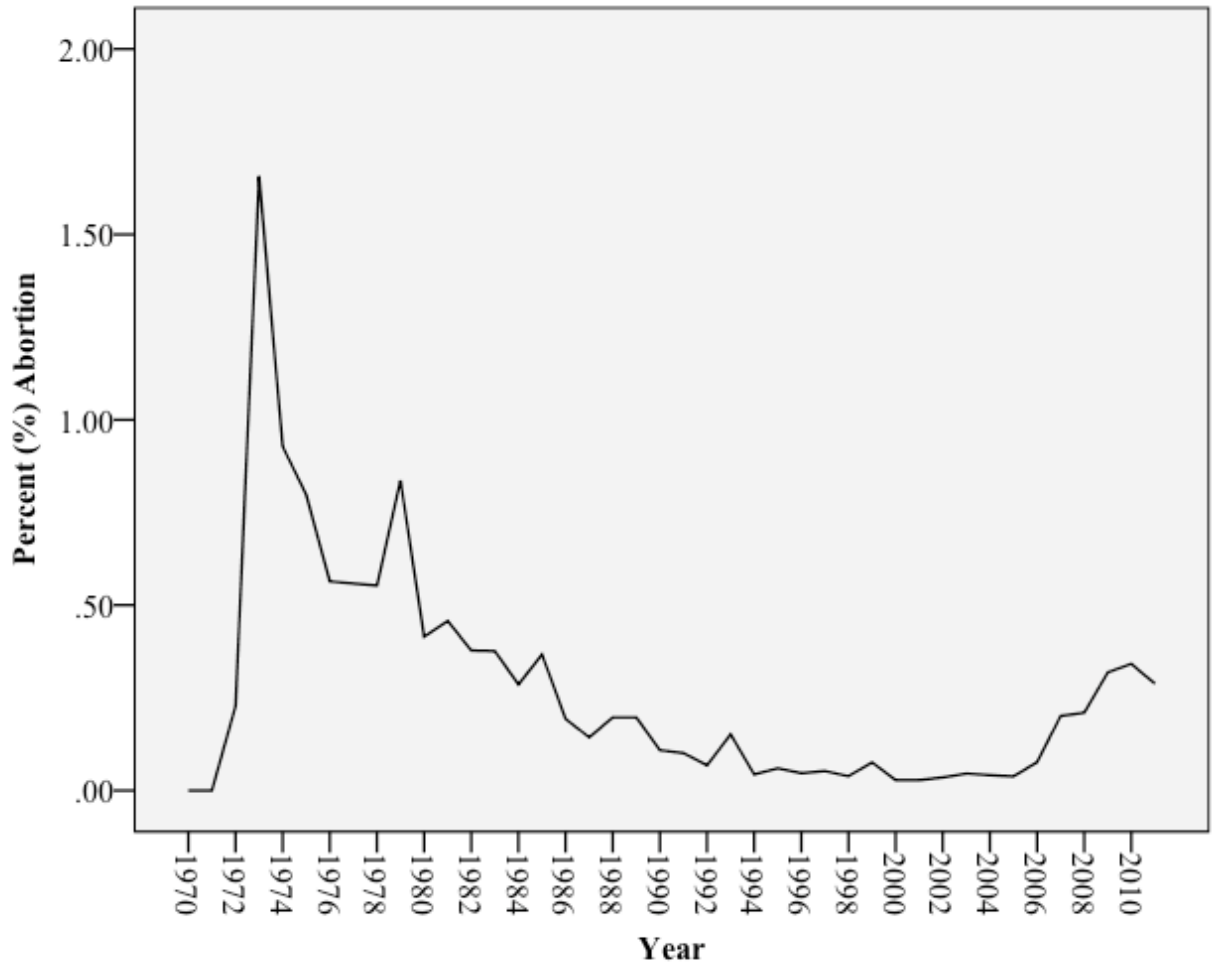


Figure 4.44 Simple Line Chart for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

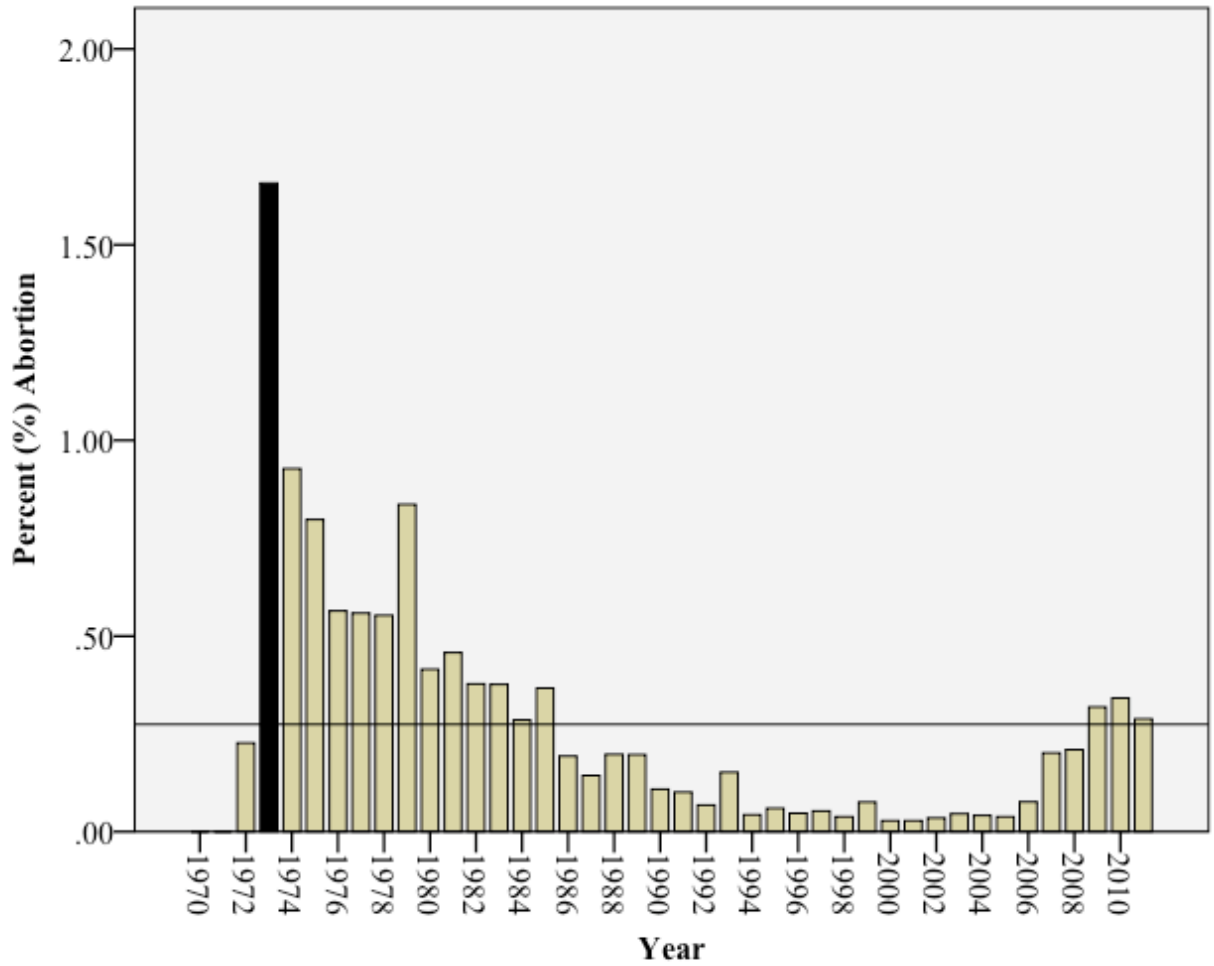


Figure 4.45 Simple Bar Chart for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Abortion Category Mean Line (0.2745%) of archival data (1970-2011)

*Descriptive Statistics for Pre and Post-Closing Abortion Category Frequencies of Annual Total of Crisis Center Call Category Frequency per Abortion Category*

In January of 1993, the last abortion clinic in Chattanooga was closed. The abortion frequency of the annual total of crisis center call frequency was transformed into a pre-closing category and a post-closing category.

A descriptive statistical analysis was conducted to evaluate the pre-closing frequency of the annual total of crisis center call frequency when grouped per abortion category encompassing twenty-three (23) years of archival data (1970-1992). Results of the descriptive statistical analysis reported a sum of 1,549 for the pre-closing category of the annual total of crisis center call frequency when grouped per abortion category with a mean of 67.35 and a standard deviation of 54.77. Descriptive statistical analysis reported a minimum frequency of 0 and a maximum frequency of 239 for the pre-closing frequency of the abortion category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the post-closing frequency of the annual total of crisis center call frequency when grouped per abortion category encompassing nineteen (19) years of archival data (1993-2011). Results of the descriptive statistical analysis reported a sum of 218 for the post-closing category of the annual total of crisis center call frequency when grouped per abortion category with a mean of 11.47 and a standard deviation of 7.33. Descriptive statistical analysis reported a minimum frequency of 4 and a maximum frequency of 25 for the post-closing category of the abortion category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results are reported in Table 4.38. Figure 4.46 provides a visual representation for the abortion frequency of the annual total of crisis center call frequency

when grouped per pre-closing (1970-1992) and post-closing (1993-2011) categories as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011) with an abortion category mean line (42.07).



Table 4.38  
 Descriptive Statistics for Abortion Frequency of Annual Total of Crisis Center Call Category  
 Frequency per Pre-Closing (1970-1992), Post-Closing (1993-2011), and Complete Years  
 (1970-2011) of archival data

Descriptive Statistics				
		Abortion Frequency Pre-Closing	Abortion Frequency Post-Closing	Abortion Frequency
N	Valid	23	19	42
	Missing	0	0	0
Minimum		0	4	0
Maximum		239	25	239
Sum		1,549	218	1,767
Mean		67.35	11.47	42.07
Standard Deviation		54.77	7.33	49.25

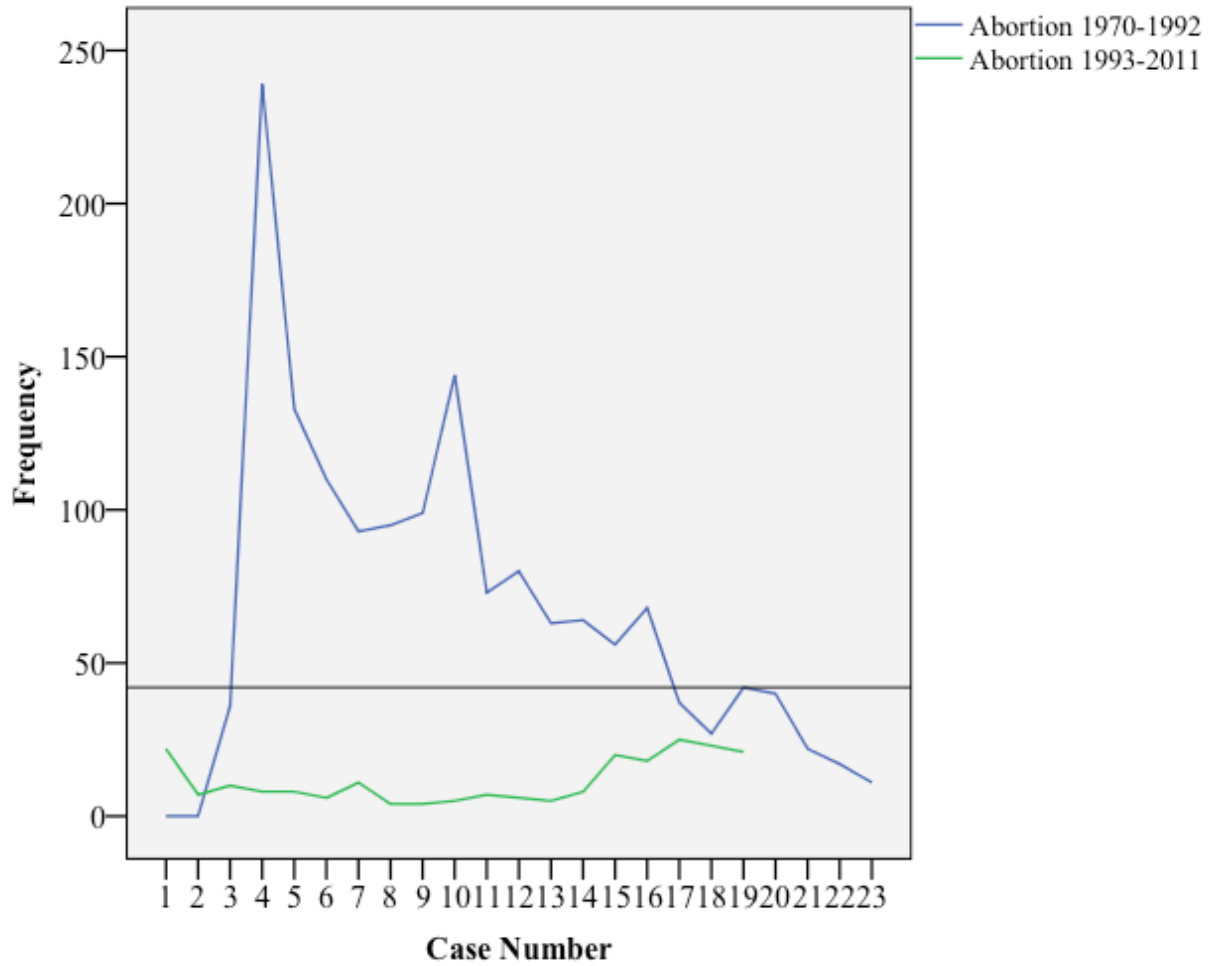


Figure 4.46 Multiple Line Chart for Abortion Frequency of Annual Total of Crisis Center Call Category Frequency Grouped Per Pre-Closing (1970-1972) and Post-Closing (1993-2011) Categories with Abortion Category Mean Line (42.07)

*Descriptive Statistics for Pre and Post Closing Abortion Category Frequencies of Annual Total of Crisis Center Call Category Frequency per Abortion Category as Ratio of Annual Total of Crisis Center Call Category Frequency*

The pre-closing category frequency of the annual total of crisis center call category frequency when grouped per abortion category were transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing twenty-three (23) years of the archival data (1970-1992). A descriptive statistical analysis was conducted to evaluate the pre-closing frequency of the annual total of crisis center call frequency when grouped per abortion category as a ratio (%) of the annual total of crisis center call category frequency encompassing twenty-three (23) years of archival data (1970-1992). The results of the descriptive statistical analysis reported a sum of 9.41% for the pre-closing category of the annual total of the crisis center call category frequency when grouped per abortion category as a ratio(%) of the annual total of crisis center call category frequency with a mean of 0.42% and a standard deviation of 0.38%. Descriptive statistical analysis reported a minimum frequency of 0.00% and a maximum frequency of 1.66% for the pre-closing category of the abortion category of the annual total of crisis center call category frequency.

The post-closing frequencies of the annual total of crisis center call category frequency when grouped per abortion category were transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing nineteen (19) years of the archival data (1993-2011). A descriptive statistical analysis was conducted to evaluate the post-closing frequency of the annual total of crisis center call frequency when grouped per abortion category as a ratio (%) of the annual total of crisis center call category frequency encompassing nineteen (19) years of archival data (1993-2011). The results of the descriptive statistical analysis

reported a sum of 2.12% for the post-closing category of the annual total of the crisis center call category frequency when grouped per abortion category as a ratio(%) of the annual total of crisis center call category frequency with a mean of 0.11% and a standard deviation of 0.11%. Descriptive statistical analysis reported a minimum frequency of 0.03% and a maximum frequency of 0.34% for the post-closing category of the abortion category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the abortion category frequencies of the annual total of crisis center call category frequency when grouped per pre-closing (1970-2011) and post-closing (1993-2011) categories as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.39. Figure 4.47 provides a visual representation for the abortion category frequencies of the annual total of crisis center call category frequency when grouped per pre-closing (1970-2011) and post-closing (1993-2011) categories as a ratio (%) of the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) abortion category mean line (0.27%).

Table 4.39

Descriptive Statistics for Abortion Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency per Pre-Closing (1970-1992), Post-Closing (1993-2011), and Complete Years (1970-2011) of archival data

Descriptive Statistics				
		Pre-Closing Frequency as Ratio (%) of Category Frequency	Post-Closing Frequency as Ratio (%) of Category Frequency	Abortion Frequency as Ratio (%) of Category Frequency
N	Valid	23	19	42
	Missing	0	0	0
Minimum		0.00%	0.03%	0.00%
Maximum		1.66%	0.34%	1.66%
Sum		9.41%	2.12%	11.53%
Mean		0.41%	0.11%	0.27%
Standard Deviation		0.38%	0.11%	0.32%

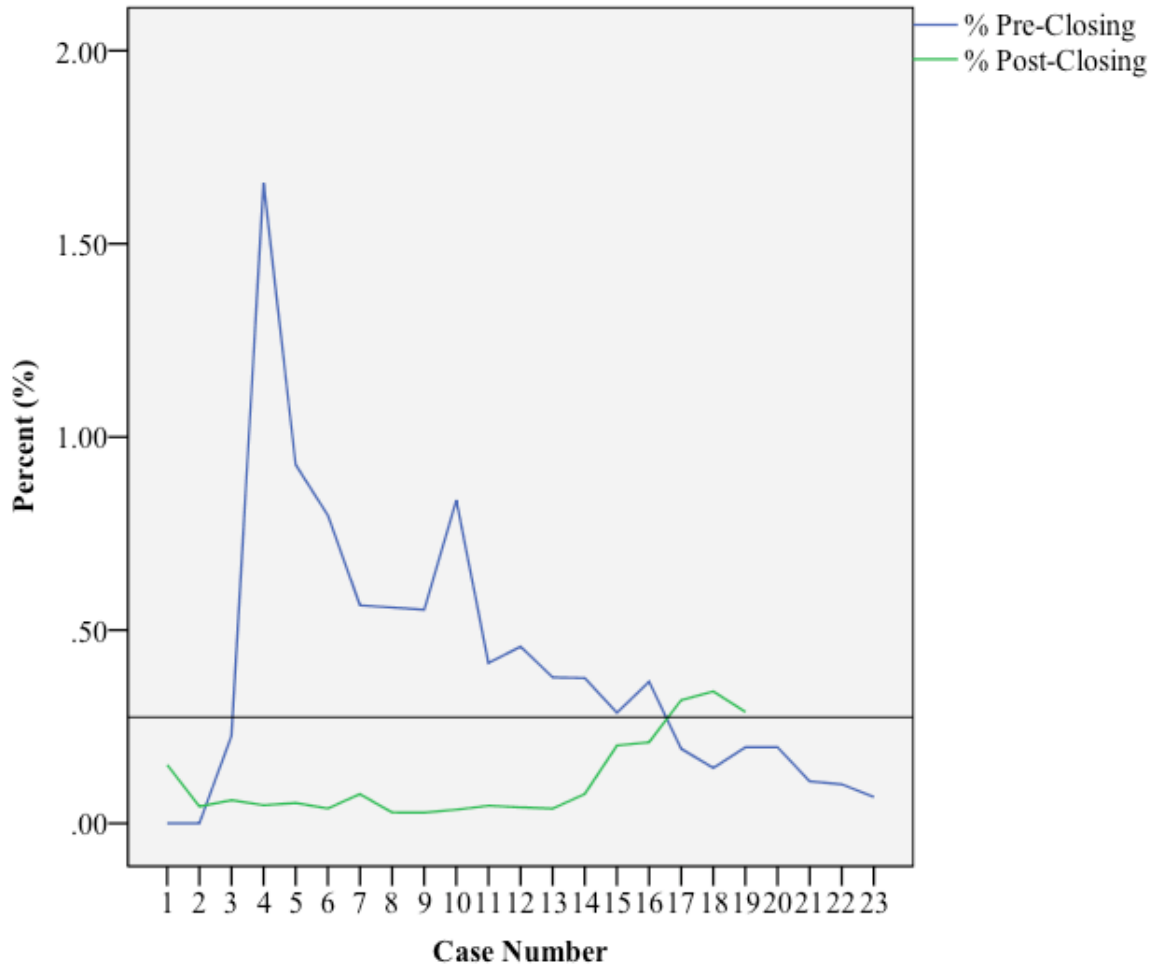


Figure 4.47 Multiple Line Chart for Abortion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency sorted by Pre-Closing (1970-1972) and Post-Closing (1993-2011) with % Abortion Category Mean Line (0.27%) of archival data (1970-2011)

## Annual Total of Crisis Center Call Category Frequency and Alcohol

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Alcohol Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each crisis center call. The call category (2) Alcohol was coded for throughout the archival data (1969-2011). Therefore, when zero (0) is reported in the alcohol frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the alcohol category rather than the absence of data for the alcohol category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately

report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency

A descriptive statistical analysis was conducted to evaluate the alcohol frequency of the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 13,185 for the alcohol category of the annual total of crisis center call category frequency with a mean of 313.93 and a standard deviation of 170.97. Descriptive statistical analysis reported a minimum frequency of 46 and a maximum frequency of 753 for the alcohol category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results on the alcohol frequency for the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.40. Figure 4.48 provides a visual representation for the alcohol frequency of the annual total of crisis center call category frequency as a simple line chart encompassing all forty-two (42) complete years of the archival data (1970-2011). Figure 4.49 provides a visual representation for the alcohol frequency of the annual total of crisis center call category



frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with an alcohol category mean line (313.93). Figure 4.50 provides a visual representation for the alcohol frequency for the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.40

Descriptive Statistics for Alcohol Category Frequency for the Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Alcohol Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		46	6,733
Maximum		753	21,292
Sum		13,185	639,102
Mean		313.93	15,216.71
Standard Deviation		170.97	3,470.44

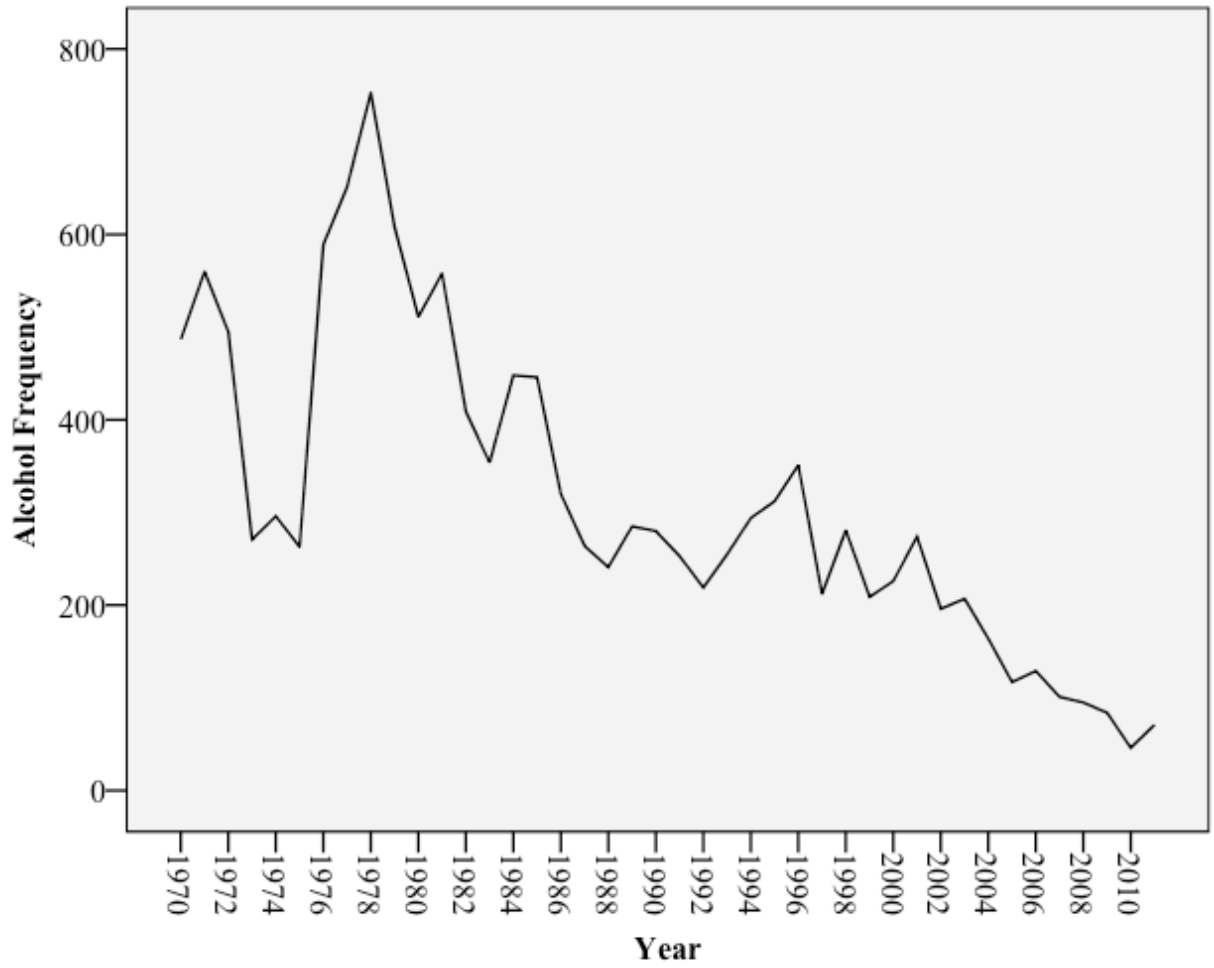


Figure 4.48 Simple Line Chart for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency (1970-2011)

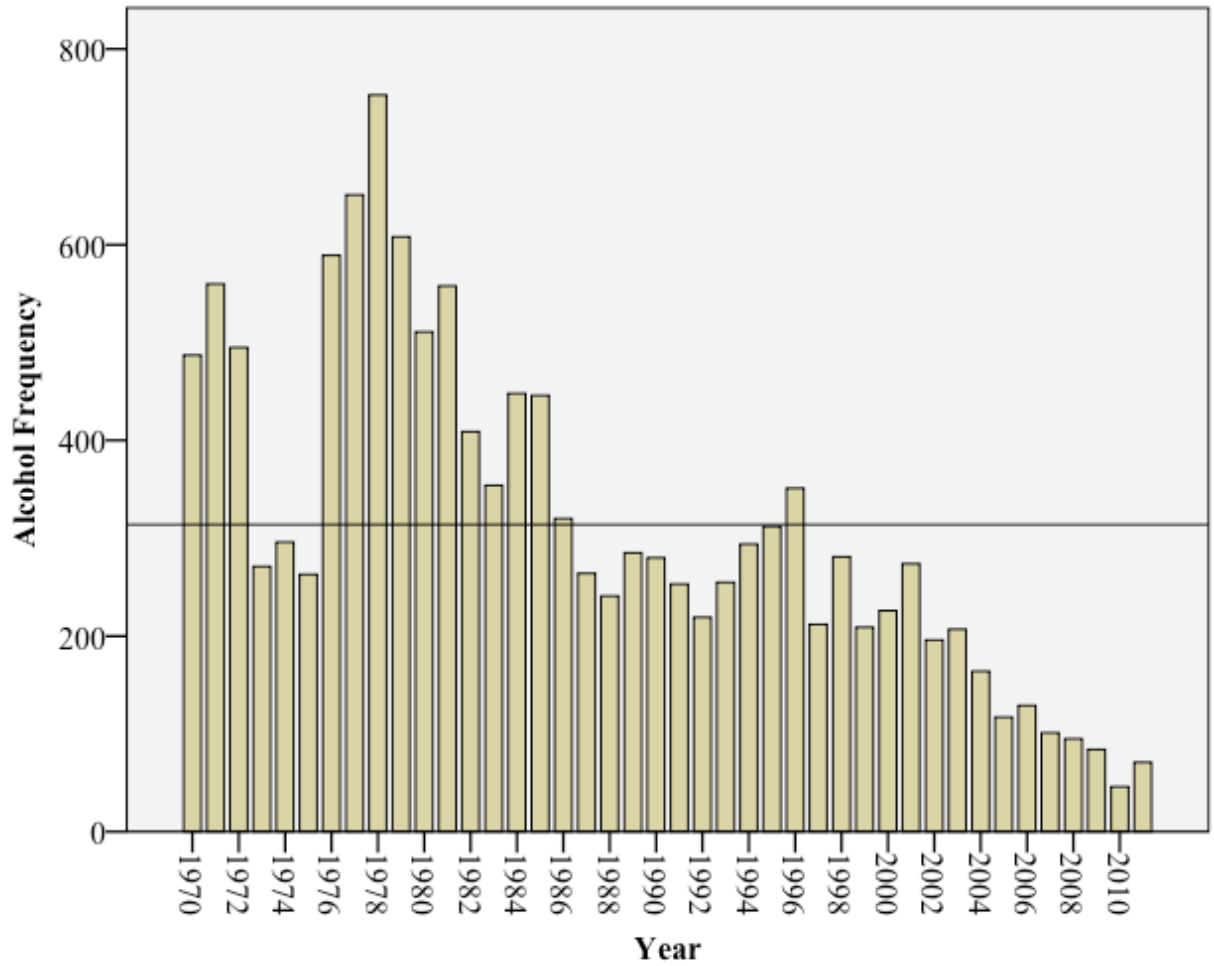


Figure 4.49 Simple Bar Chart for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency with Alcohol Category Mean Line (313.93) of archival data (1970-2011)

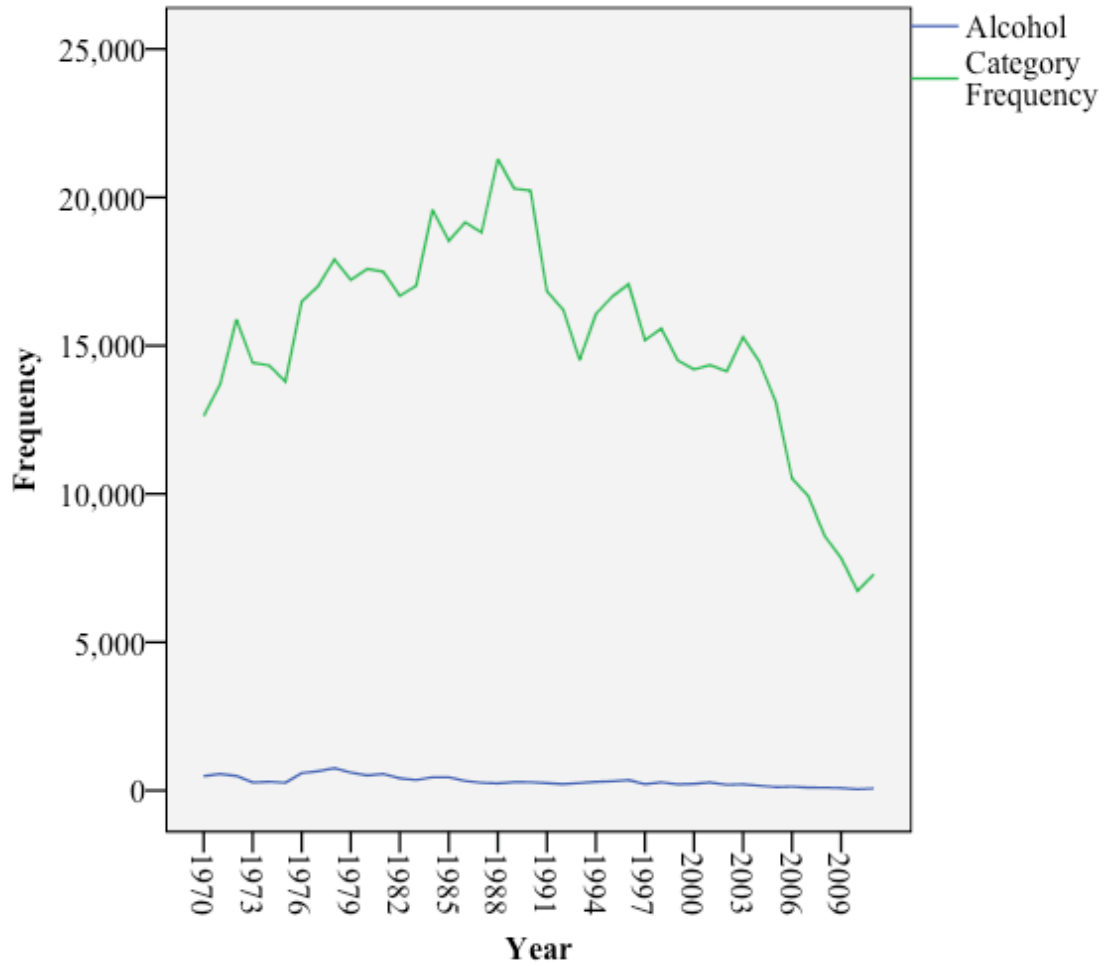


Figure 4.50 Multiple Line Chart for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The alcohol category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the alcohol frequency of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 83.733% of alcohol category of the annual total crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 1.99% and a standard deviation of 0.95%. Descriptive statistical analysis reported a minimum frequency of 0.68% and a maximum frequency of 4.21% for the alcohol category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the alcohol category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.41. Figure 4.51 provides a visual representation for the alcohol category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.52 provides a visual representation for the alcohol category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage

(%) alcohol category meal line (1.99%). Black bars represent years reported to have highest and lowest frequency.

Table 4.41

Descriptive Statistics for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Alcohol Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.68%
Maximum		4.21%
Sum		83.73%
Mean		1.99%
Standard Deviation		0.95%



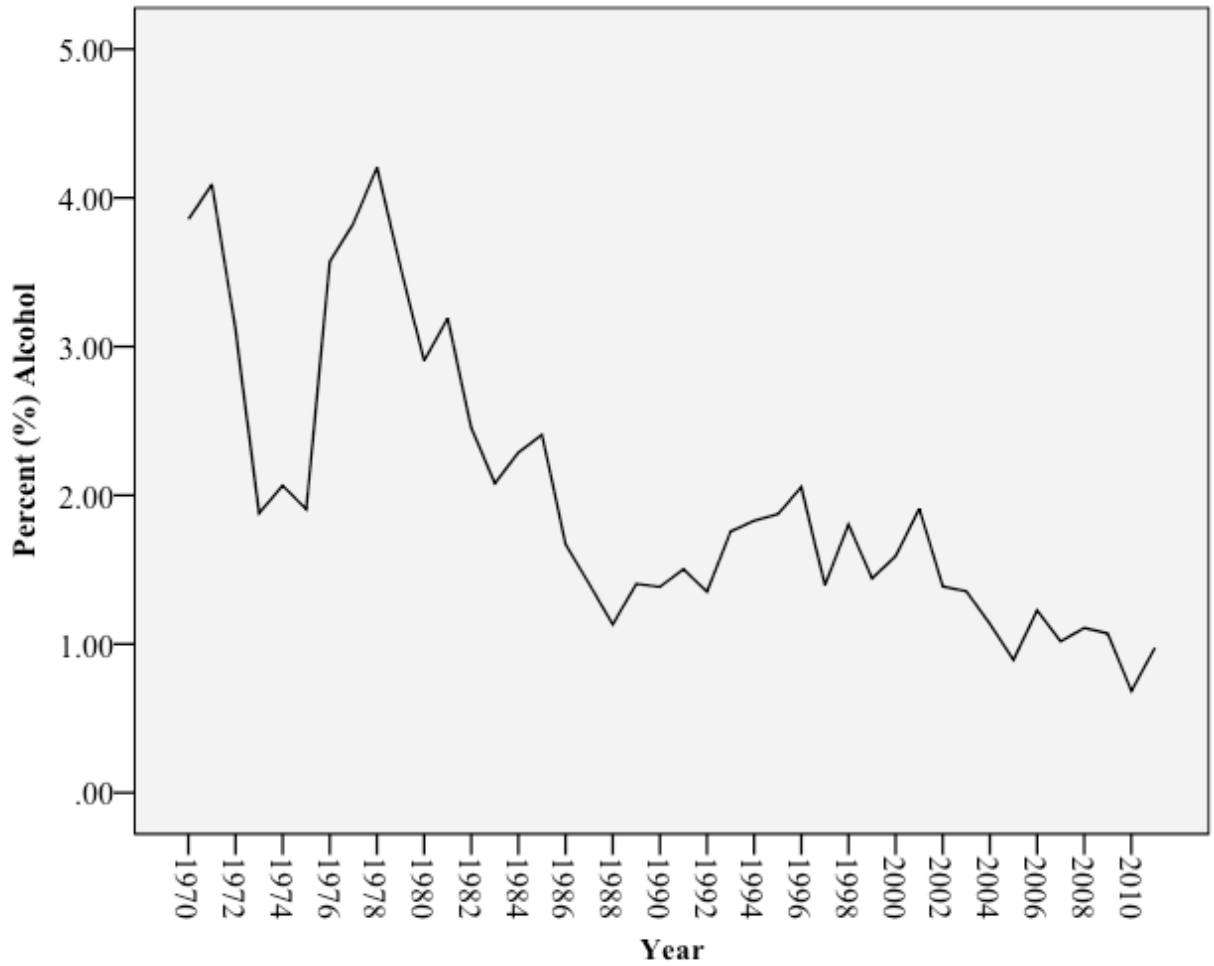


Figure 4.51 Simple Line Chart for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

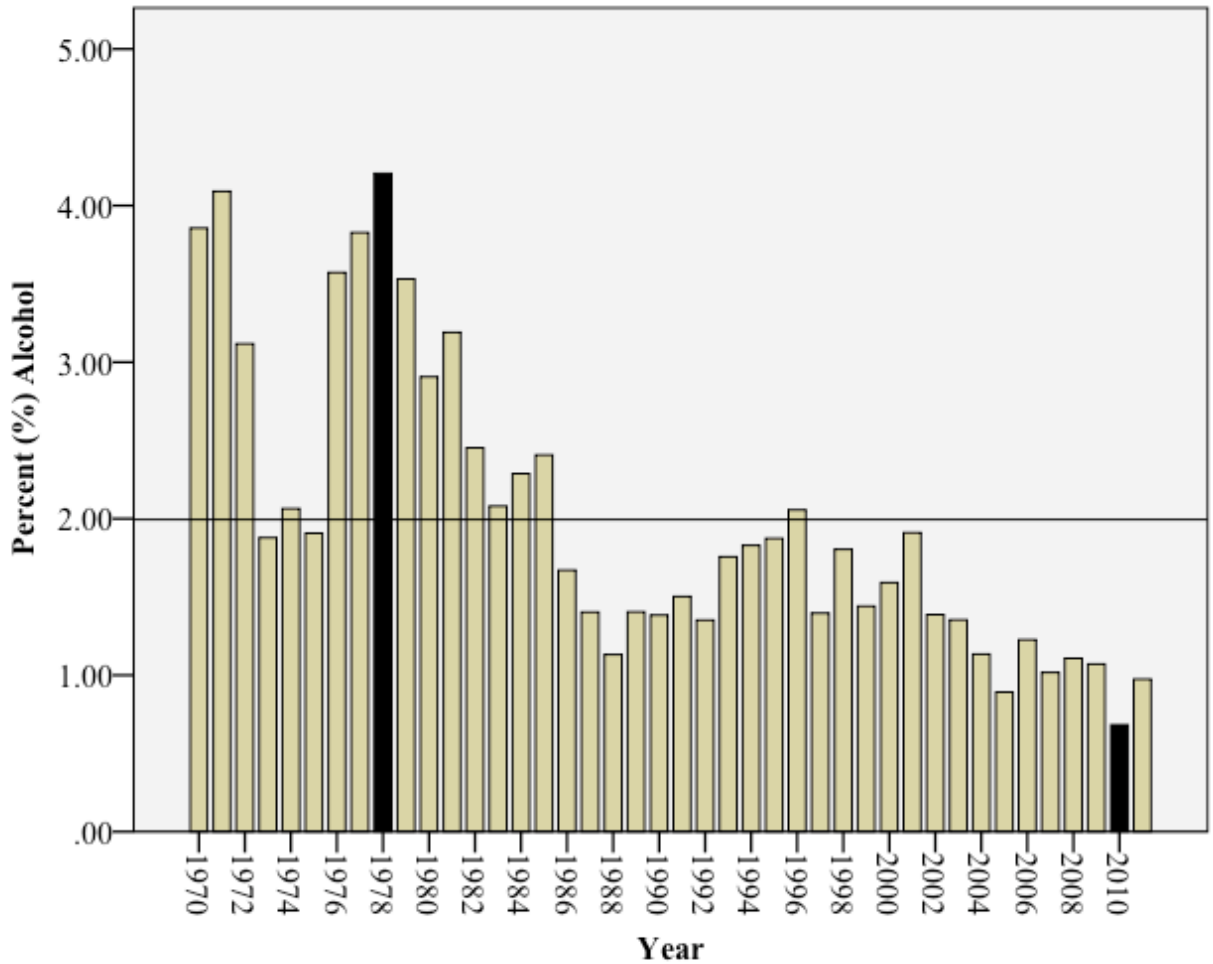


Figure 4.52 Simple Bar Chart for Alcohol Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Alcohol Category Mean Line (1.99%) of archival data (1970-2011)

Examination of the descriptive statistical results for the alcohol category frequency of the of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call frequency suggests that the current alcohol category frequency represents a very small proportion of the annual total of crisis center call category frequency.

## Annual Total of Crisis Center Call Category Frequency and Appreciation

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Appreciation Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (3) Appreciation was coded for throughout the archival data (1969-2011). Therefore, when zero (0) is reported in the appreciation frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the appreciation category rather than the absence of data for the appreciation category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for call category identification were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for call category ensuring the annual total

results accurately report the archival data. All statistical analysis is based on annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the appreciation category frequency for the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 4,046 for the appreciation category for the annual total of crisis center call category frequency with a mean of 96.33 and a standard deviation of 24.151. Descriptive statistical analysis reported a minimum frequency of 53 and a maximum frequency of 149 for the appreciation category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.437. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the appreciation category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011) are reported in Table 4.42. Figure 4.53 provides a visual representation of the appreciation category for the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of archival data (1970-2011). Figure 4.54 provides a visual representation for the appreciation category frequency of the annual total of crisis center call category frequency as a simple bar chart

encompassing forty-two (42) complete years of archival data (1970-2011) with an appreciation category mean line (96.33). Figure 4.55 provides a visual representation for the appreciation category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.42

Descriptive Statistics for Appreciation Category Frequency of the Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Appreciation Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		53	6,733
Maximum		149	21,292
Sum		4,046	639,102
Mean		96.33	15,216.71
Standard Deviation		24.151	3,470.437

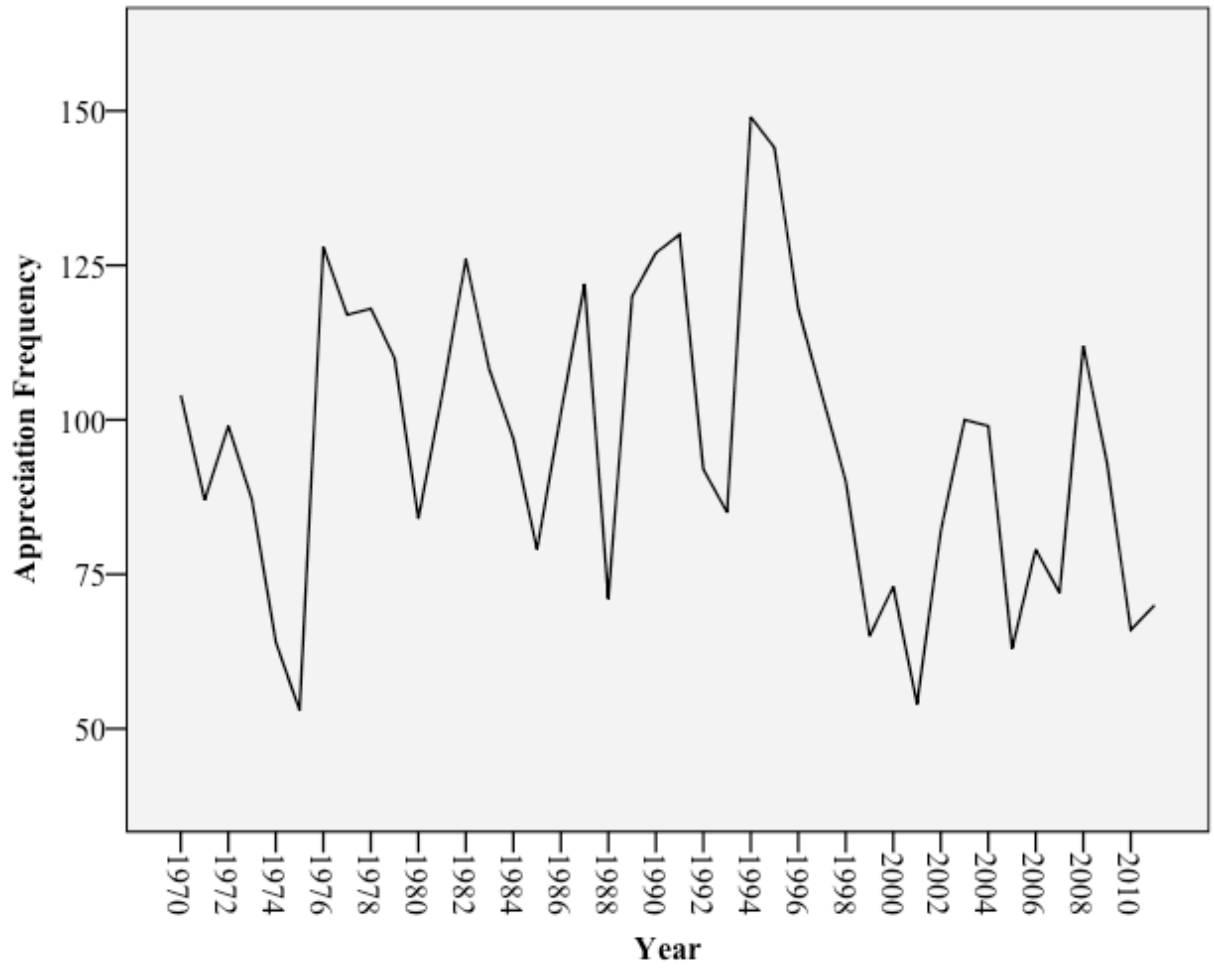


Figure 4.53 Simple Line Chart for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

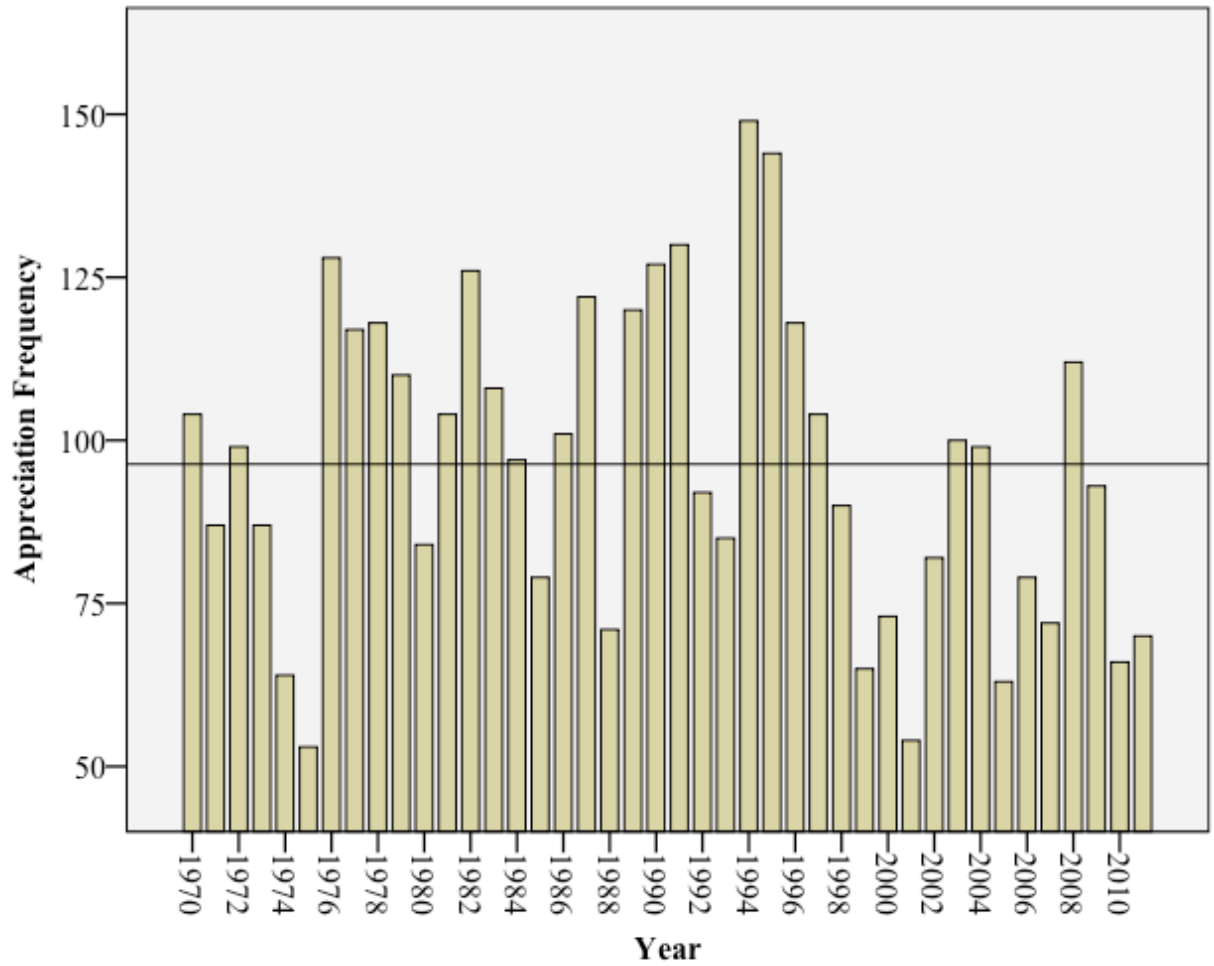


Figure 4.54 Simple Bar Chart for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency with Appreciation Category Mean Line (96.33) of archival data (1970-2011)



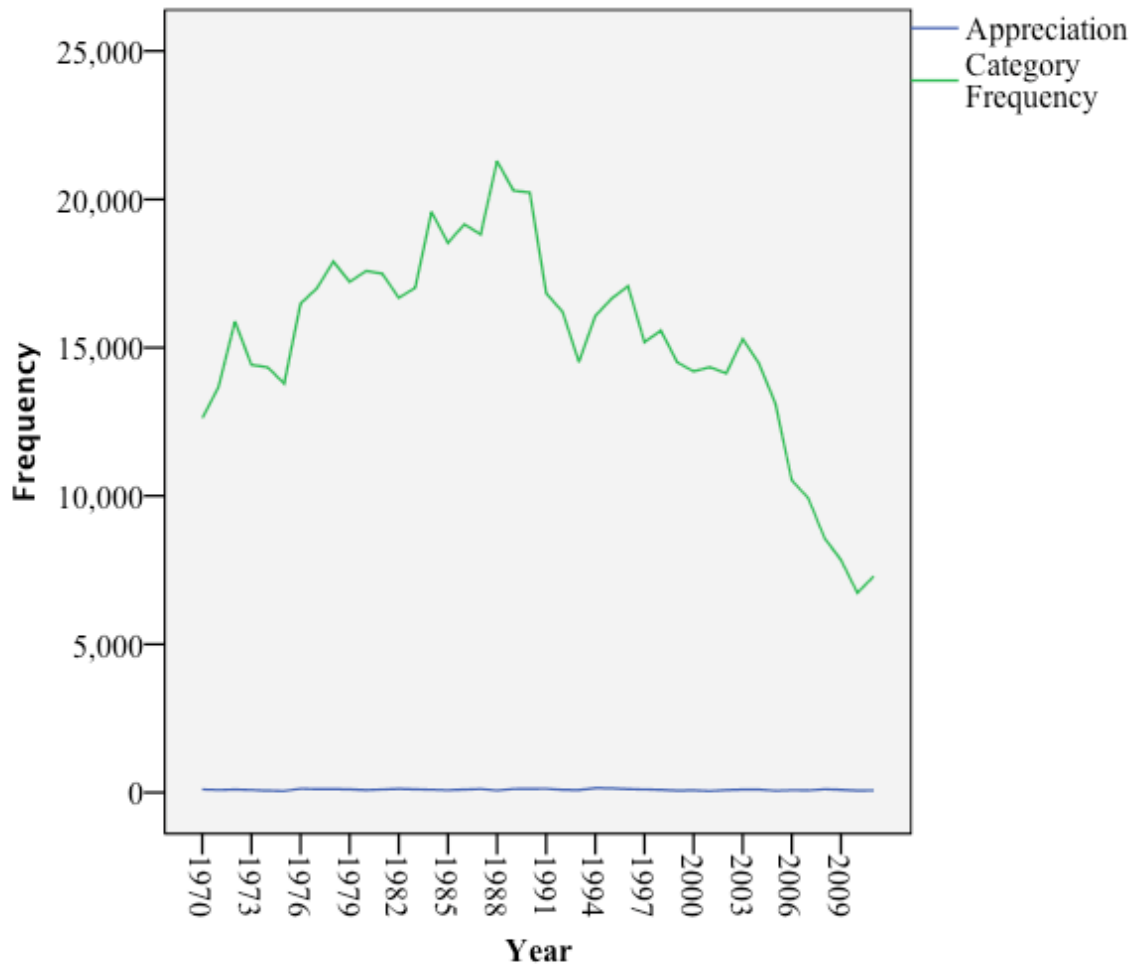


Figure 4.55 Multiple Line Chart for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The appreciation category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the appreciation category frequency of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 27.71% for the appreciation category of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 0.66% and a standard deviation of 0.20%. Descriptive statistical analysis reported a minimum frequency of 0.33% and a maximum frequency of 1.31% for the appreciation category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the appreciation category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.43. Figure 4.56 provides a visual representation for the appreciation category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.57 provides a visual representation for the appreciation category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call

category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) appreciation category mean line (0.66%). Black bars represent years reported to have highest and lowest frequency.

Table 4.43

Descriptive Statistics for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Appreciation Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.33%
Maximum		1.31%
Sum		27.71%
Mean		0.66%
Standard Deviation		0.20%

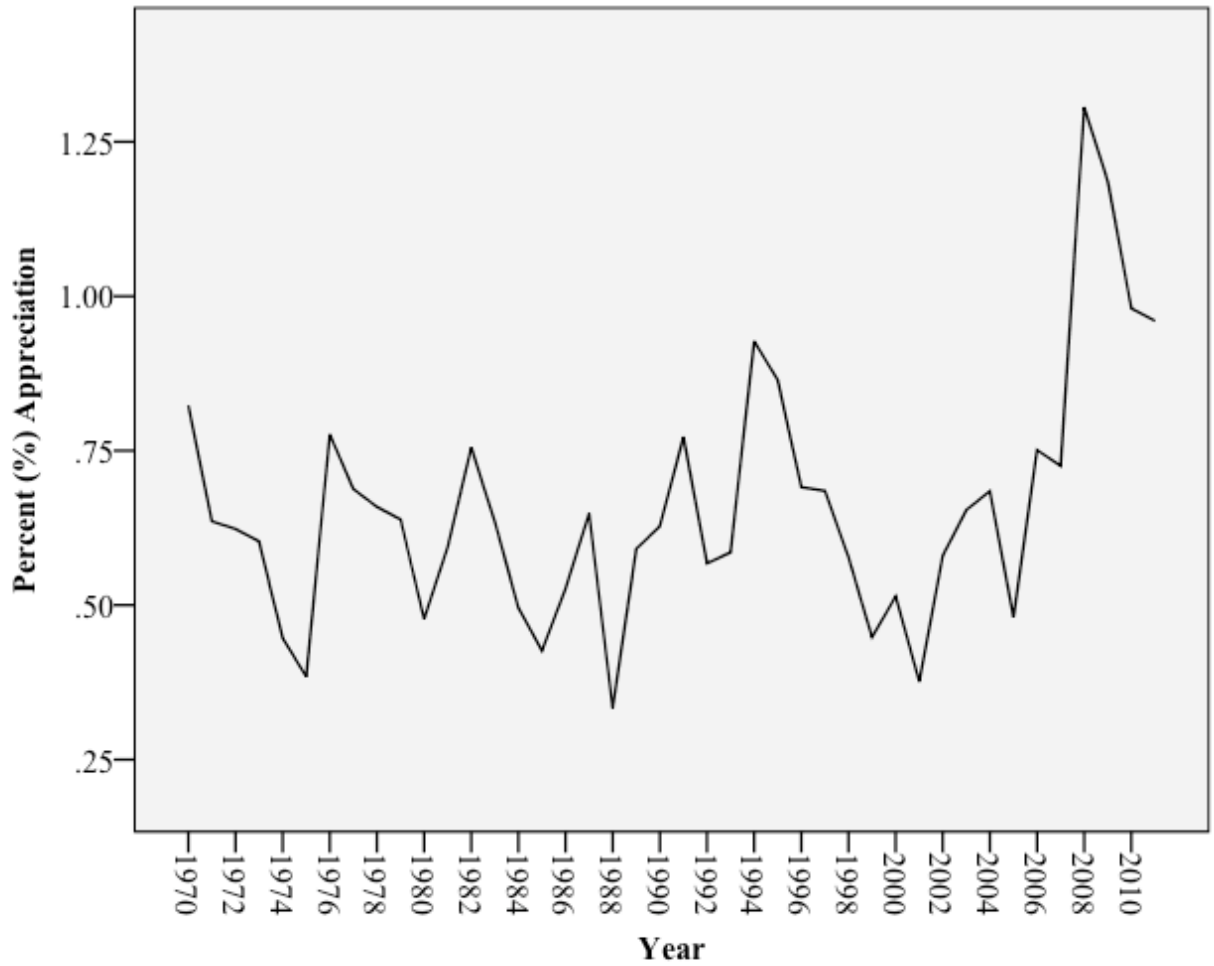


Figure 4.56 Simple Line Chart for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

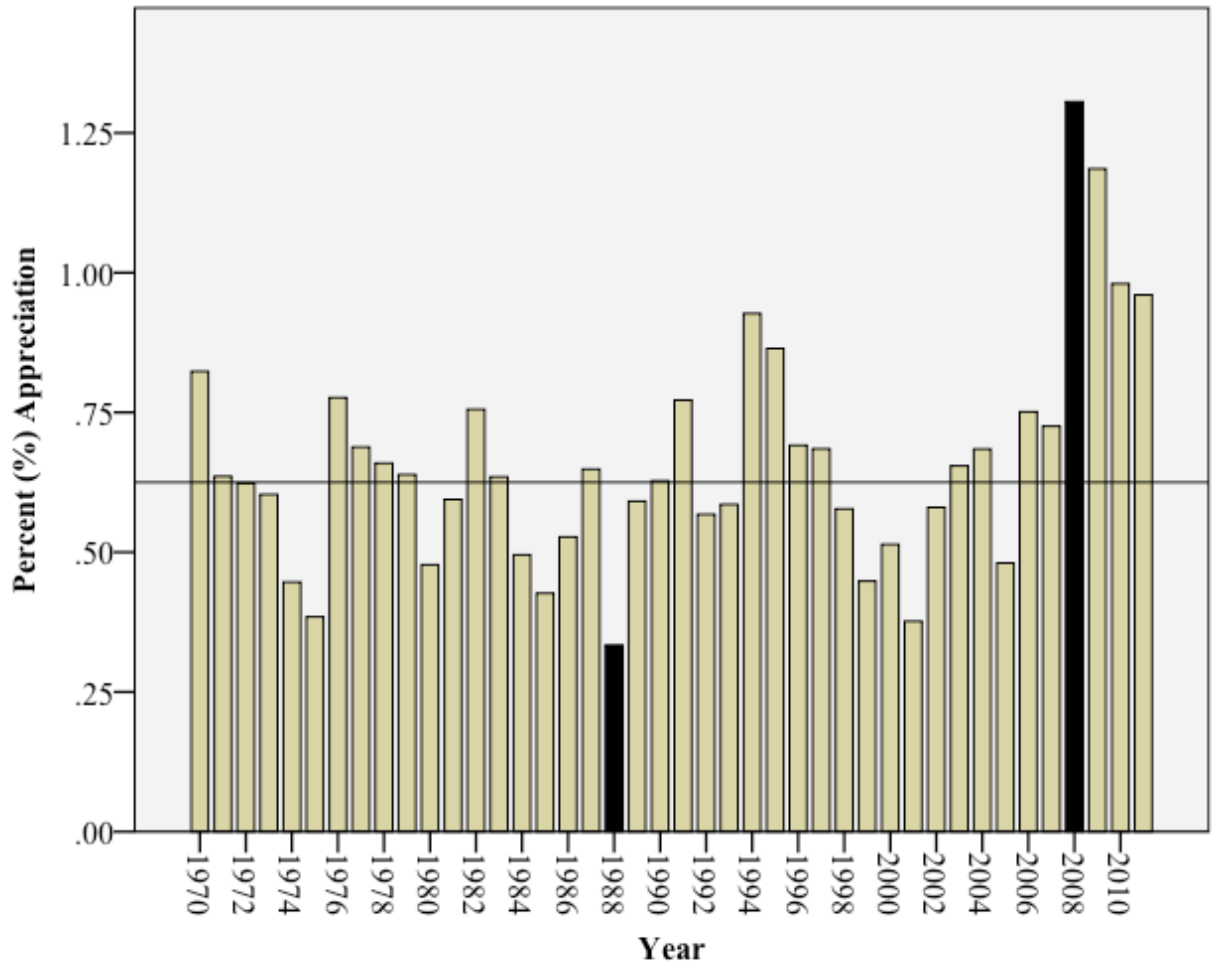


Figure 4.57 Simple Bar Chart for Appreciation Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Appreciation Category Mean Line (0.66%) of archival data (1970-2011)

Examination of the descriptive statistical results for the appreciation category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the appreciation category frequency has increased significantly since 2008. It should be noted that the appreciation call category represents a small proportion of the annual total of crisis center call category frequency. It would

be of interest to see if this upward trend in appreciation category frequency continues or whether it is simply the reflection of distribution fluctuations that naturally occur over time. However interesting the suggestion may be, a more rigorous data collection method would be necessary for further statistical evaluation to determine whether or not a statistical relationship exists among the appreciation category frequency with respect to the annual total of crisis center call category frequency and the strength of that relationship, if it does exist.

## Annual Total of Crisis Center Call Category Frequency and Dating

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Dating Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (4) Dating was coded for throughout the archival data (1969-2011). Therefore, when zero (0) is reported in the dating frequency of the annual total of crisis center call frequency, the number reflects the absence of call frequency related to the dating category rather than the absence of data for the dating category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for call category identification were noted; reported annual total of crisis center call category frequency was inconsistent with the reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for call category ensuring the annual total



results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the dating category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 9,260 for the dating category of the annual total of crisis center call category frequency with a mean of 220.48 and a standard deviation of 229.26. Descriptive statistical analysis reported a minimum frequency of 0 and a maximum frequency of 953 for the dating category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.437. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the dating frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.44. Figure 4.58 provides a visual representation for the dating frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.59 provides a visual representation for the dating category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years

of the archival data (1970-2011) with a dating category mean line (42.07). Figure 4.60 provides a visual representation of the dating category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.44

Descriptive Statistics for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Frequency Category of archival data (1970-2011)

Descriptive Statistics			
		Dating Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		0	6,733
Maximum		953	21,292
Sum		9,260	639,102
Mean		220.48	15,216.71
Standard Deviation		229.26	3,470.437

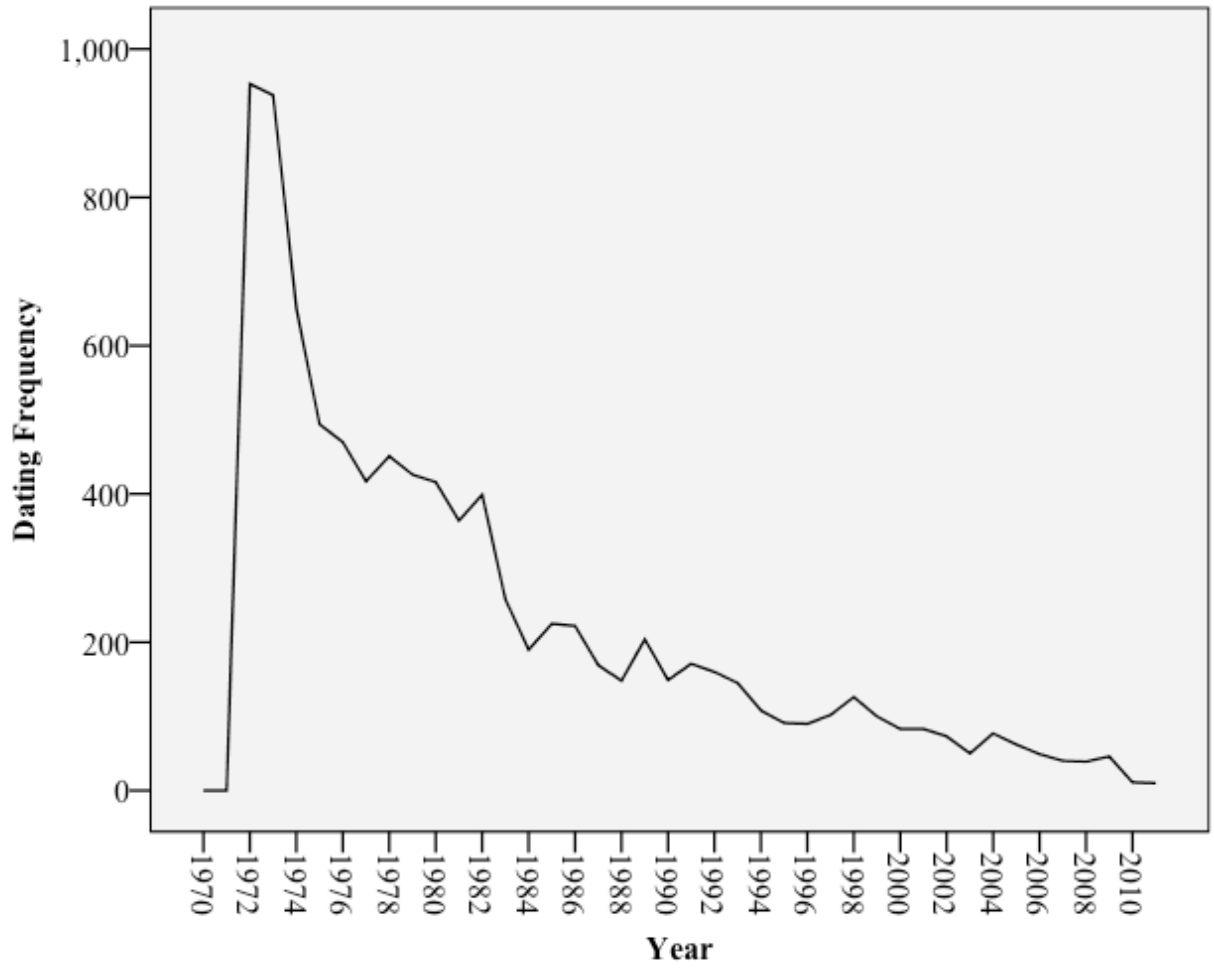


Figure 4.58 Simple Line Chart for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

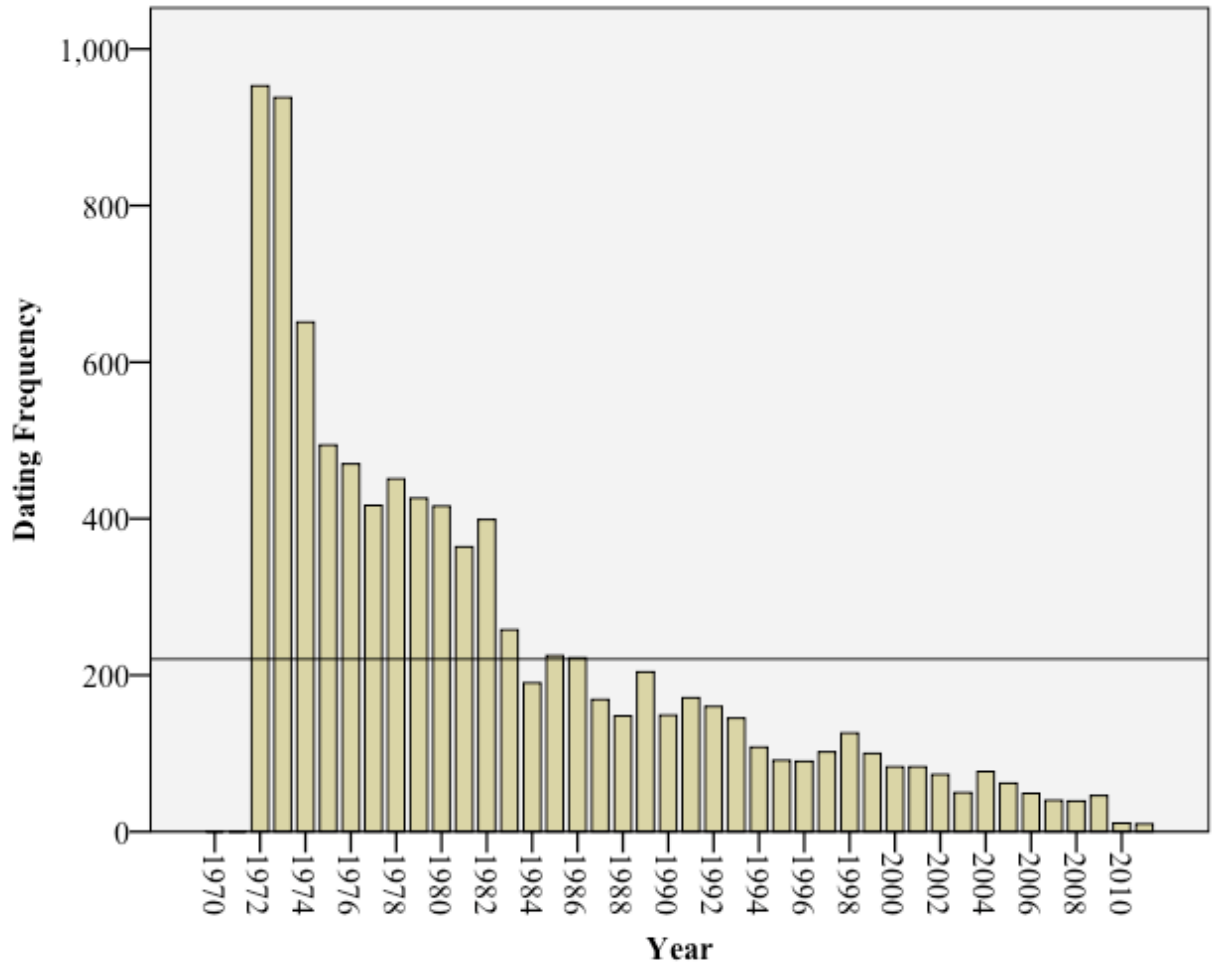


Figure 4.59 Simple Bar Chart for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency with Dating Category Mean Line (220.48) of archival data (1970-2011)

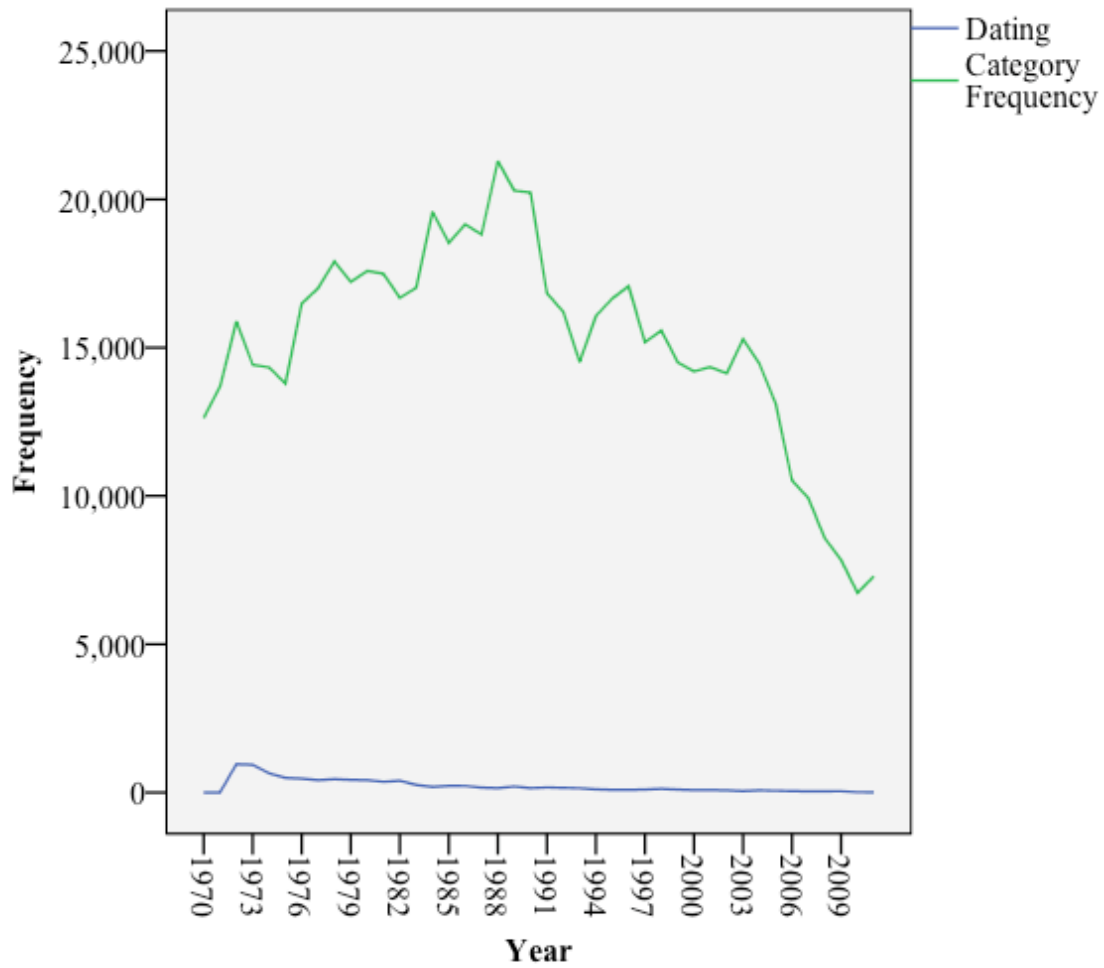


Figure 5.60 Multiple Line Chart for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Category Call Frequency*

The dating category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center category frequency encompassing forty-two (42) complete years of archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the dating category frequency of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 58.10% for dating category of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 0.138% and a standard deviation of 0.149%. Descriptive statistical analysis reported a minimum frequency of 0.00% and a maximum frequency of 6.50% for the dating category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the dating category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.45. Figure 4.61 provides a visual representation for the dating category frequency of annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.62 provides a visual representation for the dating category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage

(%) dating category mean line (1.38%). Black bars represent years reported to have highest (1973) and lowest (2011) frequency.



Table 4.45

Descriptive Statistics for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Dating Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.00%
Maximum		6.50%
Sum		58.10%
Mean		1.38%
Standard Deviation		1.49%

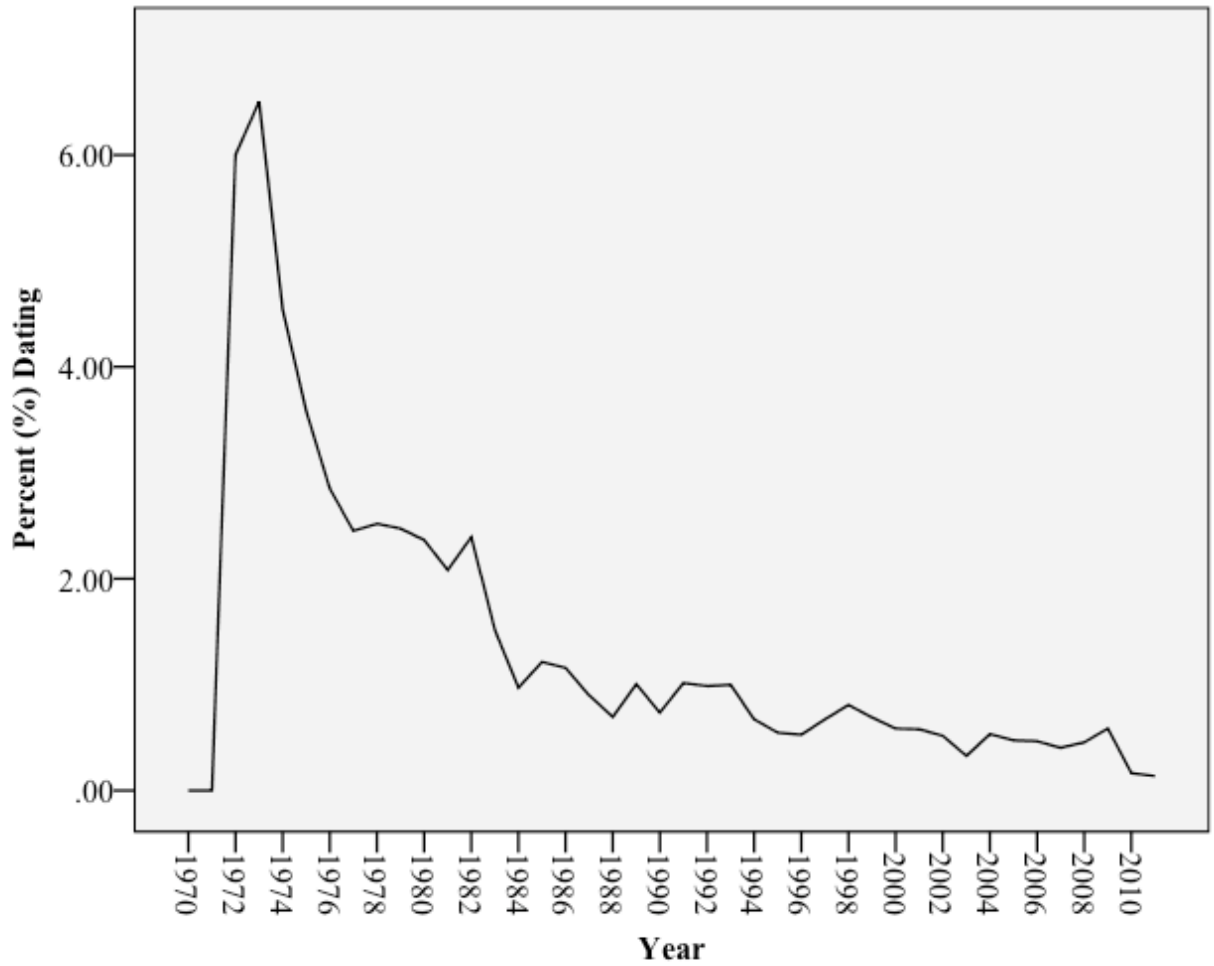


Figure 4.61 Simple Line Chart for Dating Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

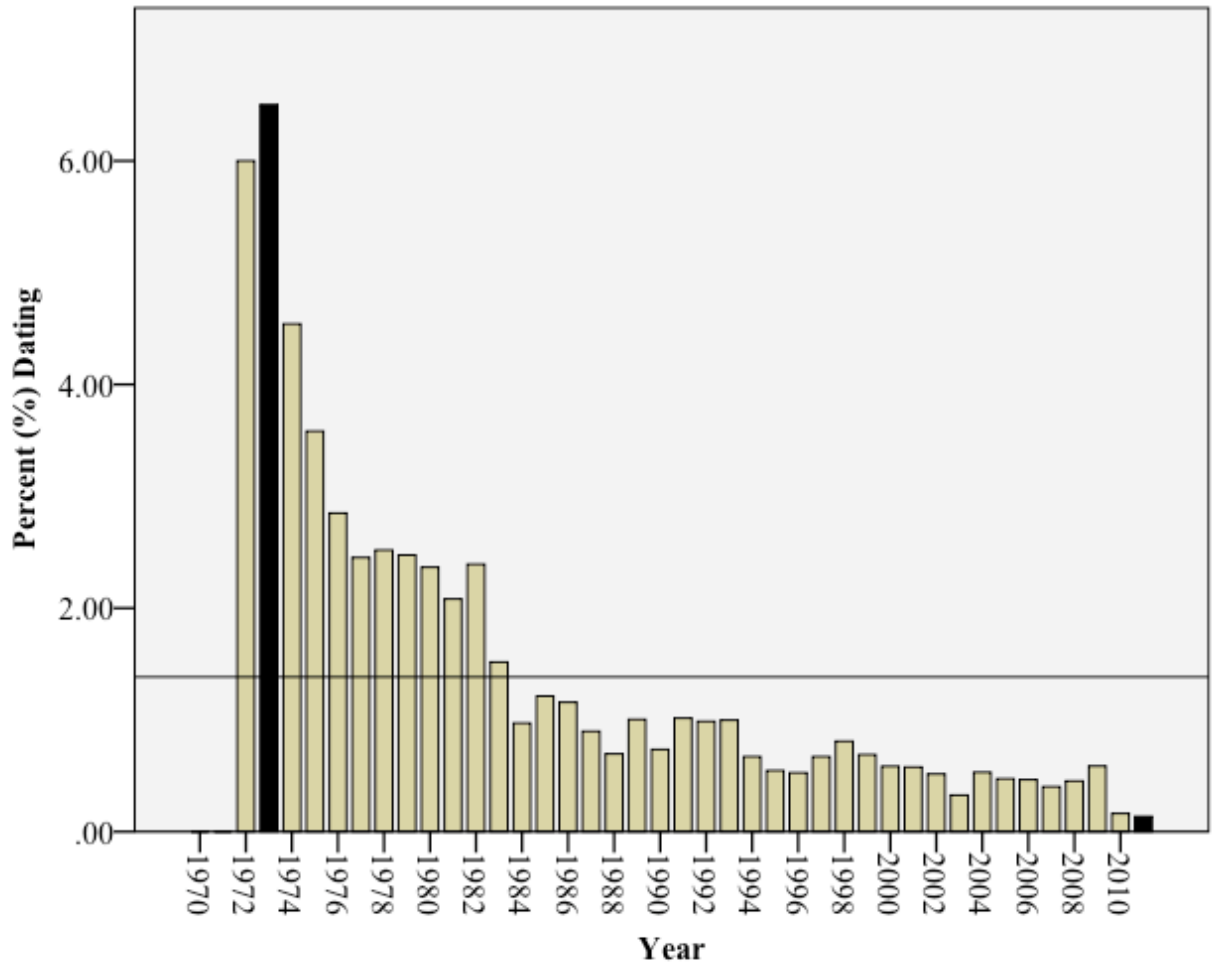


Figure 4.62 Simple Bar Chart for Dating Category of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Dating Category Mean Line (1.38%) of archival data (1970-2011)

Examination of the descriptive statistical results for the dating category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the dating category frequency has decreased significantly since 1973 and has remained a relatively small proportion of the annual total of crisis center call category frequency (< 1%) since 2002.

## Annual Total of Crisis Center Call Category Frequency and Deafness

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Deaf Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (5) Deaf was coded for only two years of the archival data (1988-1989). This was a telephone service that CONTACT of Chattanooga provided to hearing impaired individuals beginning in 1988. After 1989, Tele Typewriter telephones became readily available for those individuals making the service that CONTACT of Chattanooga provided unnecessary. Archival data for the annual total of crisis center call frequency when grouped per deaf category is not statistically salient as to warrant evaluation as an individual call category ( $n = 2$ ). It is included in statistical analysis for Group 4: Physical Health.

## Annual Total of Crisis Center Call Category Frequency and Depression

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Depression Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (6) Depression was coded for nine (9) years of the archival data (2003-2011). Although the archival data for the depression frequency of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as an individual call category. When zero (0) is reported in the depression frequency of the annual total of crisis center call category frequency for years 1969-2002, the number reflects the absence of data for the depression category. When zero (0) is reported in depression frequency of the annual total of crisis center call category frequency for years 2003-2011, the number reflects the absence of call frequency related to the depression category rather than the absence of data for the depression category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Nine (9) complete years were identified and used for statistical analysis (2003-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for call category identification were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the

statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for call category ensuring the annual total results accurately report the archival data. All statistical analysis is based on annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the depression frequency of the annual total of crisis center call category frequency encompassing nine (9) years of archival data (2003-2011). Results of the descriptive statistical analysis reported a sum of 1,854 for the depression category of the annual total of crisis center call category frequency with a mean of 206.00 and a standard deviation of 125.75. Descriptive statistical analysis reported a minimum frequency of 104 and a maximum frequency of 516 for the depression category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing nine (9) years of archival data (2003-2011). Results of the descriptive statistical analysis reported a sum of 93,747 for the annual total of crisis center call category frequency with a mean of 10,416.33 and a standard deviation of 3,181.11. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the depression category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing nine (9) complete years of the archival data (2003-2011) are reported in Table 4.46. Figure 4.63 provides a visual representation for the depression frequency of the

annual total of crisis center call category frequency as a simple line chart encompassing nine (9) complete years of the archival data (2003-2011). Figure 4.64 provides a visual representation of the depression category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing nine (9) complete years of the archival data (2003-2011) with a depression category mean line (206.00). Figure 4.65 provides a visual representation for the depression category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing nine (9) complete years of the archival data (2003-2011).

Table 4.46

Descriptive Statistics for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011)

Descriptive Statistics			
		Depression Frequency	Category Frequency
N	Valid	9	9
	Missing	0	0
Minimum		104	6,733
Maximum		516	21,292
Sum		1,854	93,747
Mean		206.00	10,416.33
Standard Deviation		125.75	3,181.11



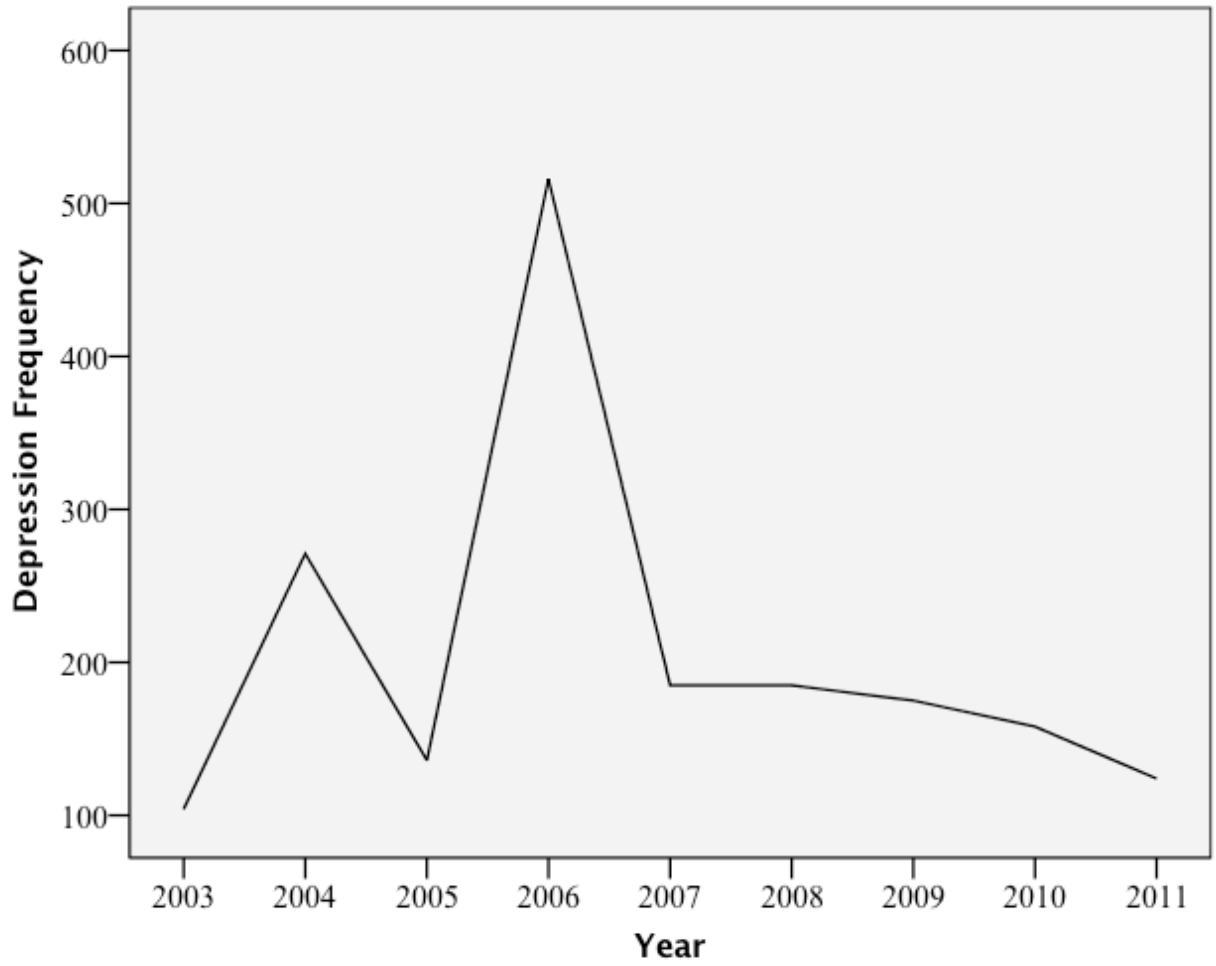


Figure 4.63 Simple Line Chart for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011)

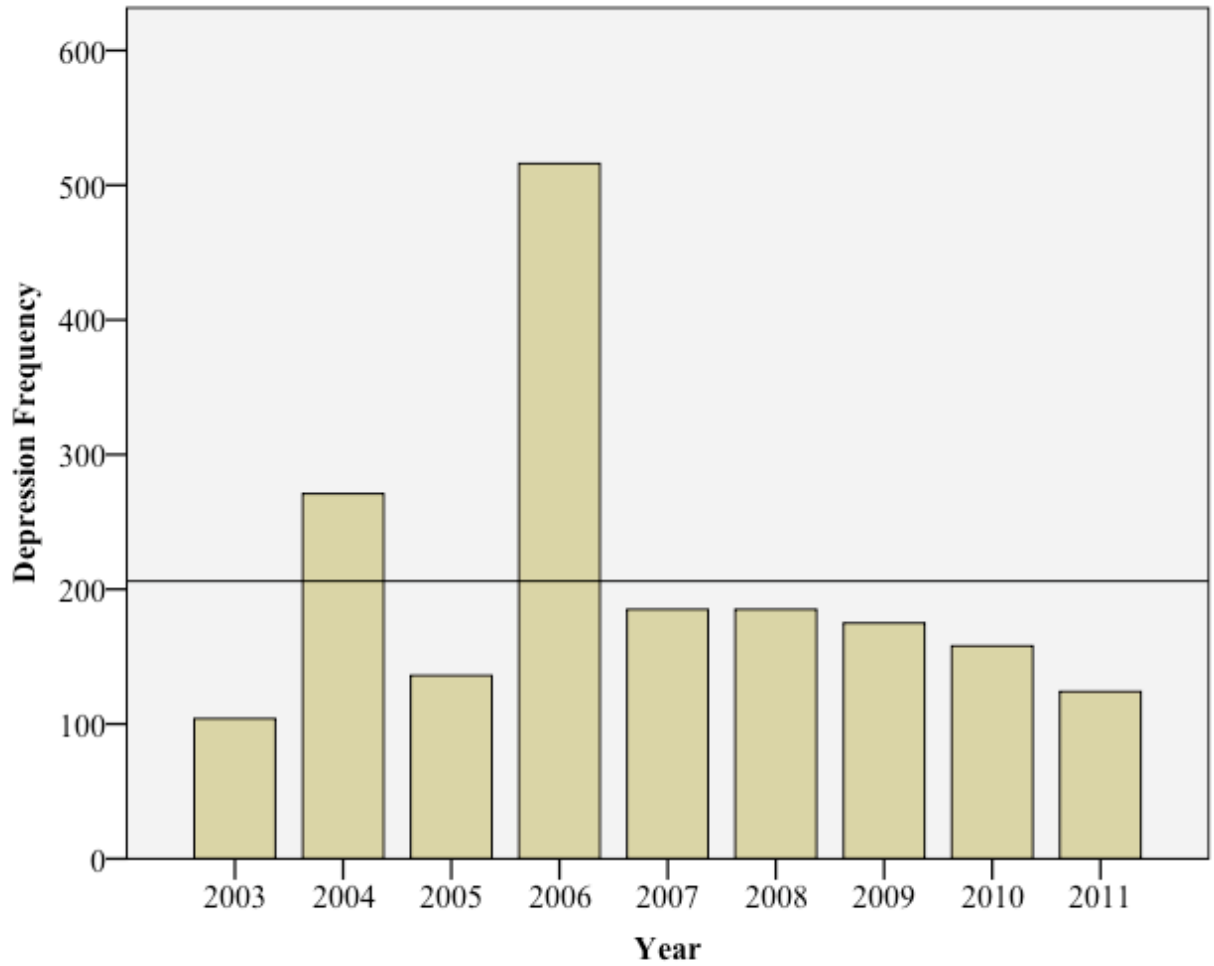


Figure 4.64 Simple Bar Chart for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency with Depression Category Mean Line (206.00) of archival data (2003-2011)

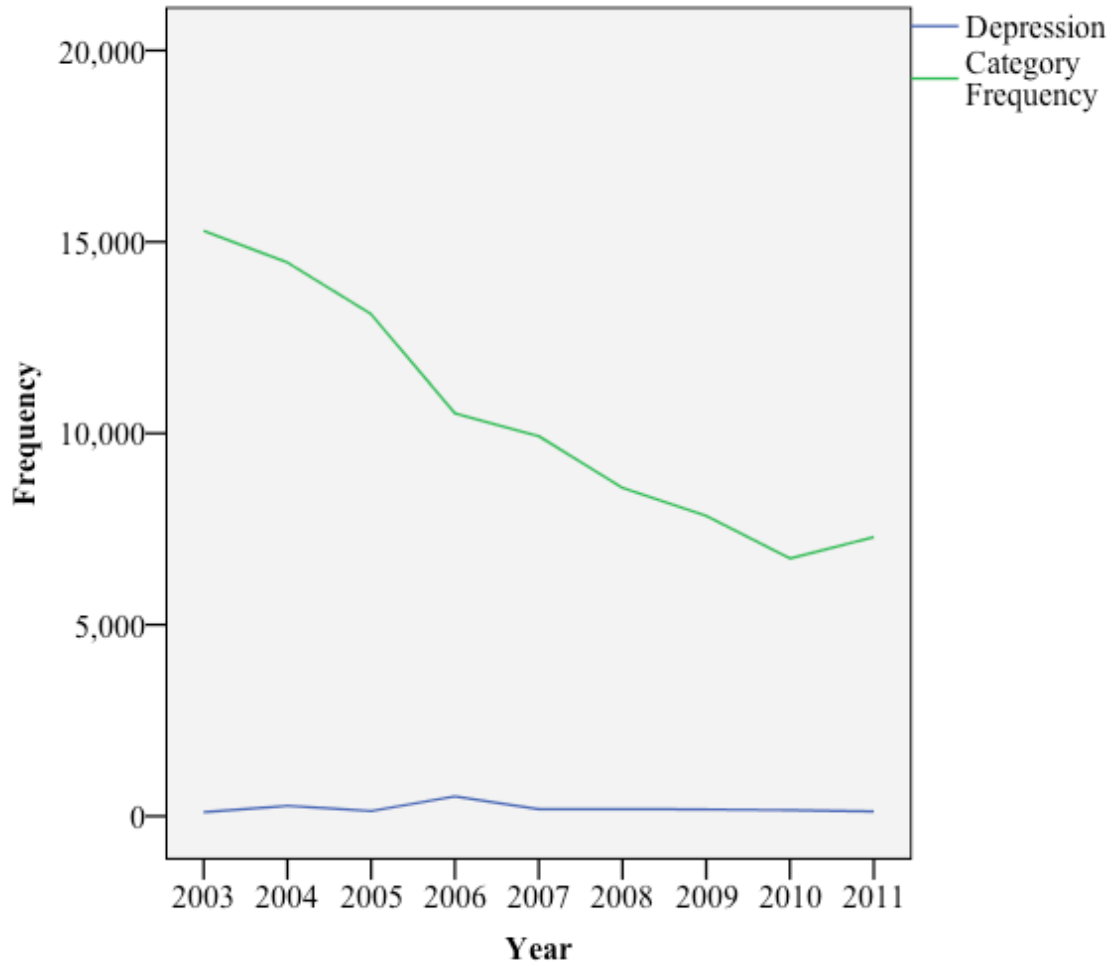


Figure 4.65 Multiple Line Chart for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011)

*Descriptive Statistics for Depression Category Frequency of Annual Total of Crisis Center Call Frequency Category as Ratio of Annual Total of Crisis Center Call Category Frequency*

The depression category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing nine (9) years of the archival data (2003-2011). A descriptive statistical analysis was conducted to evaluate the depression frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing nine (9) complete years of the archival data (2003-2011). The results of the descriptive statistical analysis reported a sum of 18.80% for the depression category of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 2.09% and a standard deviation of 1.19%. Descriptive statistical analysis reported a minimum frequency of 0.68% and a maximum frequency of 4.91% for the depression category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results the depression category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing nine (9) complete years of the archival data (2003-2011) are reported in Table 4.47. Figure 4.66 provides a visual representation for the depression category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing nine (9) complete years of the archival data (2003-2011). Figure 4.67 provides a visual representation for the depression frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing

nine (9) complete years of the archival data (2003-2011) with a percentage (%) depression mean line (2.09%). Black bars represent years reported to have highest (2006) and lowest (2003) frequency.

Table 4.47

Descriptive Statistics for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011)

Descriptive Statistics		
		Depression Frequency as Ratio (%) of Category Frequency
N	Valid	9
	Missing	0
Minimum		0.68%
Maximum		4.91%
Sum		18.80%
Mean		2.09%
Standard Deviation		1.19%

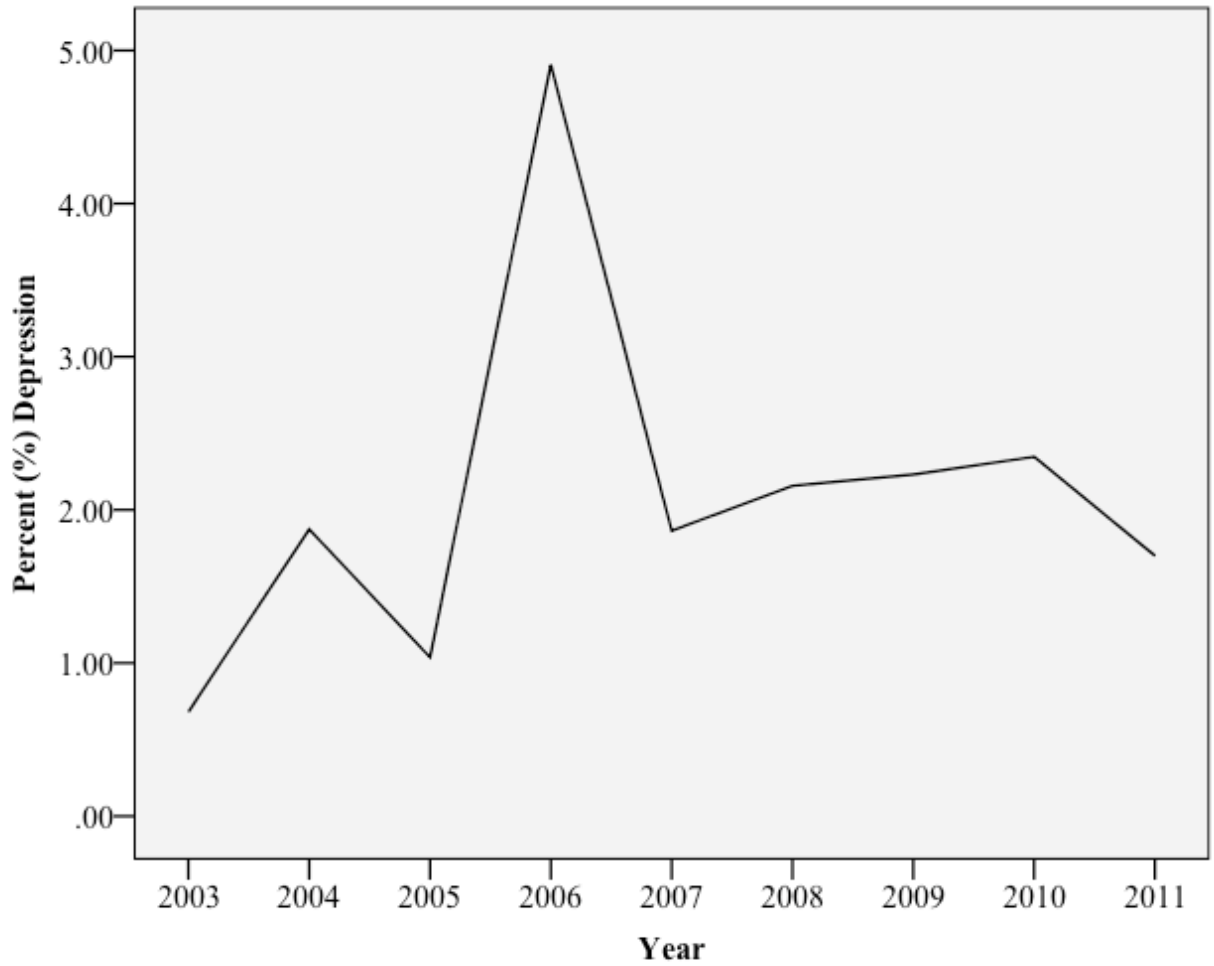


Figure 4.66 Simple Line Chart for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011)

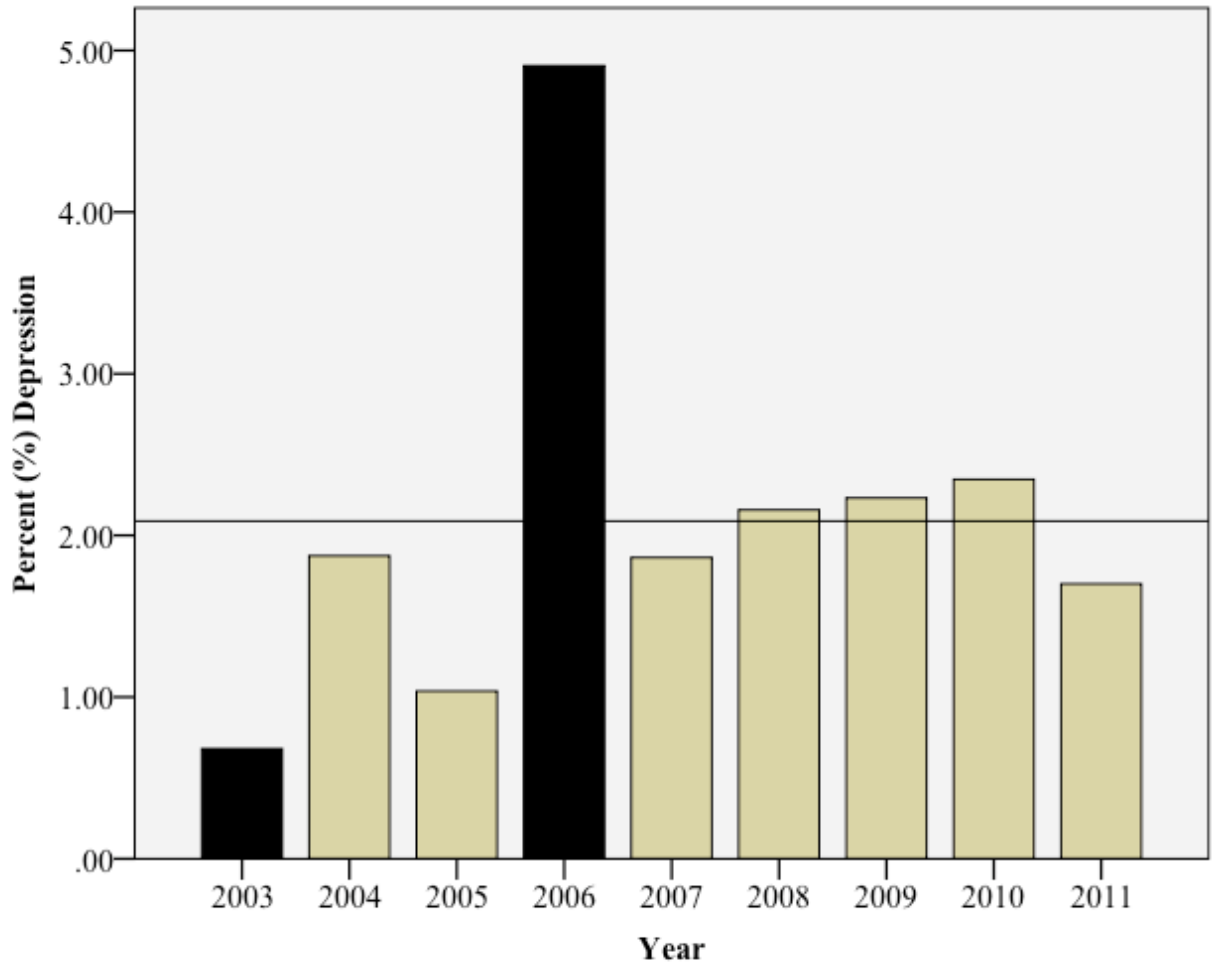


Figure 4.67 Simple Bar Chart for Depression Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Depression Category Mean Line (96.33%) of archival data (2003-2011)

Examination of the descriptive statistical results for the depression category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the depression category frequency has decreased significantly since 2006 and has remained a relatively small proportion of the annual total of crisis center call category frequency (about 2%) since 2007.



## Annual Total of Crisis Center Call Category Frequency and Desertion

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Desertion Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (7) Desertion was coded for nine (9) years of the archival data (1969-1977). Although the archival data for the desertion category of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as a specific call category. When zero (0) is reported in the desertion frequency of the annual total of crisis center call category frequency for the years 1969-1977, the number reflects the absence of call frequency related to the desertion category rather than the absence of data for the desertion category. When zero (0) is reported in desertion frequency of the annual total of crisis center call category frequency for years 1978-2011, the number reflects the absence of data for the desertion category.

The archival data for the annual total of crisis center call category frequency was grouped per years ( $n = 12$ ). Inclusion of incomplete years ( $n \neq 12$ ) in procedures for descriptive statistical analyses and computation of correlation coefficients would have reported skewed results. Therefore, the year of 1969 is excluded from statistical analyses when indicated. Eight (8) complete years were identified (1970-1977).

In the tabulation of VCLs, some inconsistencies in the frequency totals were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile

any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for call category ensuring the annual total results accurately report the archival data. All statistical analysis and is based on annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the desertion category frequency of the annual total of crisis center call category frequency encompassing eight (8) years of archival data (1970-1977). Results of the descriptive statistical analysis reported a sum of 316 for the desertion category of the annual total of crisis center call category frequency with a mean of 39.50 and a standard deviation of 23.92. Descriptive statistical analysis reported a minimum frequency of 15 and a maximum frequency of 95 for the depression category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing eight (8) years of archival data (1970-1977). Results of the descriptive statistical analysis reported a sum of 118,243 for the annual total of crisis center call category frequency with a mean of 14,780.38 and a standard deviation of 1,521.89 encompassing eight (8) years of archival data (1970-1977). Descriptive statistical analysis reported a minimum frequency of 12,629 and a maximum frequency of 17,006 for the depression category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the desertion category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977) are reported in Table 4.48. Figure 4.68 provides a visual representation for the desertion category frequency

of the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of archival data (1970-1977). Figure 4.69 provides a visual representation for the desertion category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing eight (8) complete years of the archival data (1970-1977) with a desertion mean line (39.50). Figure 4.70 provides a visual representation for the desertion category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing eight (8) complete years of the archival data (1970-1977).

Table 4.48

Descriptive Statistics for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

Descriptive Statistics			
		Desertion Frequency	Category Frequency
N	Valid	8	8
	Missing	0	0
Minimum		18	12,629
Maximum		95	17,006
Sum		316	118,243
Mean		39.50	14,780.38
Standard Deviation		23.91	1,521.89

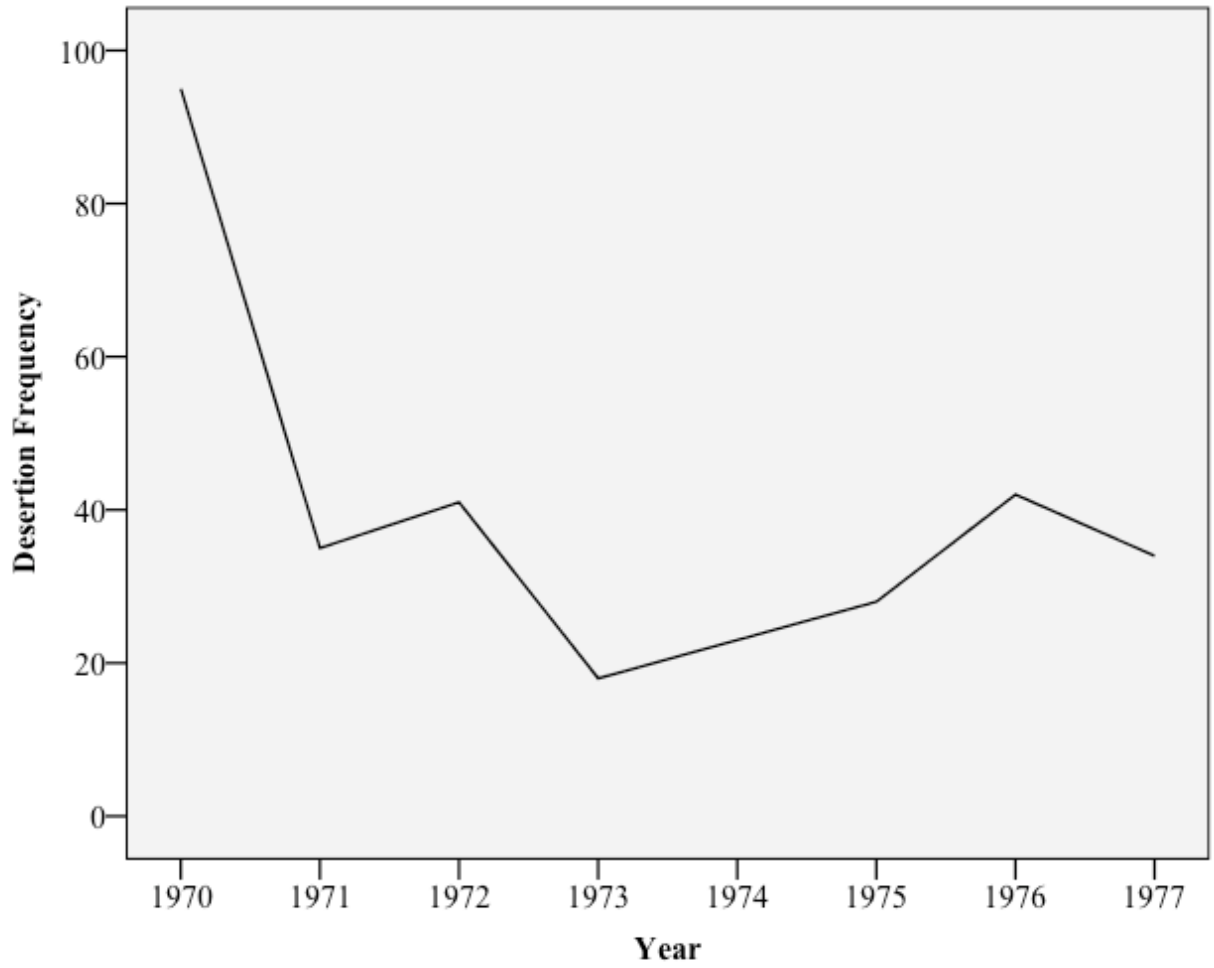


Figure 4.68 Simple Line Chart for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

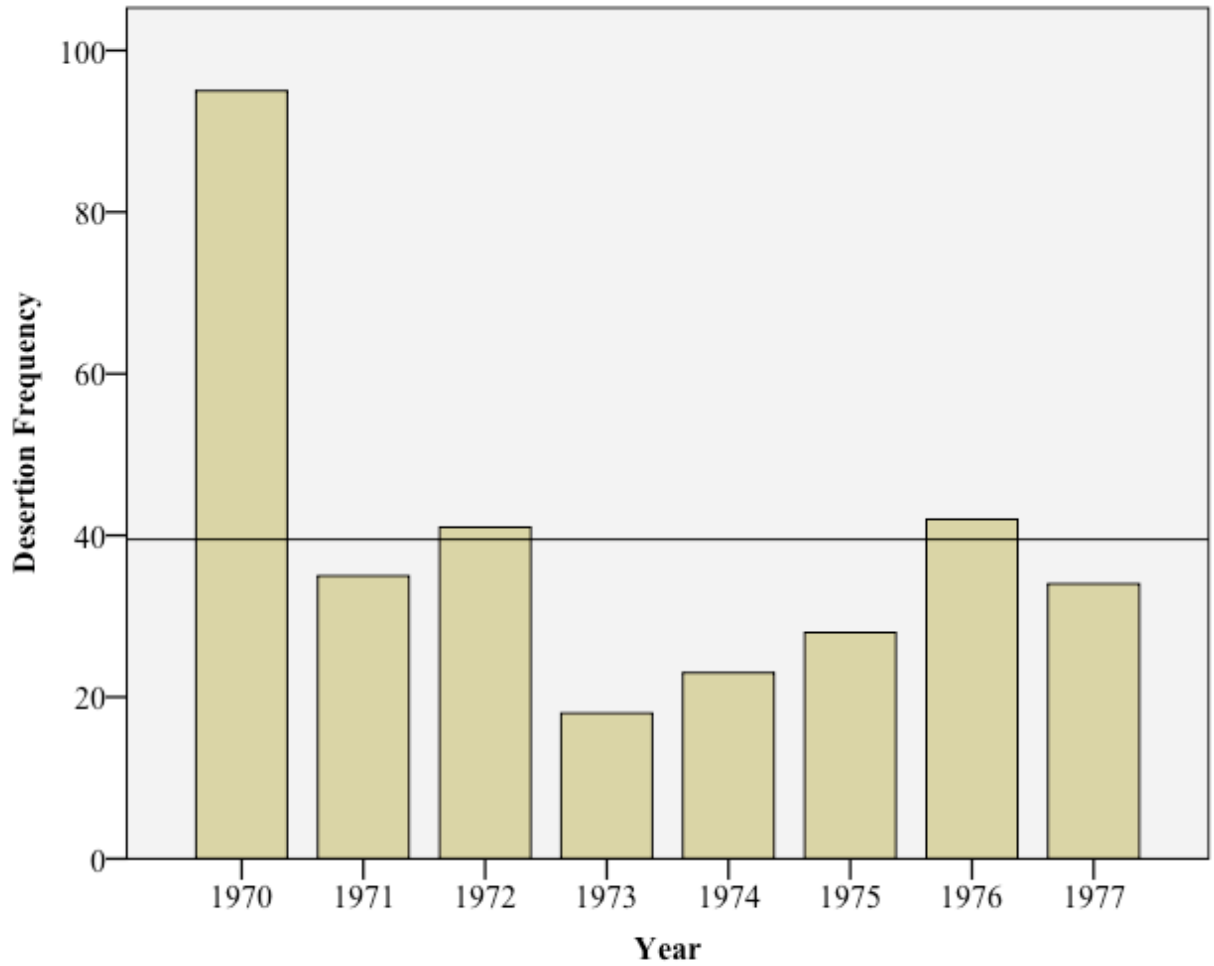


Figure 4.69 Simple Bar Chart for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency with Desertion Category Mean Line (39.50) of archival data (1970-1977)

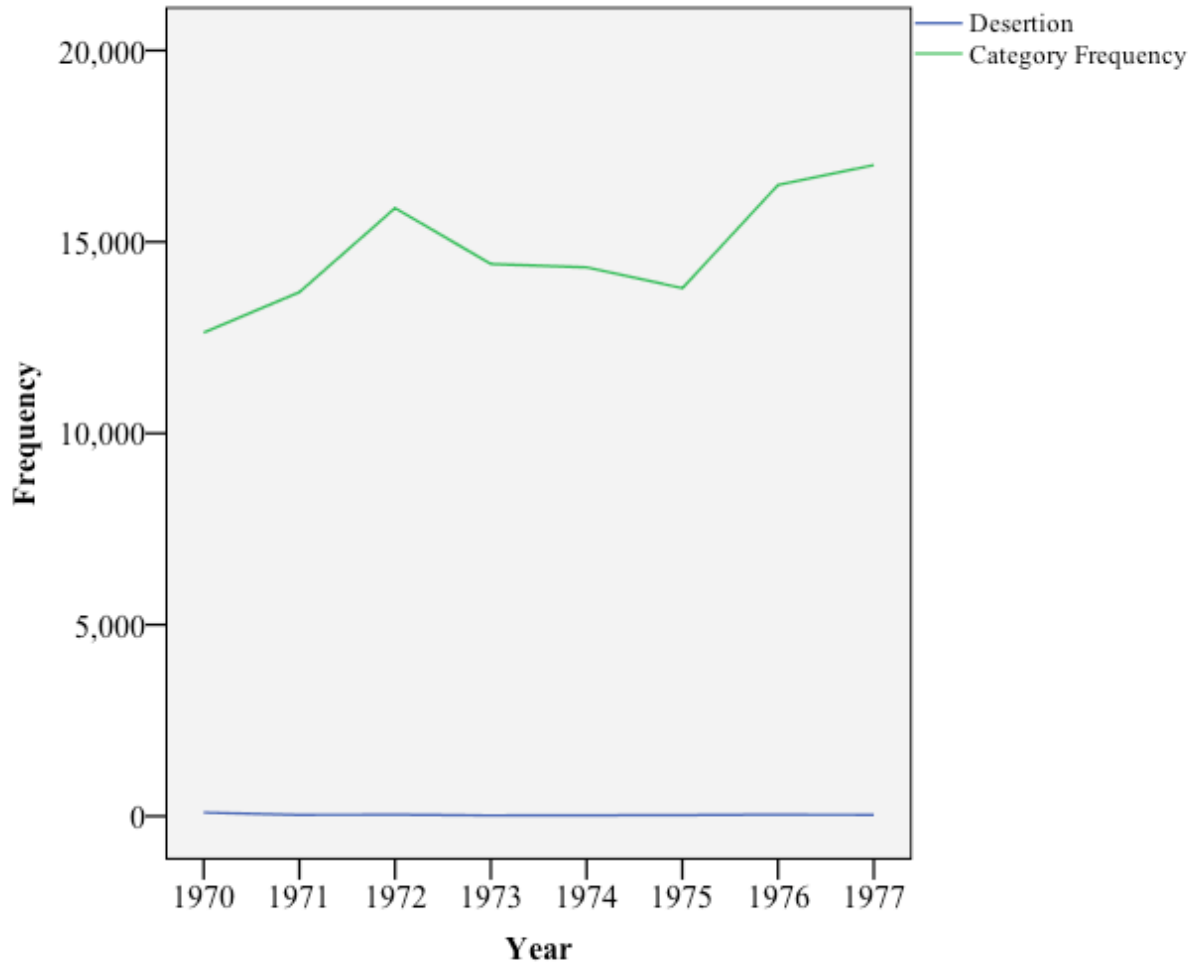


Figure 4.70 Multiple Line Chart for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

*Descriptive Statistics for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The desertion category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of archival data (1970-1977). A descriptive statistical analysis was conducted to evaluate the desertion frequency of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of archival data (1970-1977). The results of the descriptive statistical analysis reported a sum of 2.21% for the desertion frequency of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 0.28% and a standard deviation of 0.20%. Descriptive statistical analysis reported a minimum frequency of 0.12% and a maximum frequency of 0.75% for the desertion category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the desertion category frequency of annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977) are reported in Table 4.49. Figure 4.71 provides a visual representation for the desertion category frequency of annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of the archival data (1970-1977). Figure 4.72 provides a visual representation for the desertion category frequency of annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart



encompassing eight (8) complete years of the archival data (1970-1977) with a percentage (%) desertion mean line (2.21%). Black bars represent years reported as to have the highest (1970) and lowest (1973) frequency.

Table 4.49  
 Descriptive Statistics for Desertion Category Frequency of Annual Total of Crisis Center Call  
 Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency  
 (1970-1977)

Descriptive Statistics		
		Desertion Frequency as Ratio (%) of Category Frequency
N	Valid	8
	Missing	0
Minimum		0.12%
Maximum		0.75%
Sum		2.21%
Mean		0.28%
Standard Deviation		0.20%

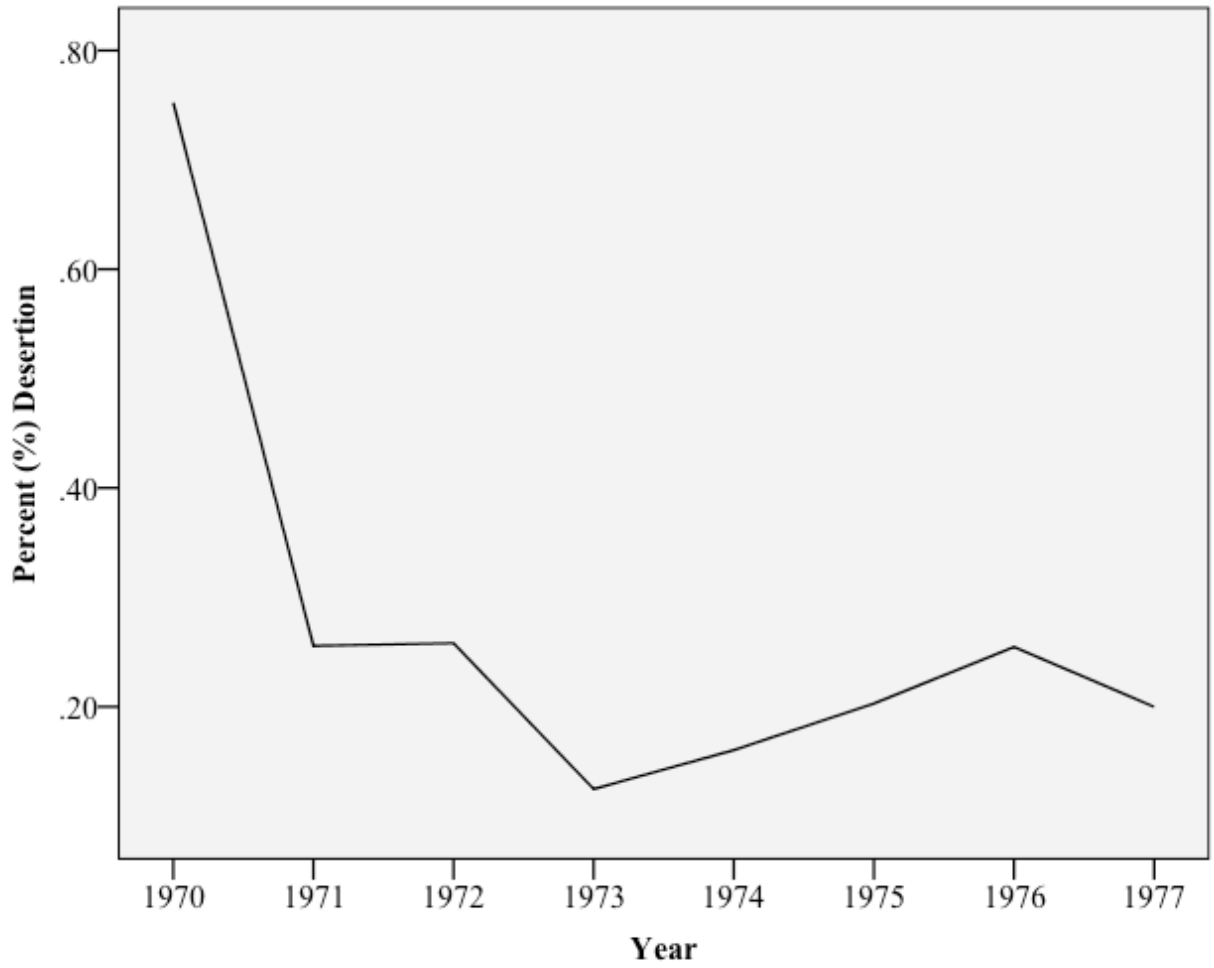


Figure 4.71 Simple Line Chart for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

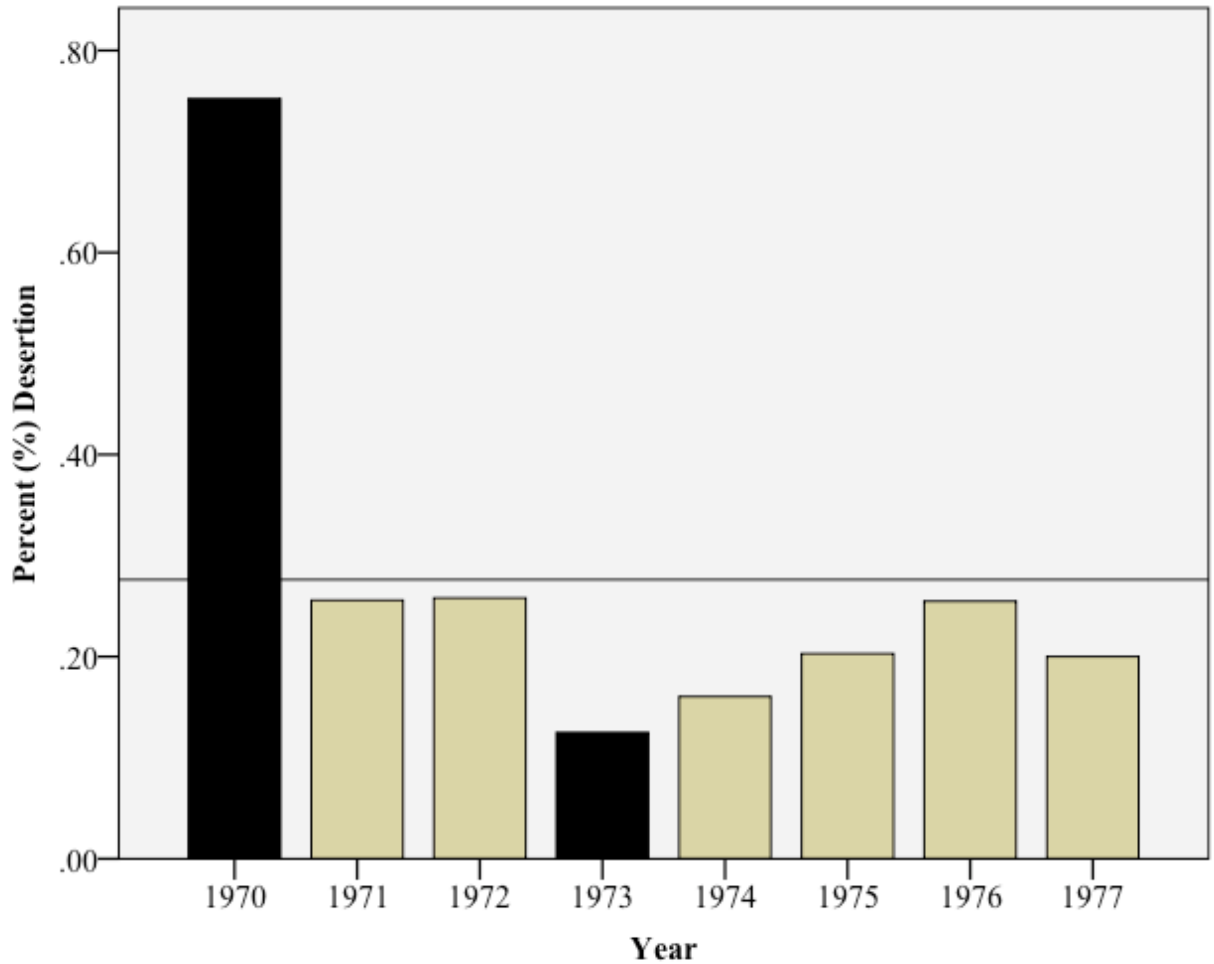


Figure 4.72 Simple Bar Chart for Desertion Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Desertion Category Mean Line (2.21% of archival data (1970-1977))

Examination of the descriptive statistical results for the desertion category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the desertion category frequency has decreased significantly since 1970 and has remained a relatively small proportion of the annual total of

crisis center call category frequency (about 0.30%%) between 1971 and 1977. In 1978, the desertion category was discontinued and no further data is available.

## Annual Total of Crisis Center Call Category Frequency and Drugs

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Drugs Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (8) Drugs was coded for throughout the archival data (1969-2011). Therefore, when zero (0) is reported in the annual total of crisis center call category frequency, the number reflects the absence of calls related to the drugs category rather than the absence of data for the drugs category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for call category identification were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for call category ensuring the annual total

results accurately report the archival data. All statistical analysis is based on annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the drugs category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 9,568 for the drug category of the annual total of crisis center call category frequency with a mean of 227.81 and a standard deviation of 152.49. Descriptive statistical analysis reported a minimum frequency of 70 and a maximum frequency of 666 for the drugs category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.437. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the drugs category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011) are reported in Table 4.50. Figure 4.73 provides a visual representation for the drugs category frequency of the annual total of crisis center call category as a simple line chart encompassing forty-two (42) complete years of archival data (1970-2011). Figure 4.74 provides a visual representation of the drugs category frequency of the annual total of crisis center call category frequency as a simple

bar chart encompassing forty-two(42) complete years of archival data (1970-2011) with a drugs category mean line (42.07). Figure 4.75 provides a visual representation for the drugs category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of archival data (1970-2011).



Table 4.50

Descriptive Statistics for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Drugs Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		70	6,733
Maximum		666	21,292
Sum		9,568	639,102
Mean		227.81	15,216.71
Standard Deviation		152.49	3,470.437

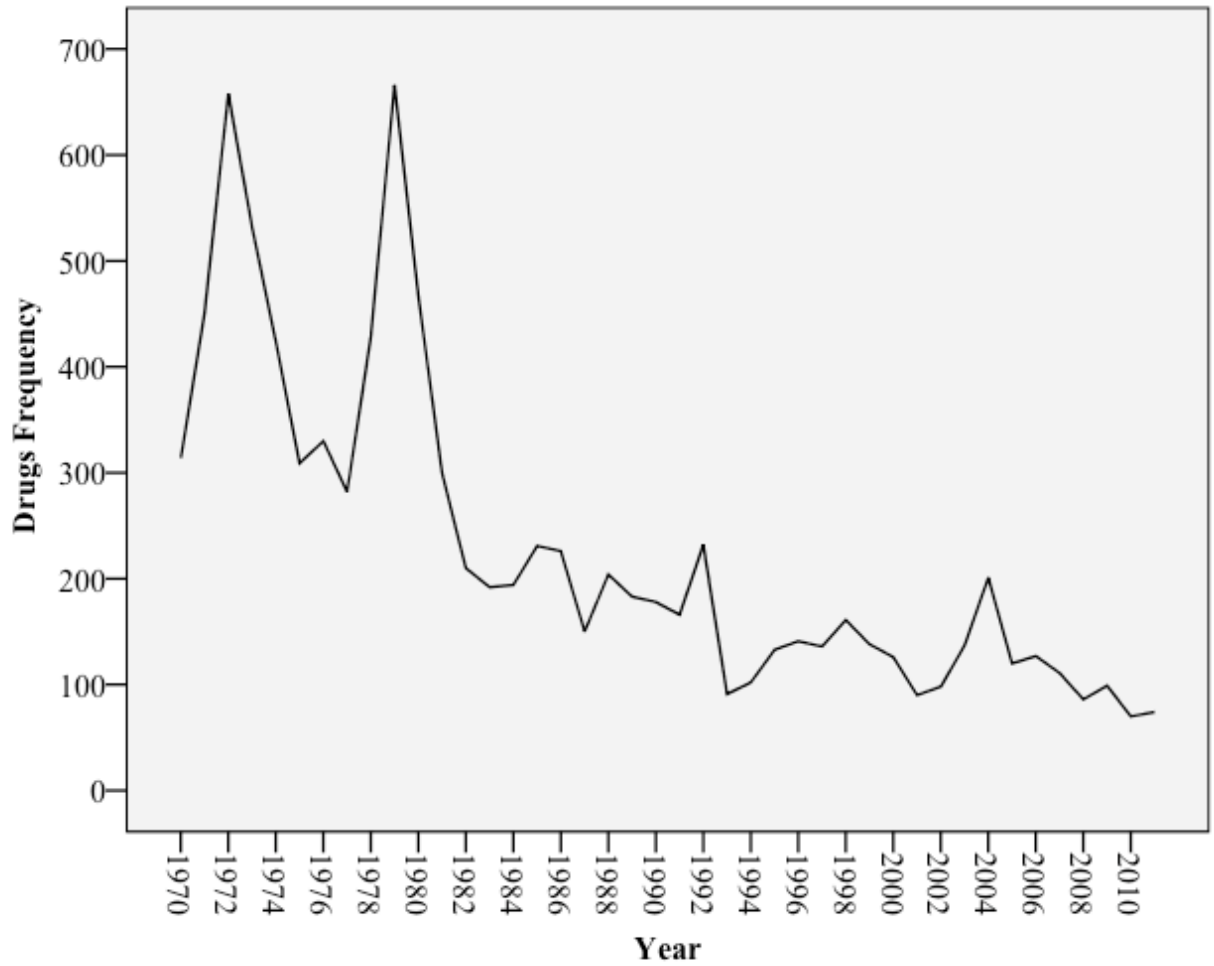


Figure 4.73 Simple Line Chart for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

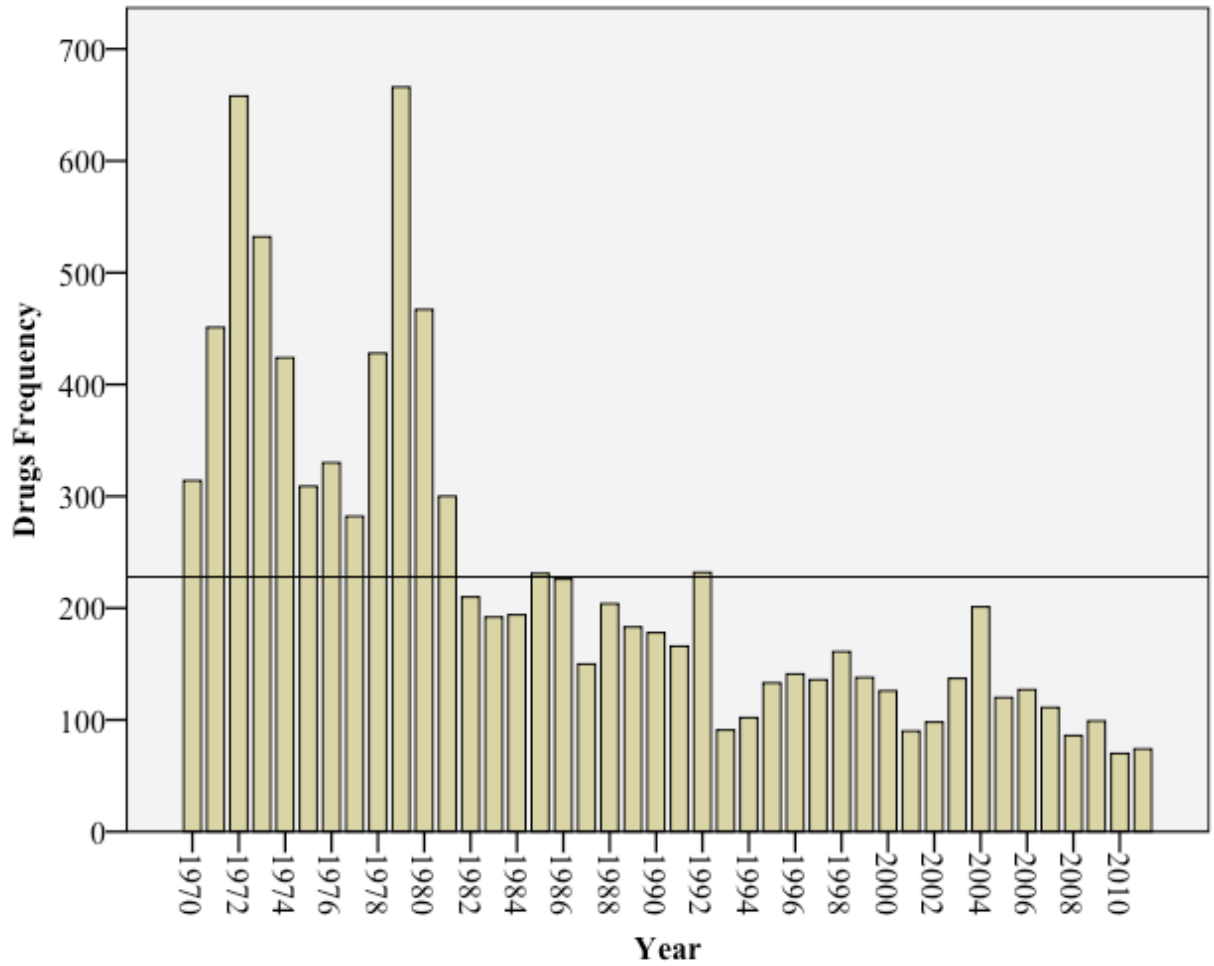


Figure 4.74 Simple Bar Chart for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency with Drugs Category Mean Line (227.81) of archival data (1970-2011)

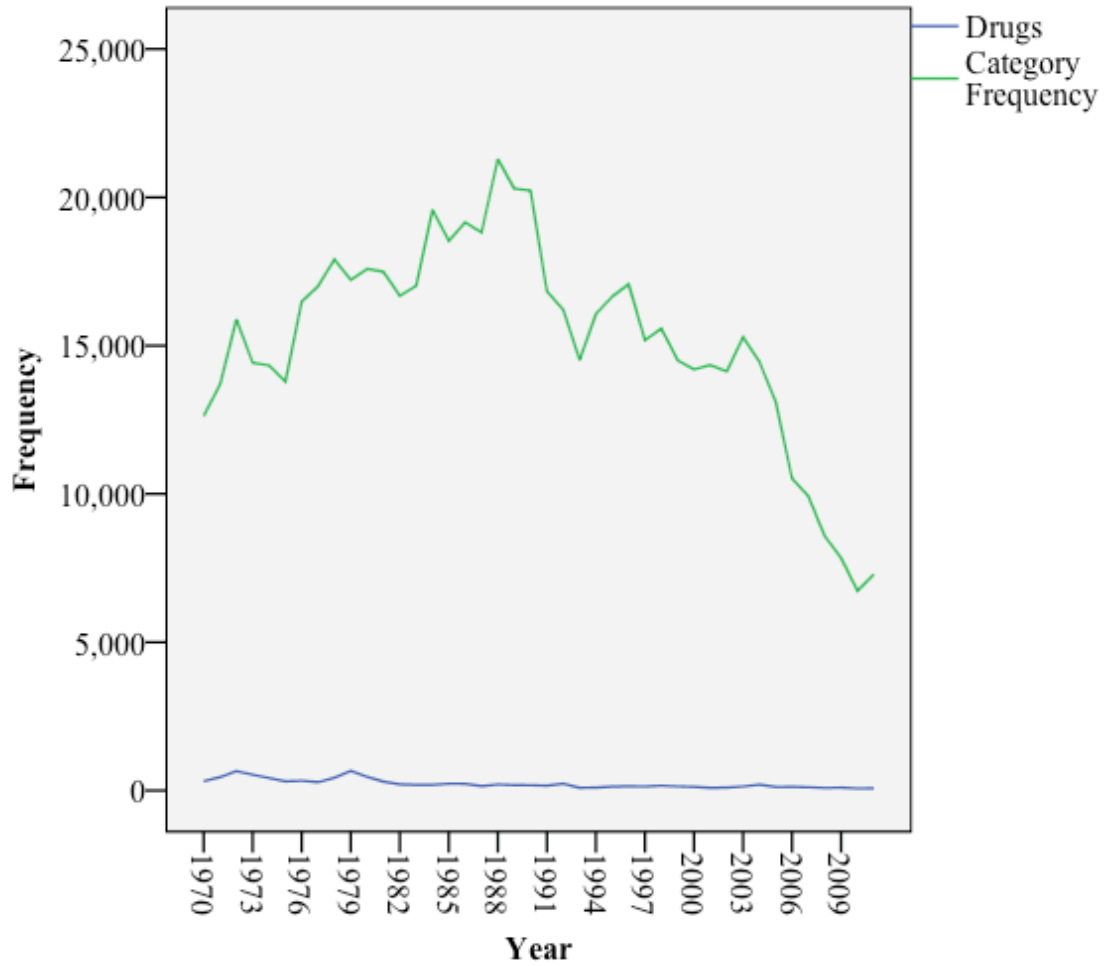


Figure 4.75 Multiple Line Chart for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The drugs category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the drugs frequency of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 62.68% for the drugs category of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 1.49% and a standard deviation of 0.94%. Descriptive statistical analysis reported a minimum frequency of 0.63% and a maximum frequency of 4.14% for the drugs category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the drugs category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.51. Figure 4.76 provides a visual representation for the drugs category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.77 provides a visual representation for the drugs category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart

encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) drugs category mean line (1.49%). Black bars represent years reported to have highest (1972) and lowest (1993) frequency.

Table 4.51

Descriptive Statistics for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Drugs Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.63%
Maximum		4.14%
Sum		62.68%
Mean		1.49%
Standard Deviation		0.94%

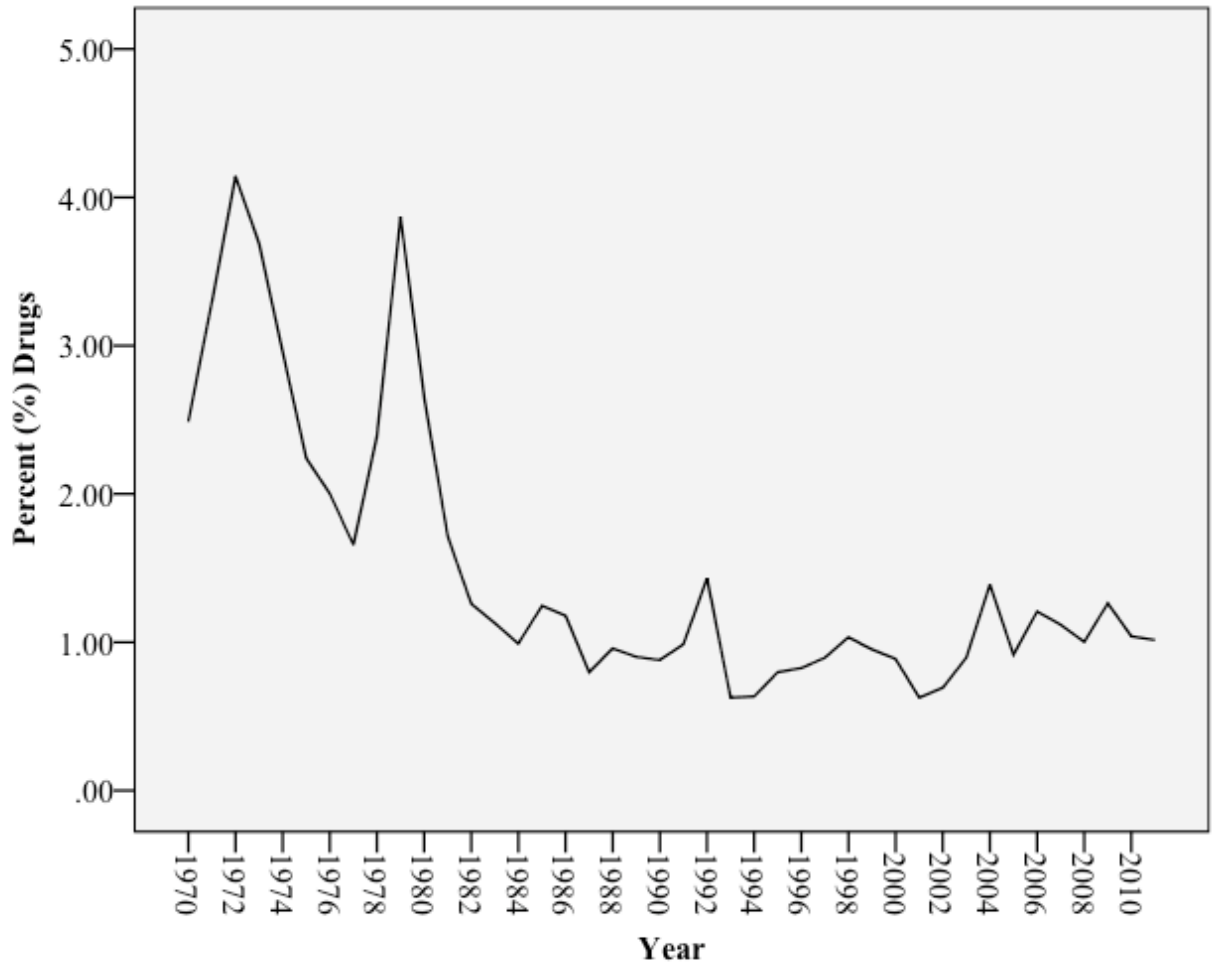


Figure 4.76 Simple Line Chart for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)



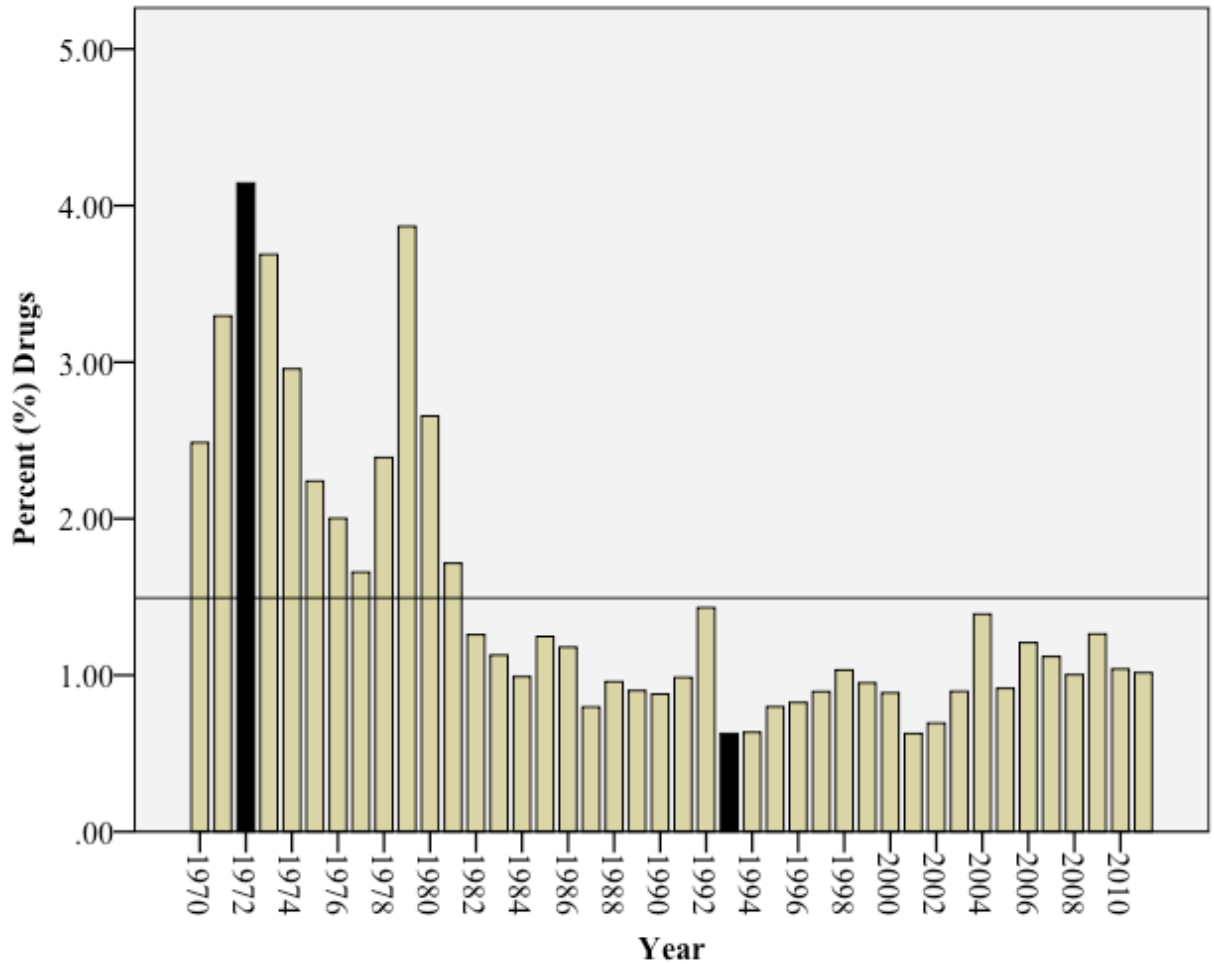


Figure 4.77 Simple Bar Chart for Drugs Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Drugs Category Mean Line (1.49%) of archival data (1970-2011)

Examination of the descriptive statistical results for the drugs category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the drugs category frequency has decreased significantly since 1972 and has remained a relatively small proportion of the annual total of crisis center call category frequency (< 1.5%) since 1982.

## Annual Total of Crisis Center Call Category Frequency and Emotions

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Emotional/ Mental Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (9) Emotional/Mental was coded for throughout the archival data (1969-2011). Therefore, when zero (0) is reported in the annual total of crisis center call category frequency, the number reflects the absence of calls related to the emotional/mental category rather than the absence of data for the emotional/mental category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for call category identification were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for call category ensuring the annual total

results accurately report the archival data. All statistical analysis is based on annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the emotional/mental category frequency of the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 89,077 for the emotional/mental category of the annual total of crisis center call category frequency with a mean of 2,120.88 and a standard deviation of 915.92. Descriptive statistical analysis reported a minimum frequency of 392 and a maximum frequency of 4,306 for the emotional/mental category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.437. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the emotional/mental category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011) are reported in Table 4.52. Figure 4.78 provides a visual representation for the emotional/mental category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of archival data (1970-2011). Figure 4.79 provides a visual representation for the emotional/mental category frequency of the annual total

of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of archival data (1970-2011) with an emotional/mental category mean line (227.12). Figure 4.80 provides a visual representation for the emotional/mental category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of archival data (1970-2011).

Table 4.52

Descriptive Statistics for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Emotional/Mental Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		392	6,733
Maximum		4,306	21,292
Sum		89,077	639,102
Mean		2,120.88	15,216.71
Standard Deviation		915.92	3,470.437



Figure 4.78 Simple Line Chart for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

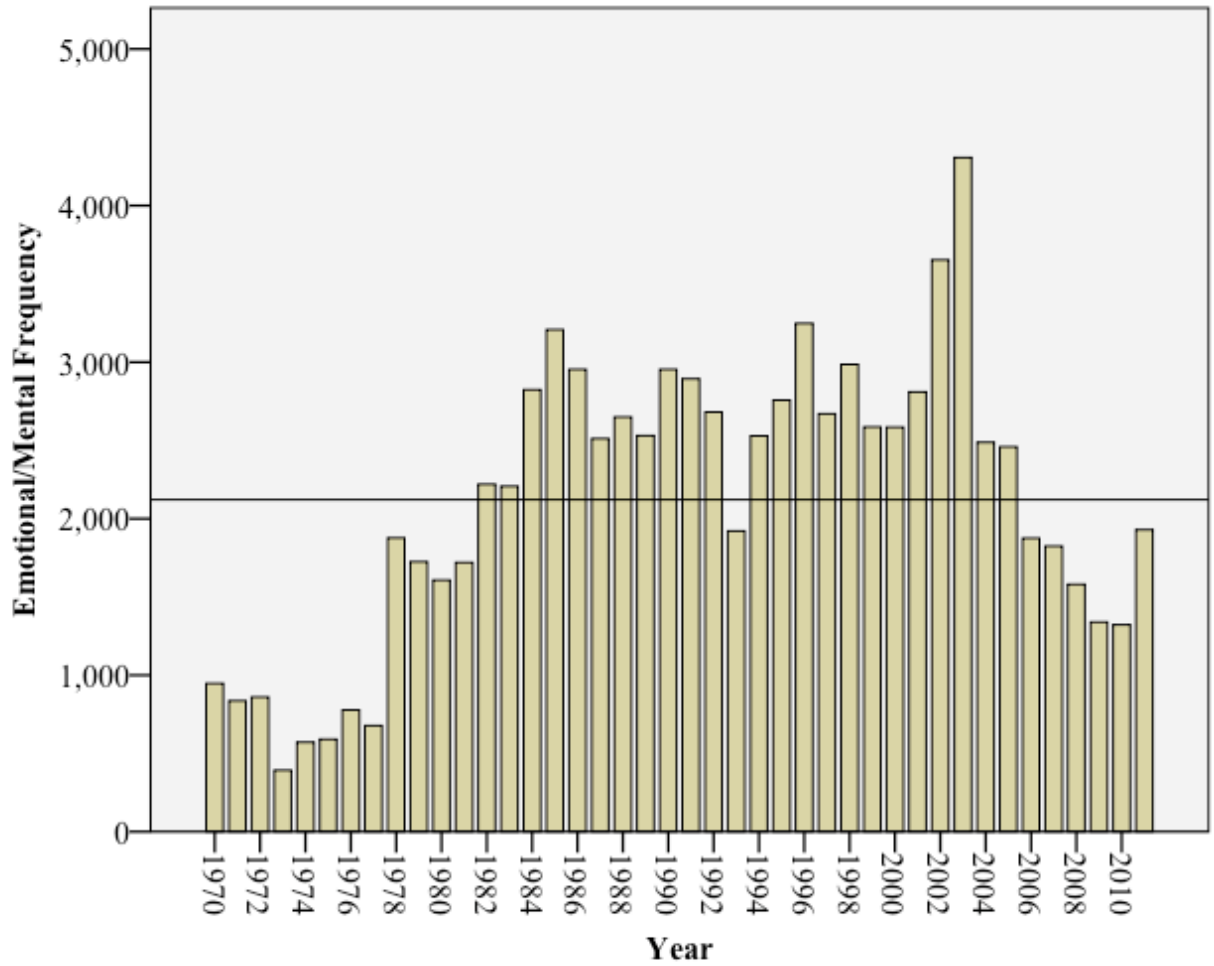


Figure 4.79 Simple Bar Chart for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency with Emotional/Mental Category Mean Line (2,120.88) of archival data (1970-2011)

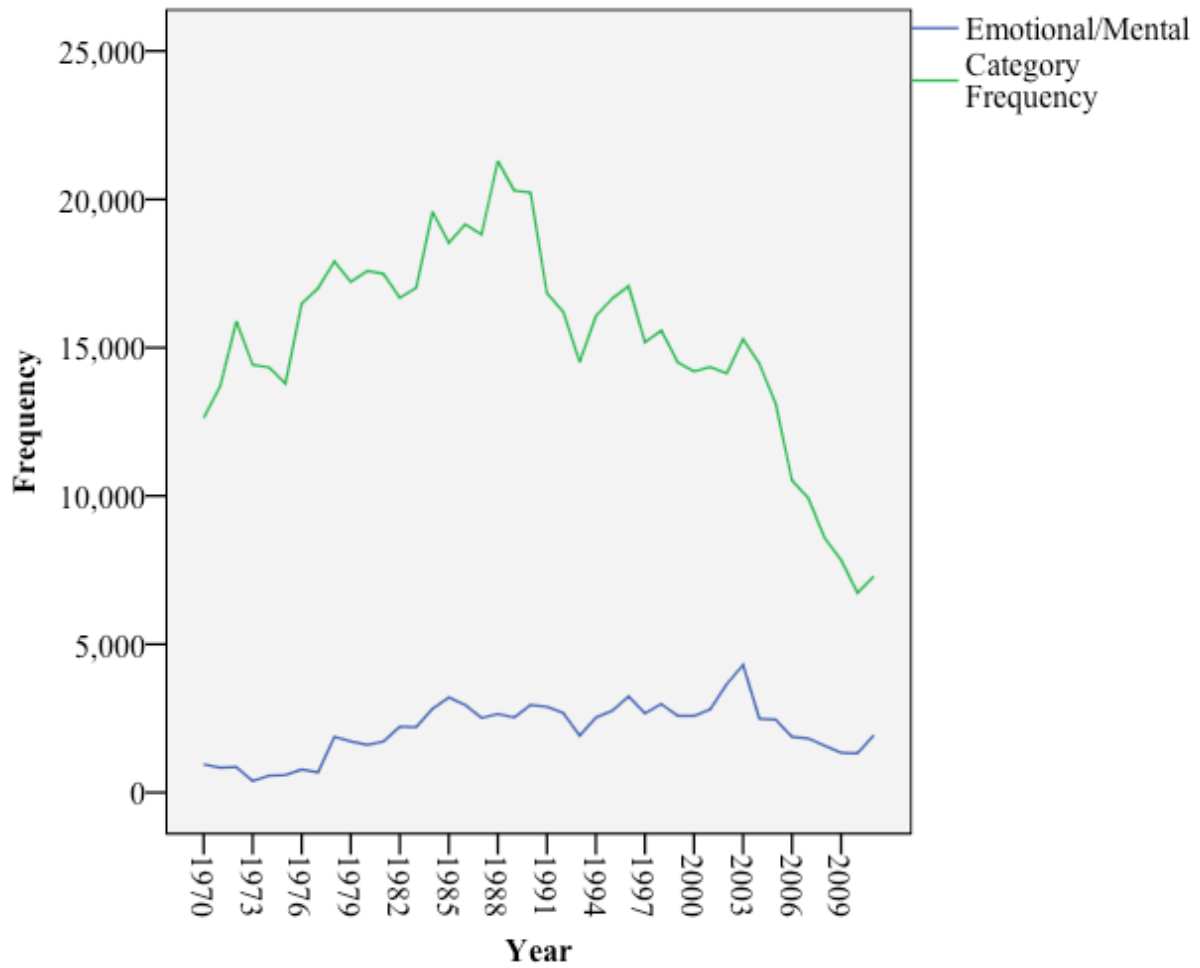


Figure 4.80 Multiple Line Chart for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)



*Descriptive Statistics for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The emotional/mental category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the emotional/mental frequency of the annual total of crisis center call category frequency y as a ratio(%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 602.87% for the emotional/mental category of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 14.35% and a standard deviation of 6.15%. Descriptive statistical analysis reported a minimum frequency of 2.72% and a maximum frequency of 28.17% for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the emotional/mental category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.53. Figure 4.81 provides a visual representation for the emotional/mental category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.82 provides a visual representation for the emotional/mental category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call

category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) emotional/mental category mean line (14.35%). Black bars represent years reported to have highest (2003) and lowest (1973) frequency.

Table 4.53

Descriptive Statistics for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Emotional/Mental Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		2.72%
Maximum		28.17%
Sum		602.87%
Mean		14.35%
Standard Deviation		6.15%



Figure 4.81 Simple Line Chart for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency (1970-2011)

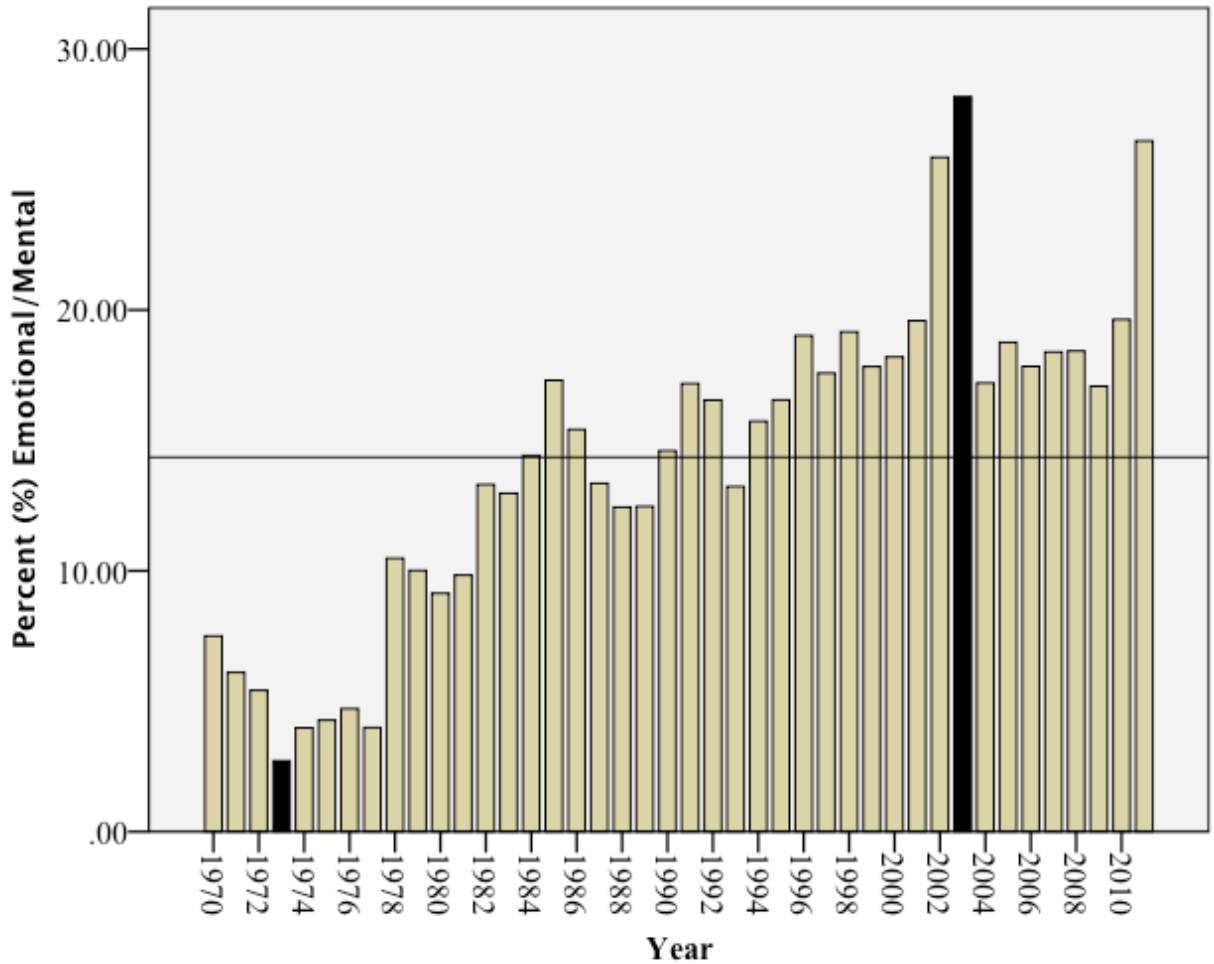


Figure 4.82 Simple Bar Chart for Emotional/Mental Category Frequency of Annual Total of Crisis Center Call Category as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Emotional/Mental Category Mean Line (14.35%) of archival data (1970-2011)

Examination of the descriptive statistical results for the emotional/mental category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the emotional/mental category frequency has increased significantly since 1973 and has remained a relatively large proportion of the annual total of crisis center call category frequency (about 20-30%) since 2002. It should

be noted that some portion of the increase may be due to the combining of the mental and emotional call categories in 1978, when the mental category was merged with emotional and coding as a separate category was discontinued.

The designation of this category appears to be ambiguous; while an emotional state may be associated with many issues (e.g. anger about loss of job), a mental states appears to have a clear definition (e.g. schizophrenia). During discussions with administrative personnel, it was suggested that the designation of *mental* to a call category was definitive and should be continued independently of *emotional* as a call category. It was further suggested that a crisis center call should be coded for the source of emotion (cause) rather than the symptom of emotion (effect), and the emotional call category be discontinued because of the ambiguity associated with cause of the designation of emotion.

## Annual Total of Crisis Center Call Category Frequency and Employment

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Employment Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (10) Employment was coded for throughout the archival data (1969-2011). Therefore, when zero (0) is reported in the annual total of crisis center call category frequency, the number reflects the absence of calls related to the employment category rather than the absence of data for the employment category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for call category identification were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for call category ensuring the annual total

results accurately report the archival data. All statistical analysis is based on annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the employment category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 9,539 for the employment category of the annual total of crisis center call category frequency with a mean of 227.12 and a standard deviation of 88.17. Descriptive statistical analysis reported a minimum frequency of 107 and a maximum frequency of 616 for the employment category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.437. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the employment category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.54. Figure 4.83 provides a visual representation of the employment category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.84 provides a visual representation of the employment category frequency of the annual total of



crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with an employment category mean line (227.12). Figure 4.85 provides a visual representation for the employment category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.54

Descriptive Statistics for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Employment Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		107	616
Maximum		6,733	21,292
Sum		9,539	639,102
Mean		227.12	15,216.71
Standard Deviation		88.19	3,470.437

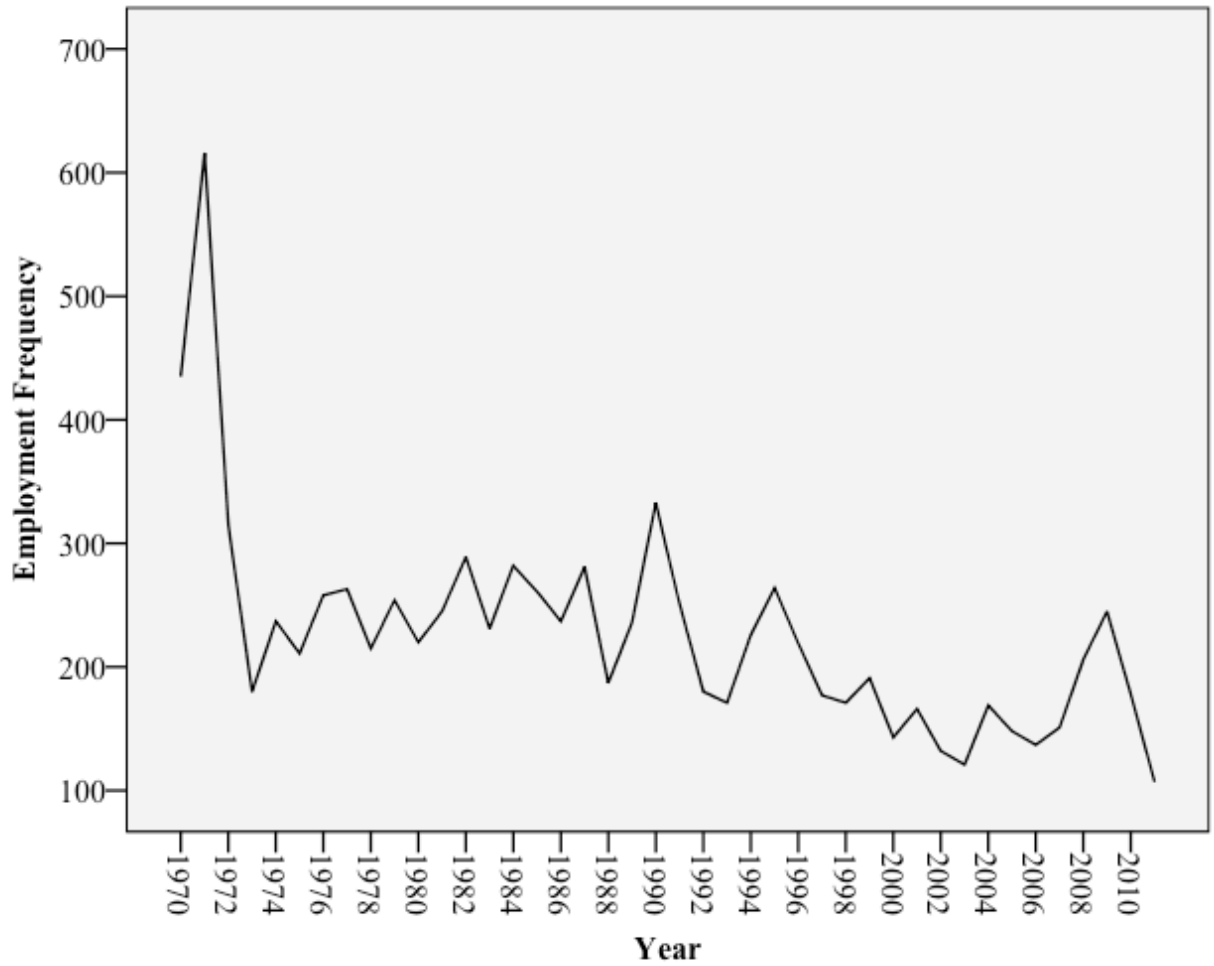


Figure 4.83 Simple Line Chart for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

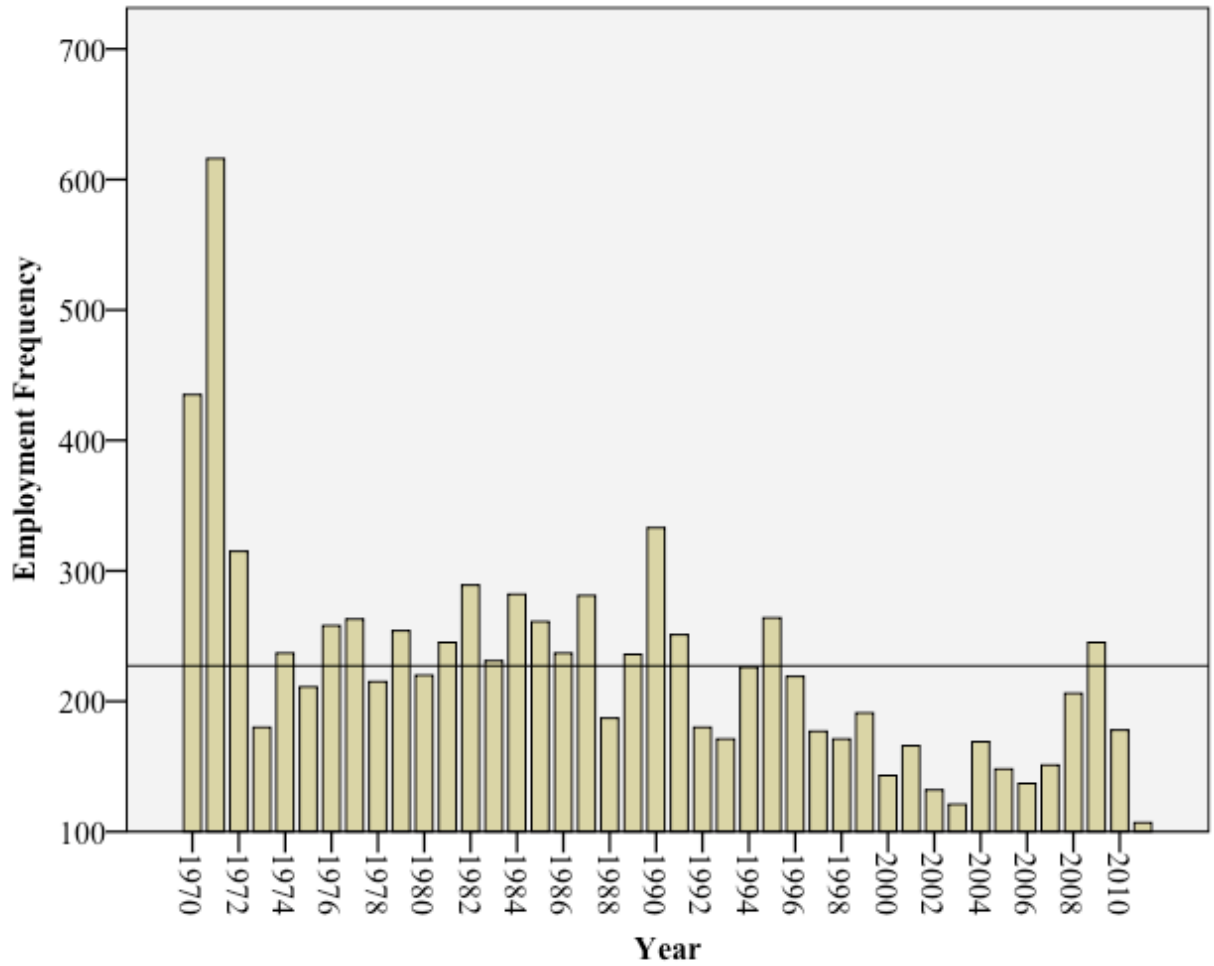


Figure 4.84 Simple Bar Chart for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency with Employment Category Mean Line (227.12) of archival data (1970-2011)

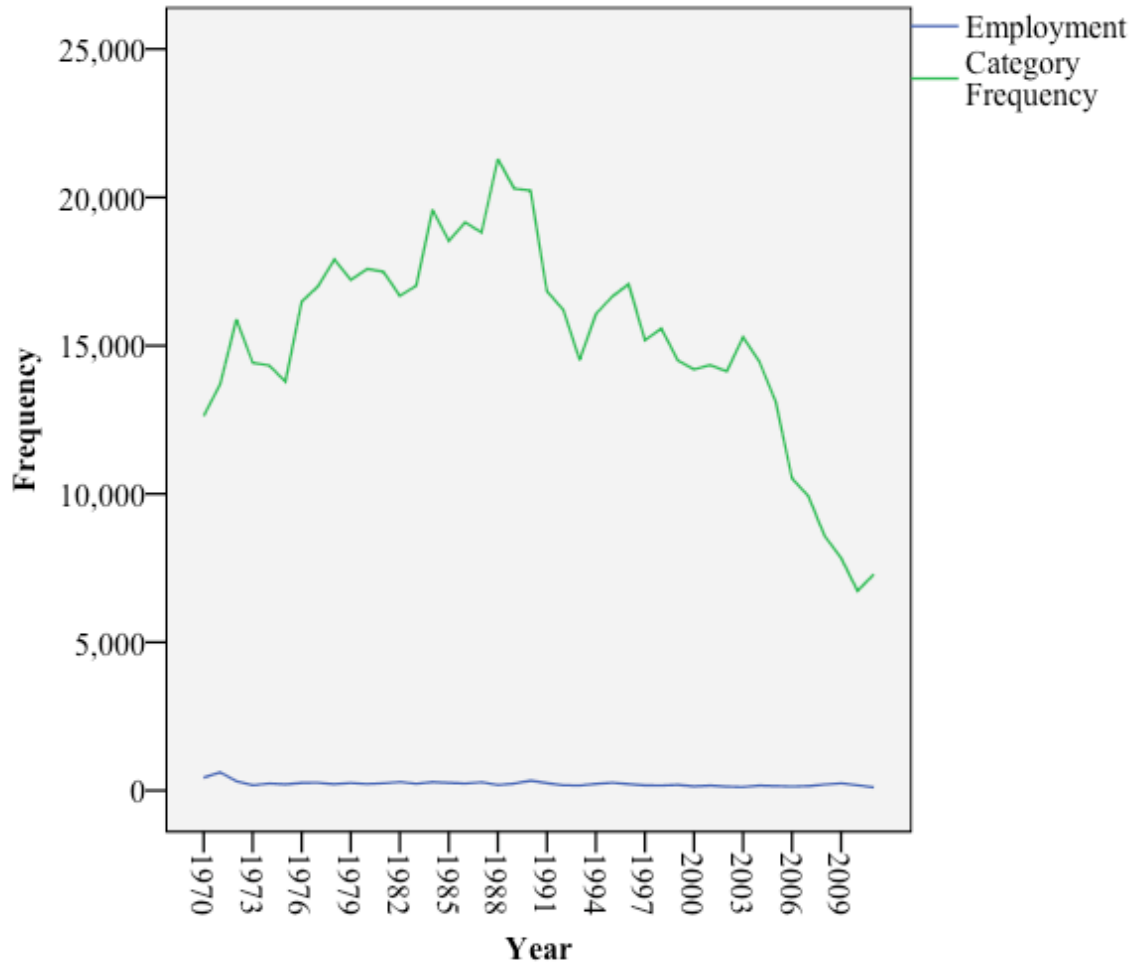


Figure 4.85 Multiple Line Chart for Employment Category of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The employment category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the employment frequency of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 65.44% for employment frequency of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 1.56% and a standard deviation of 0.71%. Descriptive statistical analysis reported a minimum frequency of 0.79% and a maximum frequency of 4.50% for the employment category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the employment category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.55. Figure 4.86 provides a visual representation for the employment category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.87 provides a visual representation for the employment category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call

category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) employment category mean line (1.56%). Black bars represent years reported to have highest (1971) and lowest (1988) frequency.

Table 4.55

Descriptive Statistics for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Employment Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Maximum		0.79%
Minimum		4.50%
Sum		65.44%
Mean		1.56%
Standard Deviation		0.71%



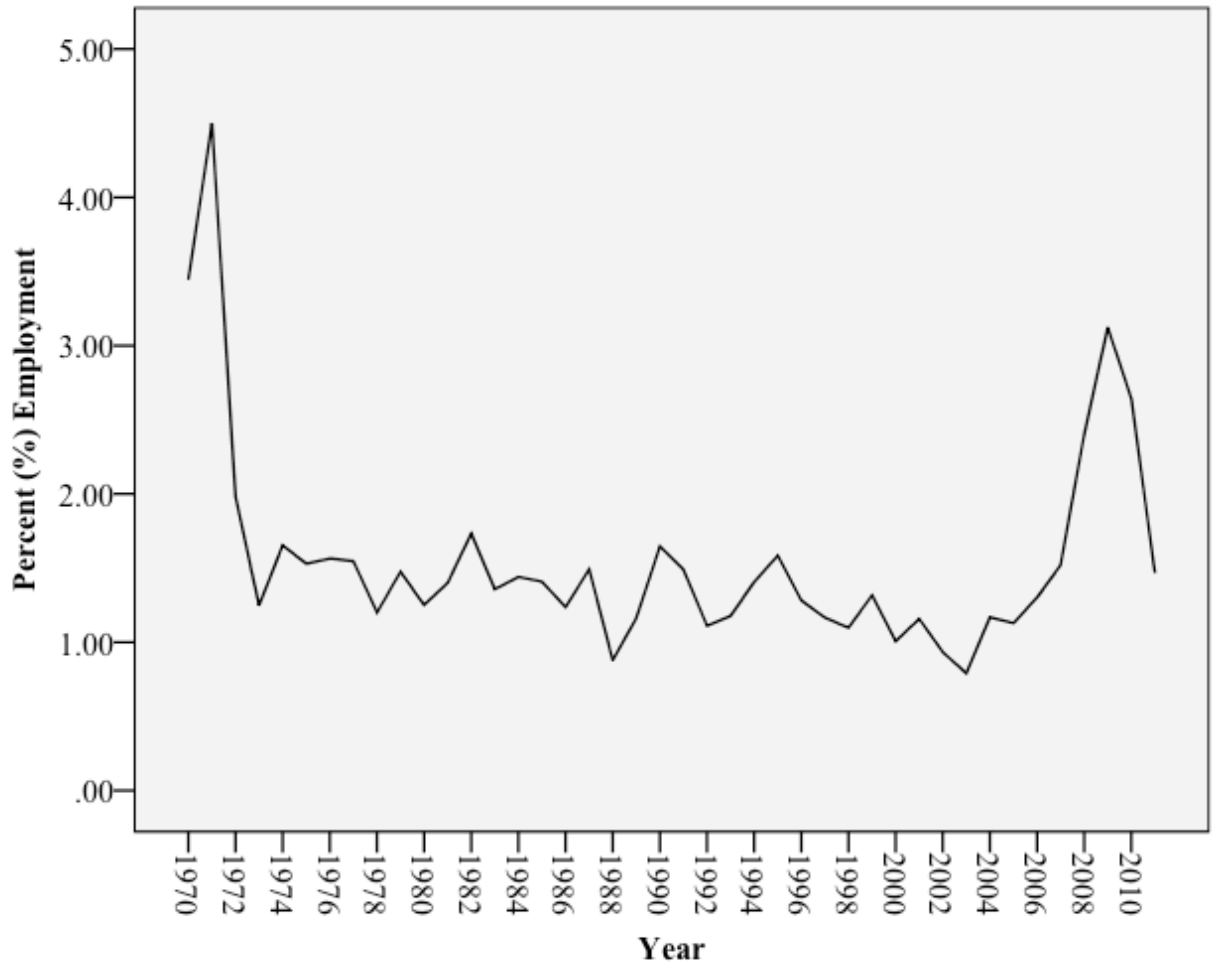


Figure 4.86 Simple Line Chart for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

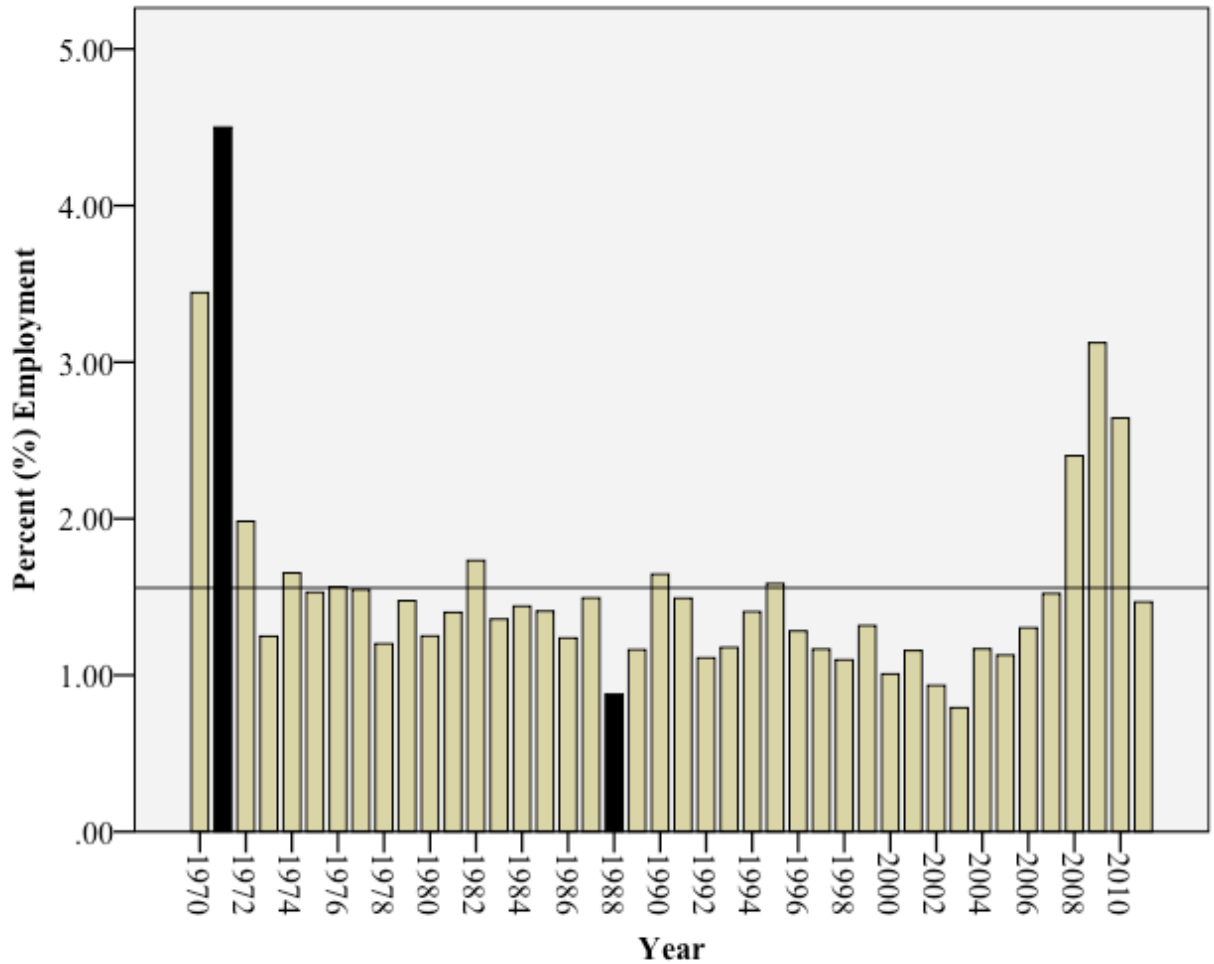


Figure 4.87 Simple Bar Chart for Employment Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Employment Category Mean Line (1.56%) of archival data (1970-2011)

Examination of the descriptive statistical results for the employment category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the employment category frequency has remained relatively consistent since 1971 and has remained a relatively small proportion of the annual total of crisis center call category frequency (< 1.5%) since 2002. A recent increase in

proportion since 2008 may be reflective of general economic conditions. However, even with the increase in proportion, the overall percentage since 2008 has remained between 1.5% and 3%.

## Annual Total of Crisis Center Call Category Frequency and Family

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Family Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (11) Family was coded for nine (9) years of the archival data (1969-1977). Although the archival data for the annual total of crisis center call category frequency when grouped per family category is limited in scope, it is sufficiently statistically salient as to warrant evaluation as a specific call category. When zero (0) is reported in the family frequency of the annual total of crisis center call category frequency for years 1969-1977, the number reflects the absence of call frequency related to the family category rather than the absence of data for the desertion category. When zero (0) is reported in family frequency of the annual total of crisis center call category frequency for years 1978-2011, the number reflects the absence of data for the family category

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Eight (8) complete years were identified and used for statistical analysis (1970-1977).

In the tabulation of VCLs, some inconsistencies in the frequency totals were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile

any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for call category ensuring the annual total results accurately report the archival data. All statistical analysis and is based on annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the family category frequency of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). Results of the descriptive statistical analysis reported a sum of 12,405 for the family category of the annual total of crisis center call category frequency with a mean of 1,550.63 and a standard deviation of 5307.15. Descriptive statistical analysis reported a minimum frequency of 1,222 and a maximum frequency of 1,988 for the family category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). Results of the descriptive statistical analysis reported a sum of 118,243 for the annual total of crisis center call category frequency with a mean of 14,780.38 and a standard deviation of 1,521.89 encompassing eight (8) complete years of the archival data (1970-1977). Descriptive statistical analysis reported a minimum frequency of 12,629 and a maximum frequency of 17,006 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the family category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977) are reported in Table 4.56. Figure 4.88 provides a visual representation for the family category frequency of

the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of the archival data (1970-1977). Figure 4.89 provides a visual representation for the family category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing eight (8) complete years of the archival data (1970-1977) with a family category mean line (1,550.63). Figure 4.90 provides a visual representation for the family category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing eight (8) complete years of the archival data (1970-1977).

Table 4.56

Descriptive Statistics for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

Descriptive Statistics			
		Family Frequency	Category Frequency
N	Valid	8	8
	Missing	0	0
Minimum		1,222	12,629
Maximum		1,988	17,006
Sum		12,405	118,243
Mean		1,550.63	14,780.38
Standard Deviation		307.15	1,521.89

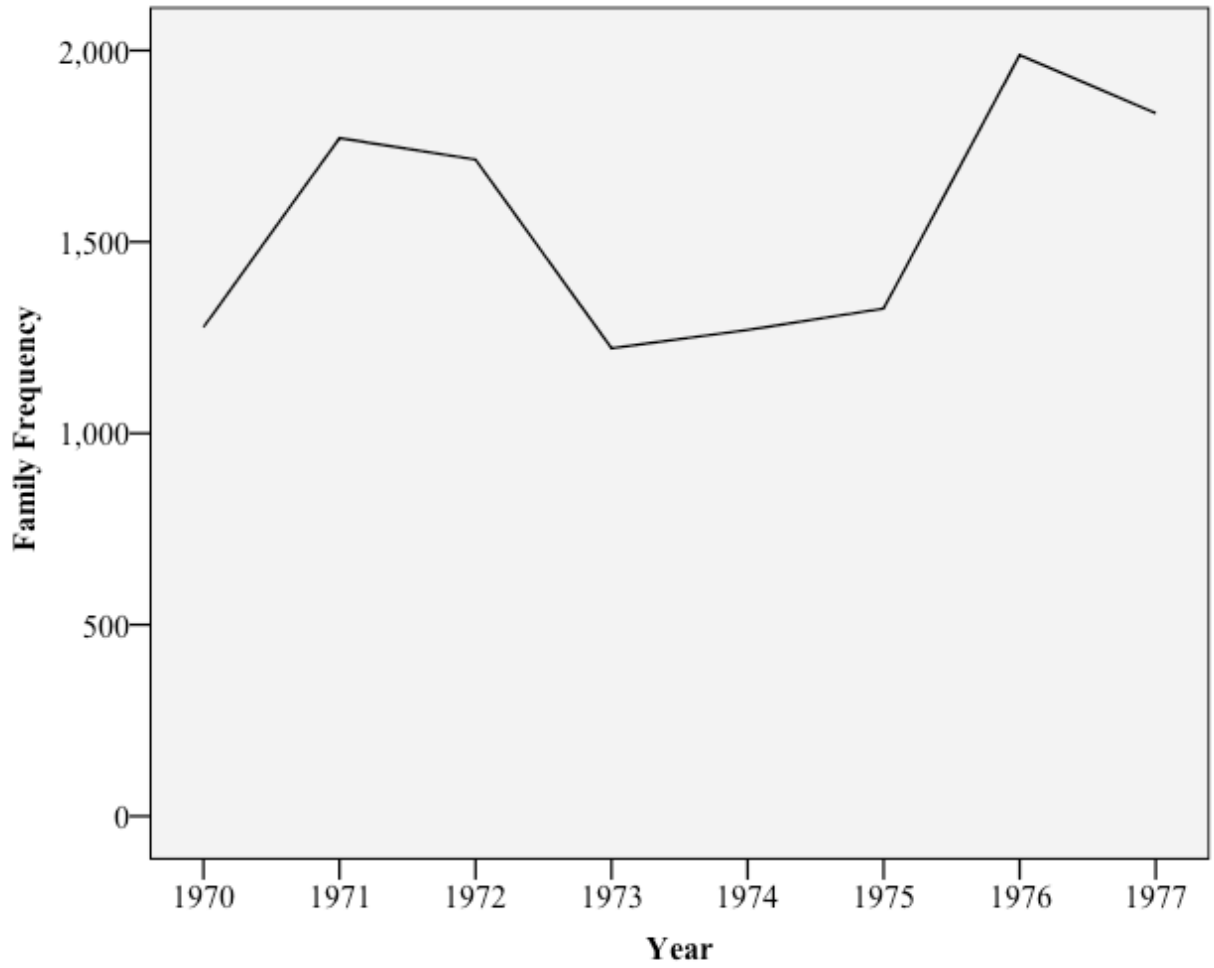


Figure 4.88 Simple Line Chart for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)



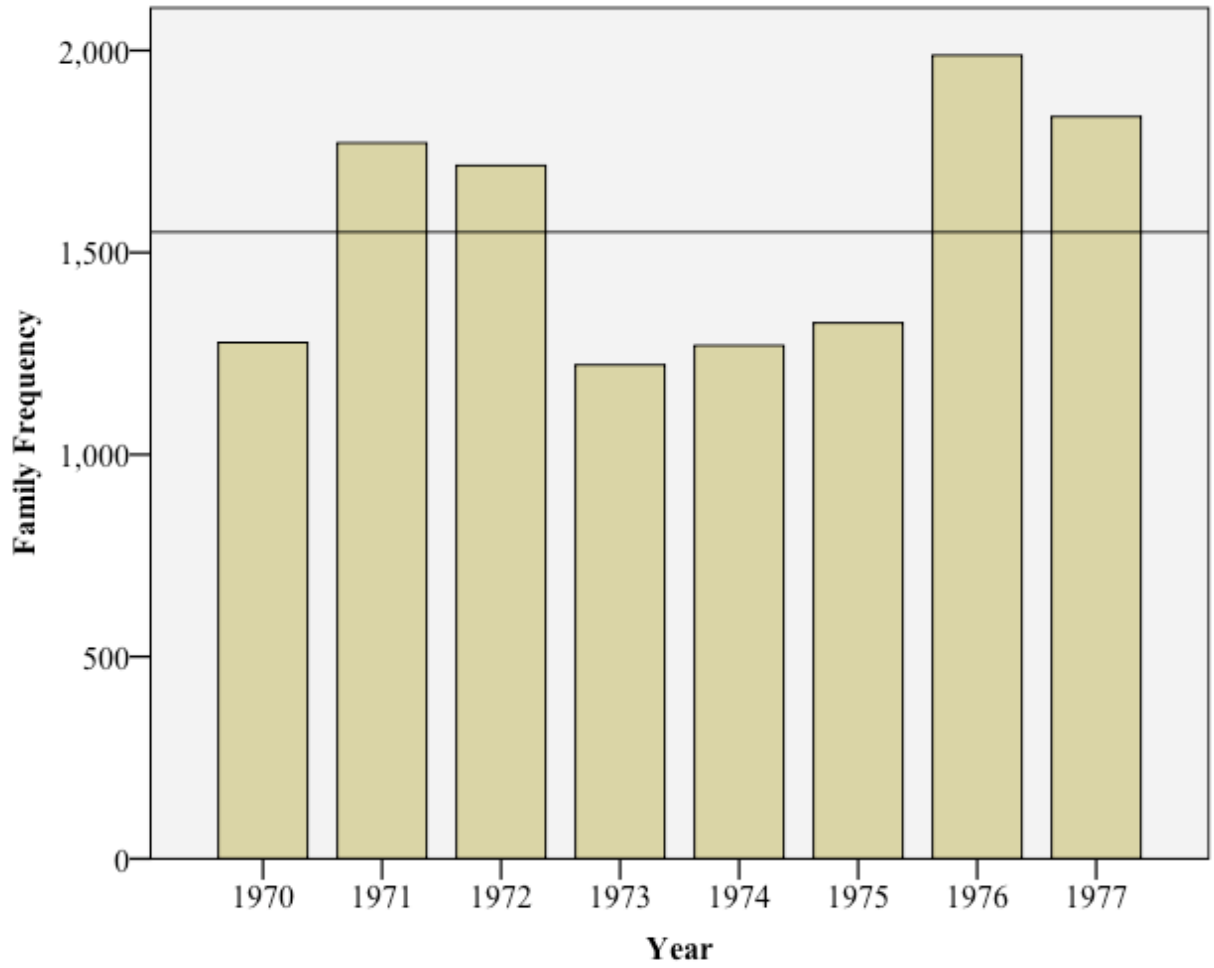


Figure 4.89 Simple Bar Chart for Family Category Frequency of Annual Total of Crisis Center Call Category with Family Category Mean Line (1,550.63) of archival data (1970-1977)

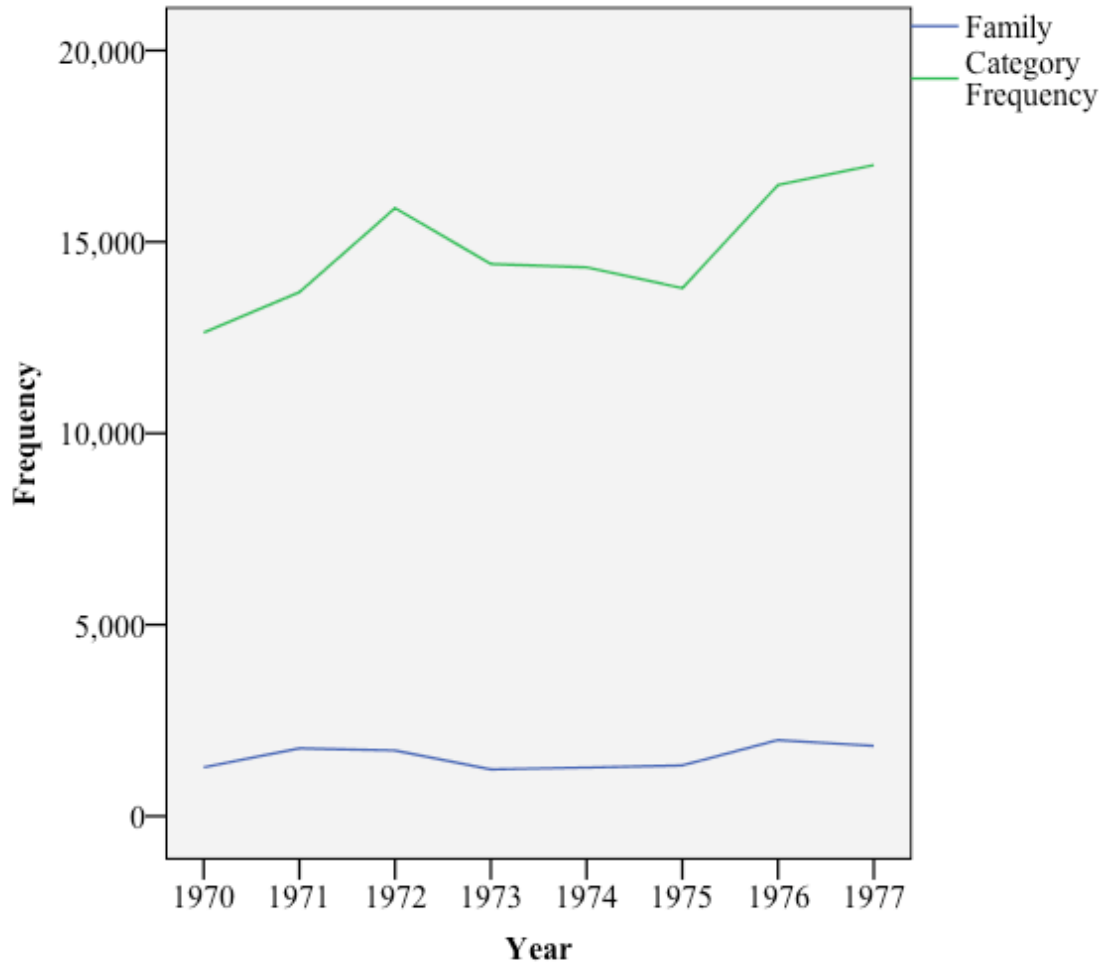


Figure 4.90 Multiple Line Chart for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

*Descriptive Statistics for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The family category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). A descriptive statistical analysis was conducted to evaluate the family category frequency of the annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). The results of the descriptive statistical analysis reported a sum of 83.65% for family category of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 10.46% and a standard deviation of 1.52%. Descriptive statistical analysis reported a minimum frequency of 8.47% and a maximum frequency of 12.94% for the family category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the family category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of the archival data (1970-1977) are reported in Table 4.57. Figure 4.91 provides a visual representation for the family category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of the archival data (1970-1977). Figure 4.92 provides a visual representation for the family category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing eight (8) complete years of the archival data (1970-1977) with a

percentage (%) family category mean line (10.46%). Black bars represent years reported to have highest (1971) and lowest (1973) frequency.

Table 4.57

Descriptive Statistics for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

Descriptive Statistics		
		Family Frequency as Ratio (%) of Category Frequency
N	Valid	8
	Missing	0
Minimum		8.47%
Maximum		12.94%
Sum		83.65%
Mean		10.46%
Standard Deviation		1.52%

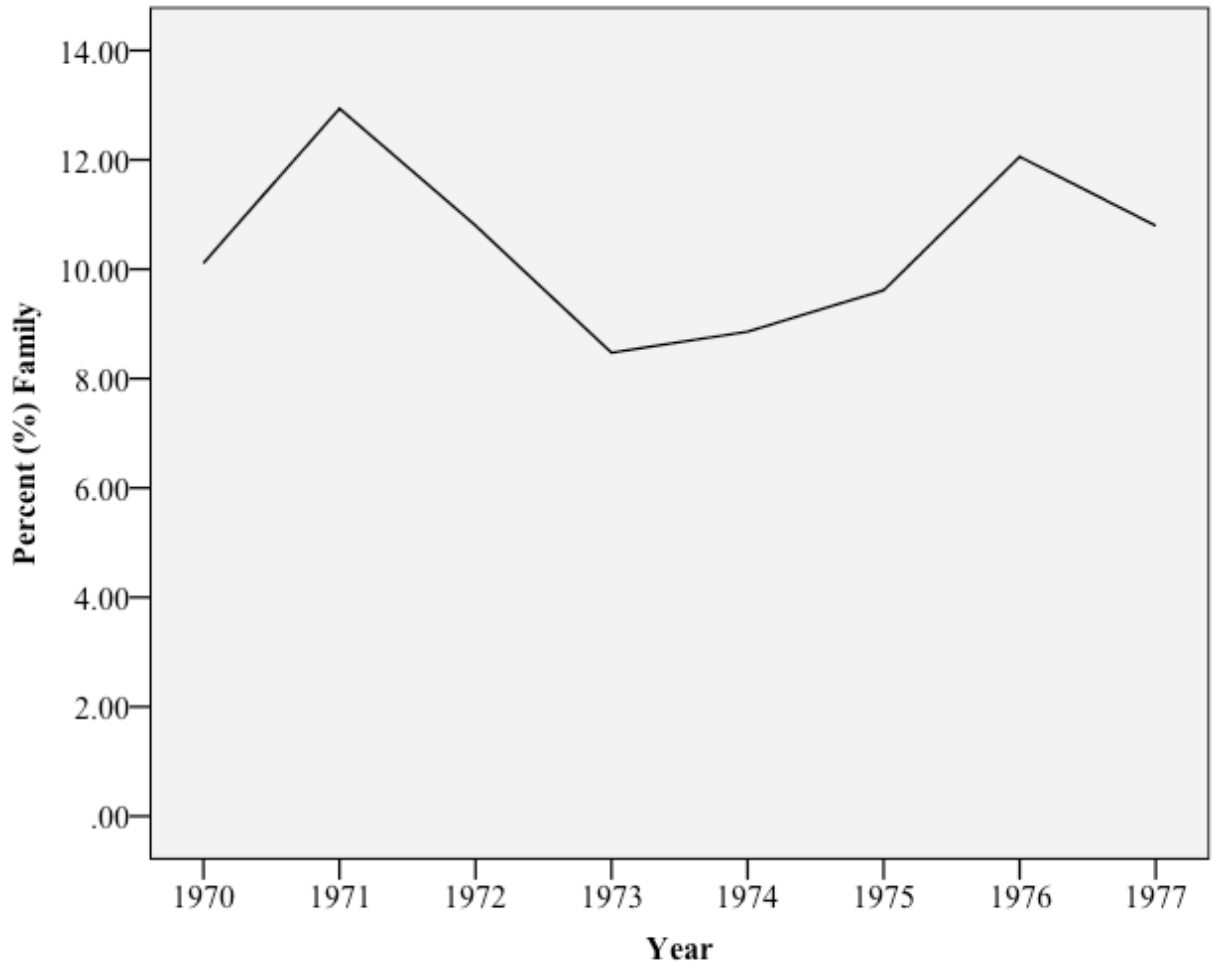


Figure 4.91 Simple Line Chart for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

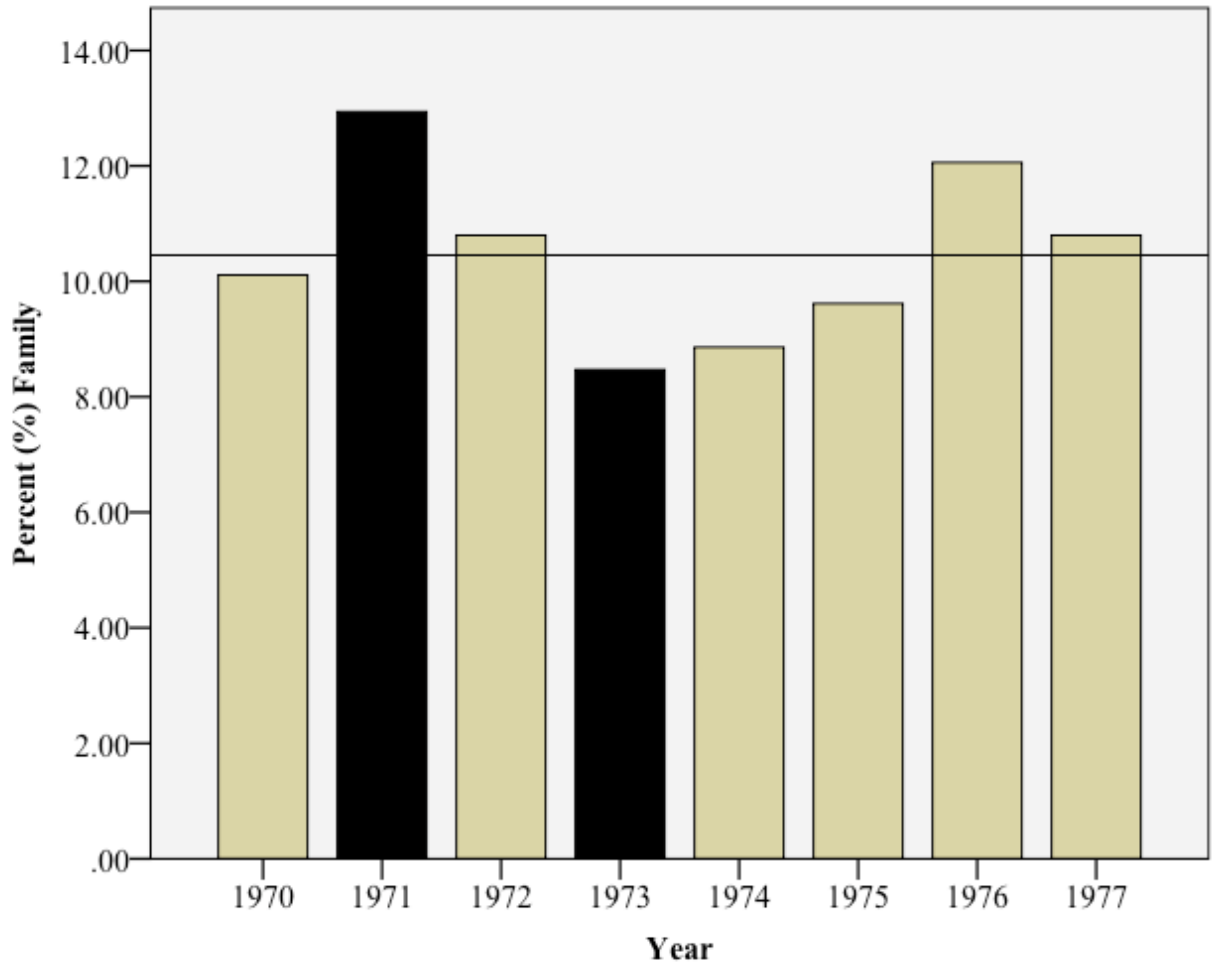


Figure 4.92 Simple Bar Chart for Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Family Category Mean Line (10.46%) of archival data (1970-1977)

Examination of the descriptive statistical results for the family category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the family category frequency has remained relatively consistent (8% to 12%) during the years for which it was coded (1970-1977). In 1978, the family category was discontinued and no further data is available.

## Annual Total of Crisis Center Call Category Frequency and Finances

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Finances Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (12) Finances was coded for throughout the archival data (1969-2011). Therefore, when zero (0) is reported in the annual total of crisis center call category frequency, the number reflects the absence of calls related to the finances category rather than the absence of data for the finances category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for call category identification were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for call category ensuring the annual total



results accurately report the archival data. All statistical analysis is based on annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the finances category frequency for the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 12,146 for the finances category of the annual total of crisis center call category frequency with a mean of 289.19 and a standard deviation of 87.56. Descriptive statistical analysis reported a minimum frequency of 164 and a maximum frequency of 539 for the finances category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.437. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the finances category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.58. Figure 4.93 provides a visual representation for the finances category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.94 provides a visual representation for the finances category frequency of the annual total of crisis

center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a finances category mean line (289.19). Figure 4.95 provides a visual representation for the finances category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.58

Descriptive Statistics for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Finances Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		164	6,733
Maximum		539	21,292
Sum		12,146	639,102
Mean		289.19	15,216.71
Standard Deviation		87.56	3,470.437

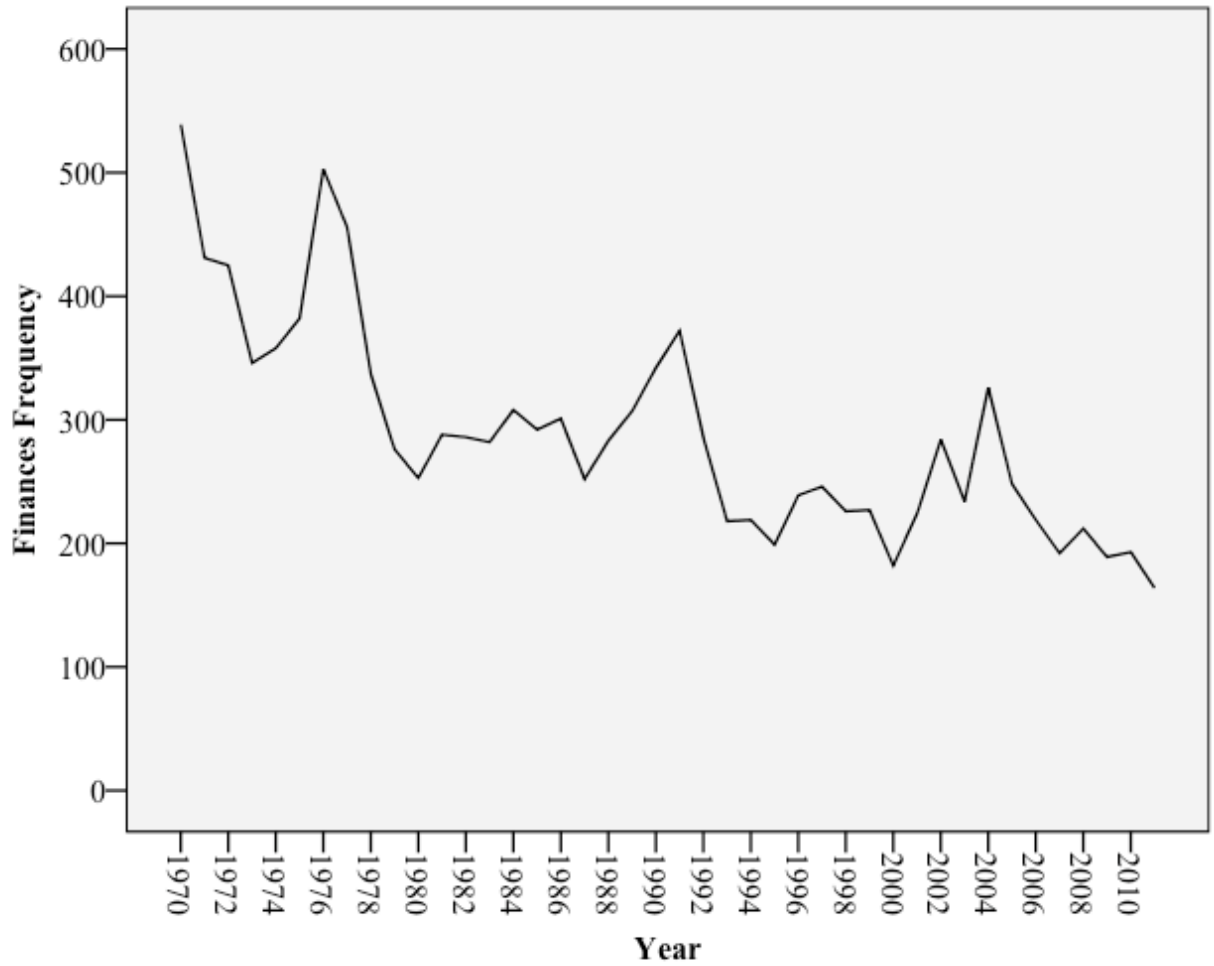


Figure 4.93 Simple Line Chart for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

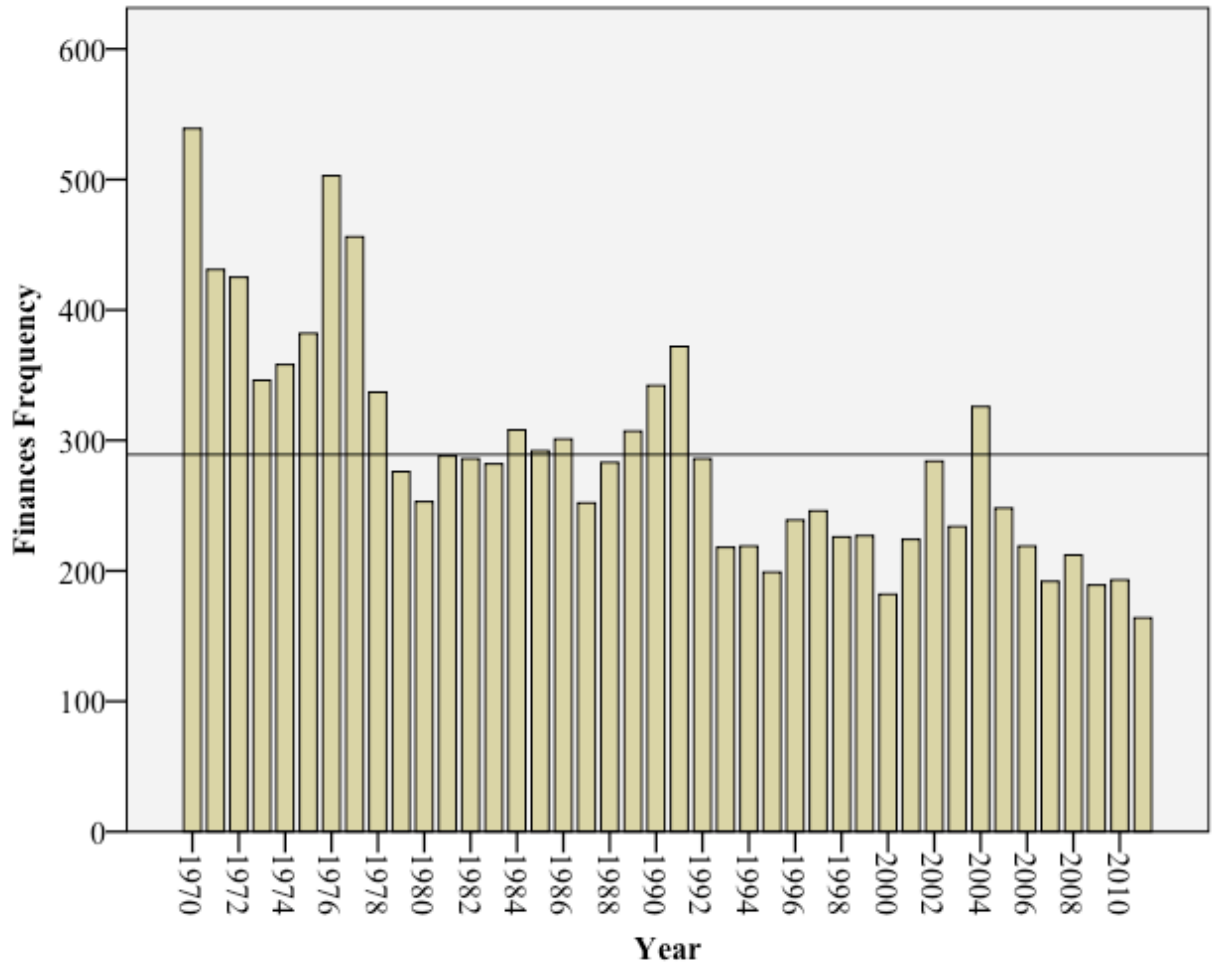


Figure 4.94 Simple Bar Chart for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency with Finances Category Mean Line (289.19) of archival data (1970-2011)

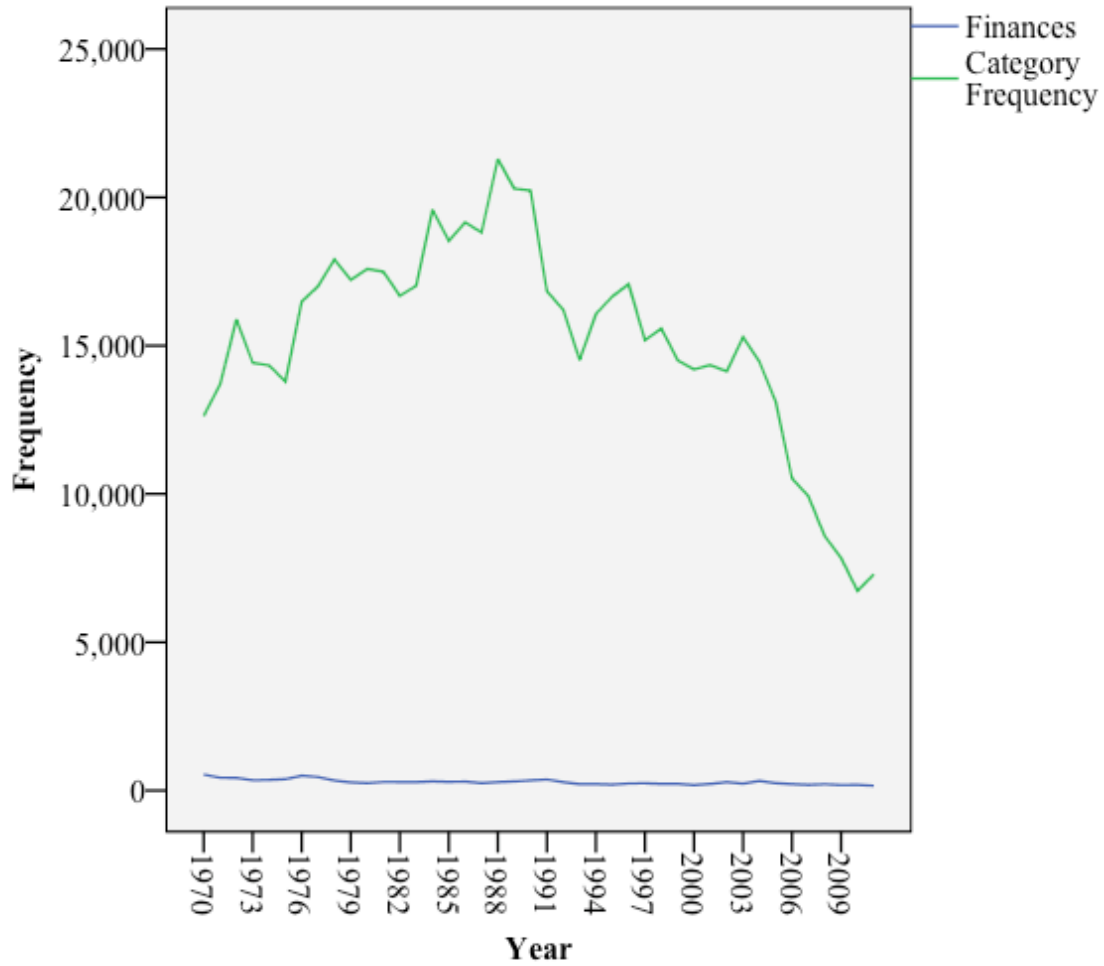


Figure 4.95 Multiple Line Chart for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The finances category frequency of annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the finances category frequency of annual total of crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 82.64% for the finances category of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 1.97% and a standard deviation of 0.64%. Descriptive statistical analysis reported a minimum frequency of 1.19% and a maximum frequency of 4.27% for the finances category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for finances category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.59. Figure 4.96 provides a visual representation for finances category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.97 provides a visual representation for the finances category frequency for the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart

encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) finances mean line (1.96%). Black bars represent years reported to have highest (1970) and lowest(1994) frequency.



Table 4.59

Descriptive Statistics for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Finances Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		1.19%
Maximum		4.27%
Sum		82.64%
Mean		1.97%
Standard Deviation		0.64%

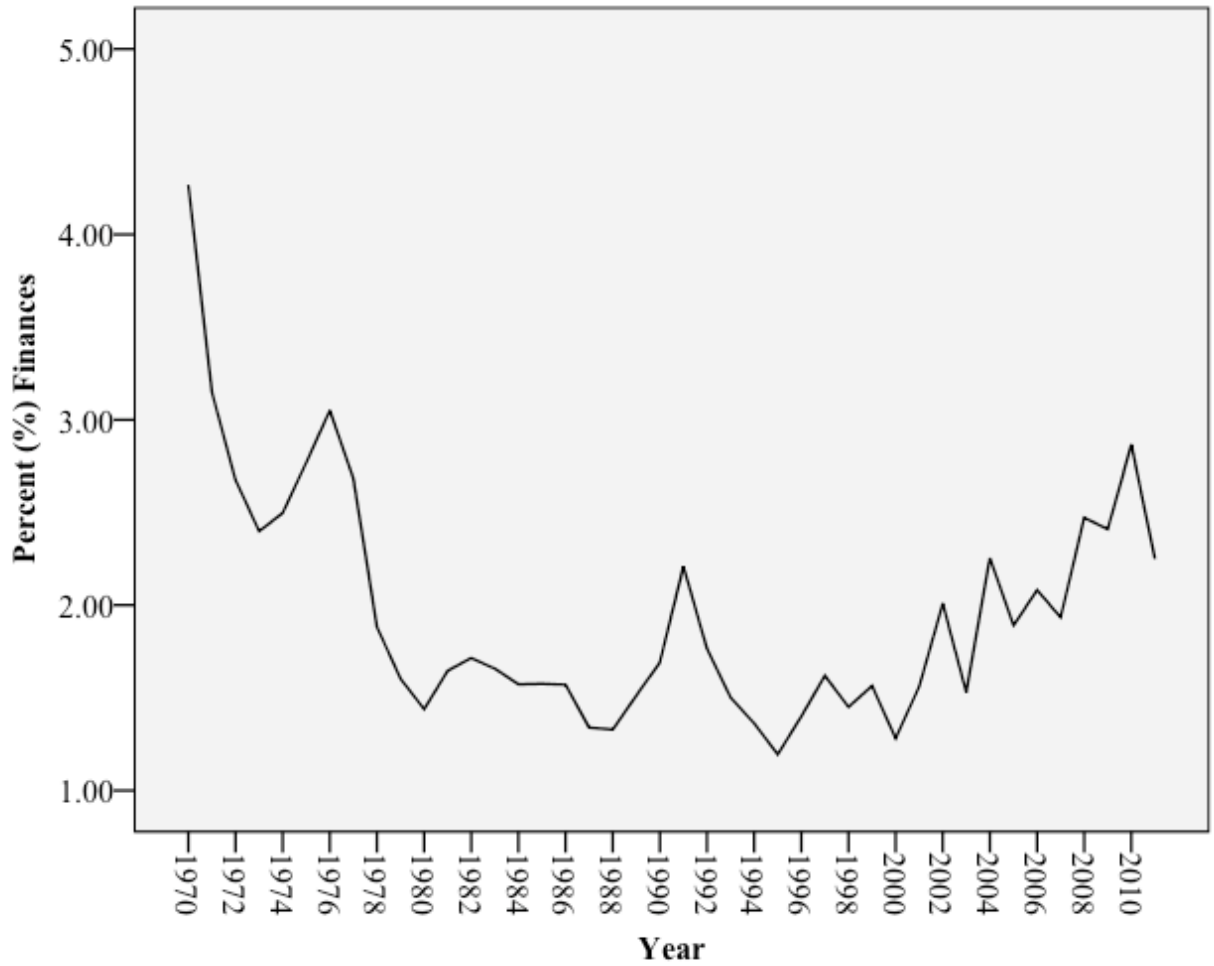


Figure 4.96 Simple Line Chart for Finance Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

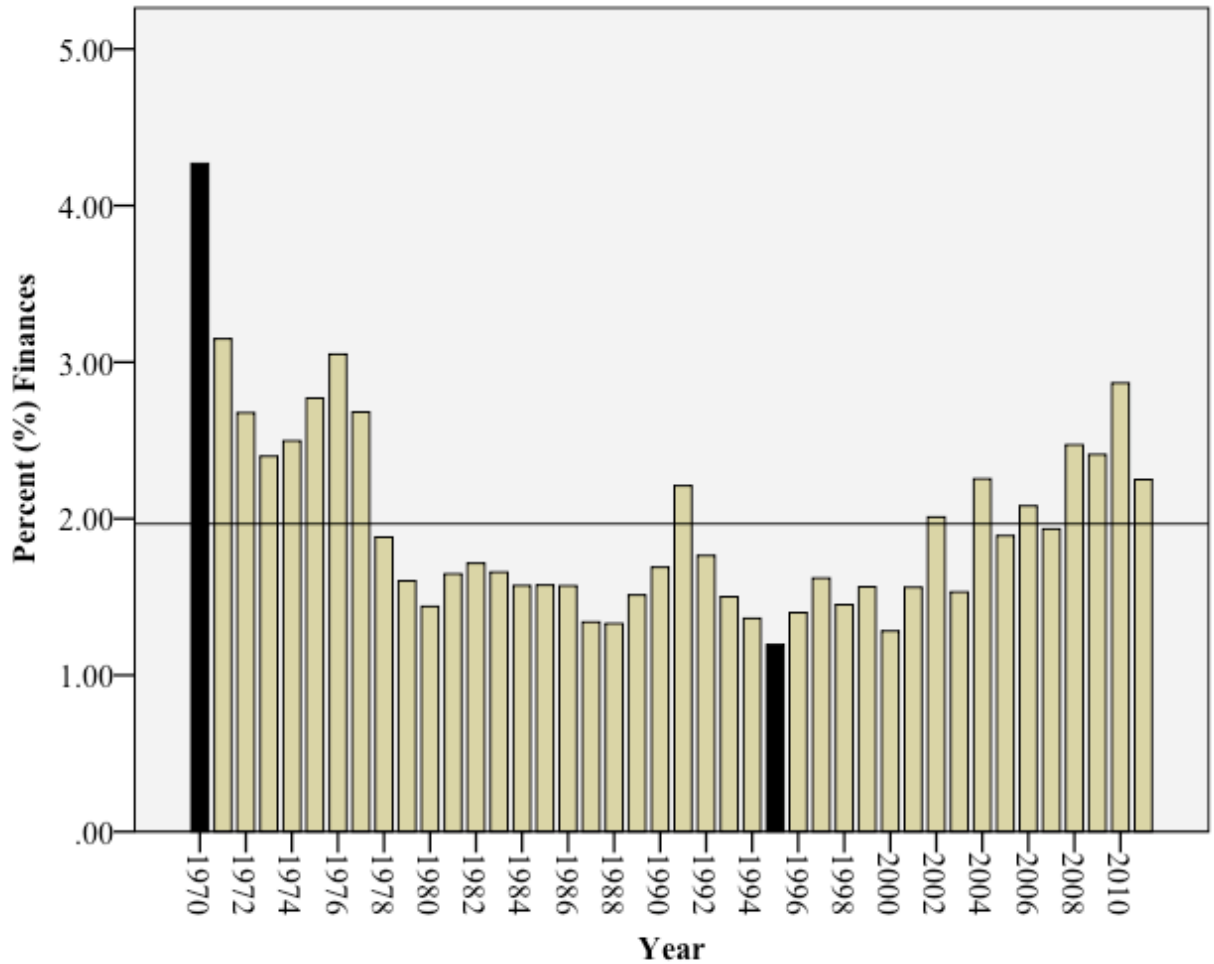


Figure 4.97 Simple Bar Chart for Finances Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Finances Mean Line (1.97%) of archival data (1970-2011)

Examination of the descriptive statistical results for the finances category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the finances category frequency has remained relatively consistent since 1979 and has remained a relatively small proportion of the annual total of crisis center call category frequency (1.5%) until 2006. A recent increase in proportion since

2007 may be reflective of general economic conditions. However, even with the increase in proportion, the overall percentage since 2007 has remained between 2% and 3% of crisis center call frequency.

## Annual Total of Crisis Center Call Category Frequency and Food/Shelter

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Food/Shelter Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (13) Food/Shelter was coded for thirty-four (34) years of the archival data (1978-2011). Although the archival data for the annual total of crisis center call category frequency when grouped per food/shelter category is limited in scope, it is sufficiently statistically salient as to warrant evaluation as a specific call category. When zero (0) is reported in the food/shelter frequency of the annual total of crisis center call category frequency for years 1969-1978, the number reflects the absence of data for the food/shelter category. When zero (0) is reported in food/shelter frequency of the annual total of crisis center call category frequency for years 1978-2011, the number reflects the absence of call frequency related to the food/shelter category rather than the absence of data for the food/shelter category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Thirty-four (34) complete years were identified and used for statistical analysis (1978-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for call category identification were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were

made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual totals for call category ensuring the annual total results accurately report the archival data. All statistical analysis is based on annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the food/shelter category of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). Results of the descriptive statistical analysis reported a sum of 6,005 for the food/shelter category of the annual total of crisis center call category frequency with a mean of 176.62 and a standard deviation of 53.49. Descriptive statistical analysis reported a minimum frequency of 1.19% and a maximum frequency of 4.27% for the finances category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). Results of the descriptive statistical analysis reported a sum of 520,859 for the annual total of crisis center call category with a mean of 15,319.38 and a standard deviation of 3,796.76. Descriptive statistical analysis reported a minimum frequency of 1.19% and a maximum frequency of 4.27% for the finances category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the food/shelter category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call

category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011) are reported in Table 4.60. Figure 4.98 provides a visual representation for the food/shelter category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011). Figure 4.99 provides a visual representation for the food/shelter category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing thirty-four (34) complete years (1978-2011) of the archival data with a food/shelter category mean line (176.62). Figure 4.100 provides a visual representation for the food/shelter category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011).

Table 4.60

Descriptive Statistics for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

Descriptive Statistics			
		Food/Shelter Frequency	Category Frequency
N	Valid	34	34
	Missing	0	0
Minimum		92	6,733
Maximum		287	21,292
Sum		6,005	520,859
Mean		176.62	15,319.38
Standard Deviation		53.49	3,796.76



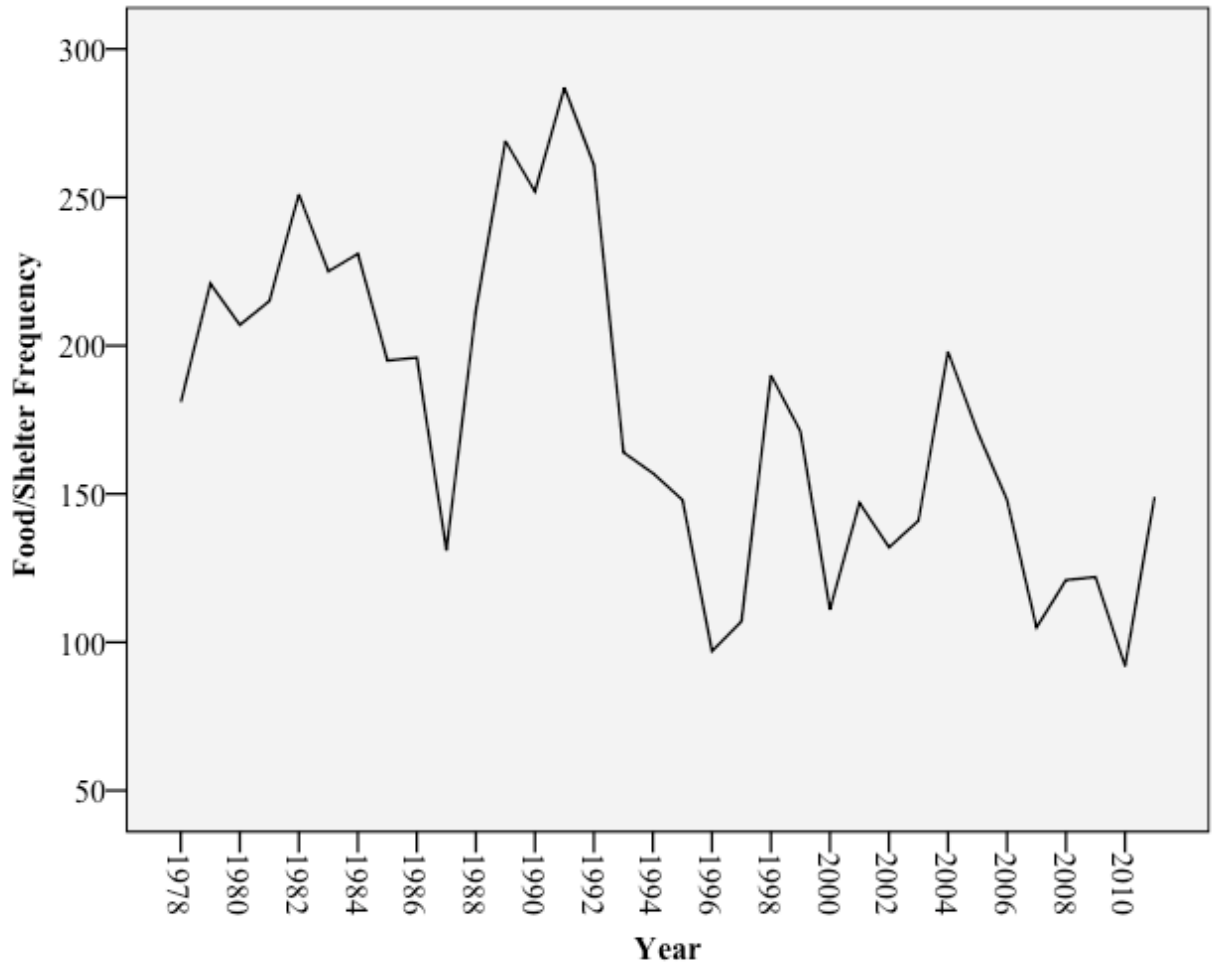


Figure 4.98 Simple Line Chart for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

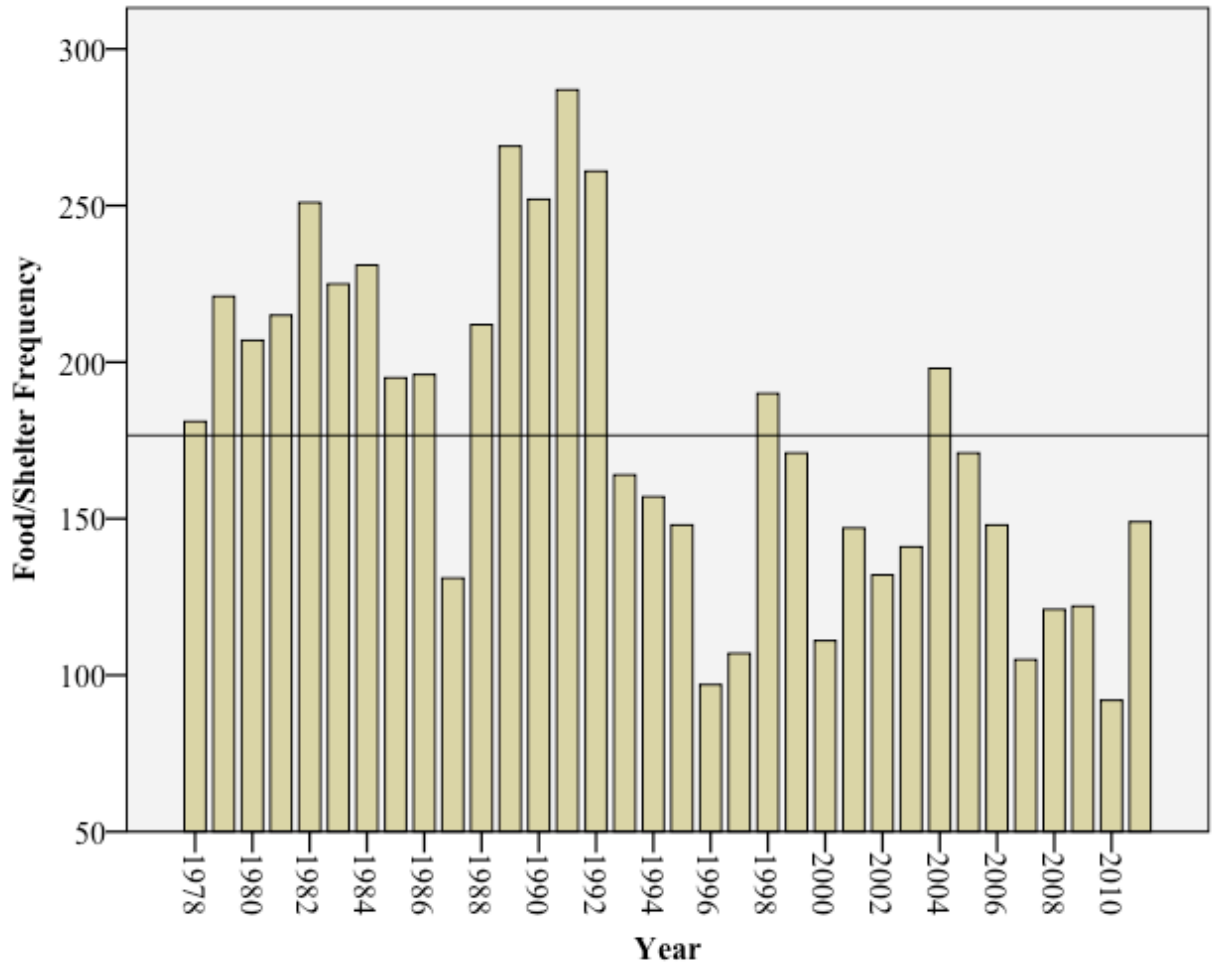


Figure 4.99 Simple Bar Chart for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency with Food/Shelter Category Mean Line (176.62) of archival data (1978-2011)

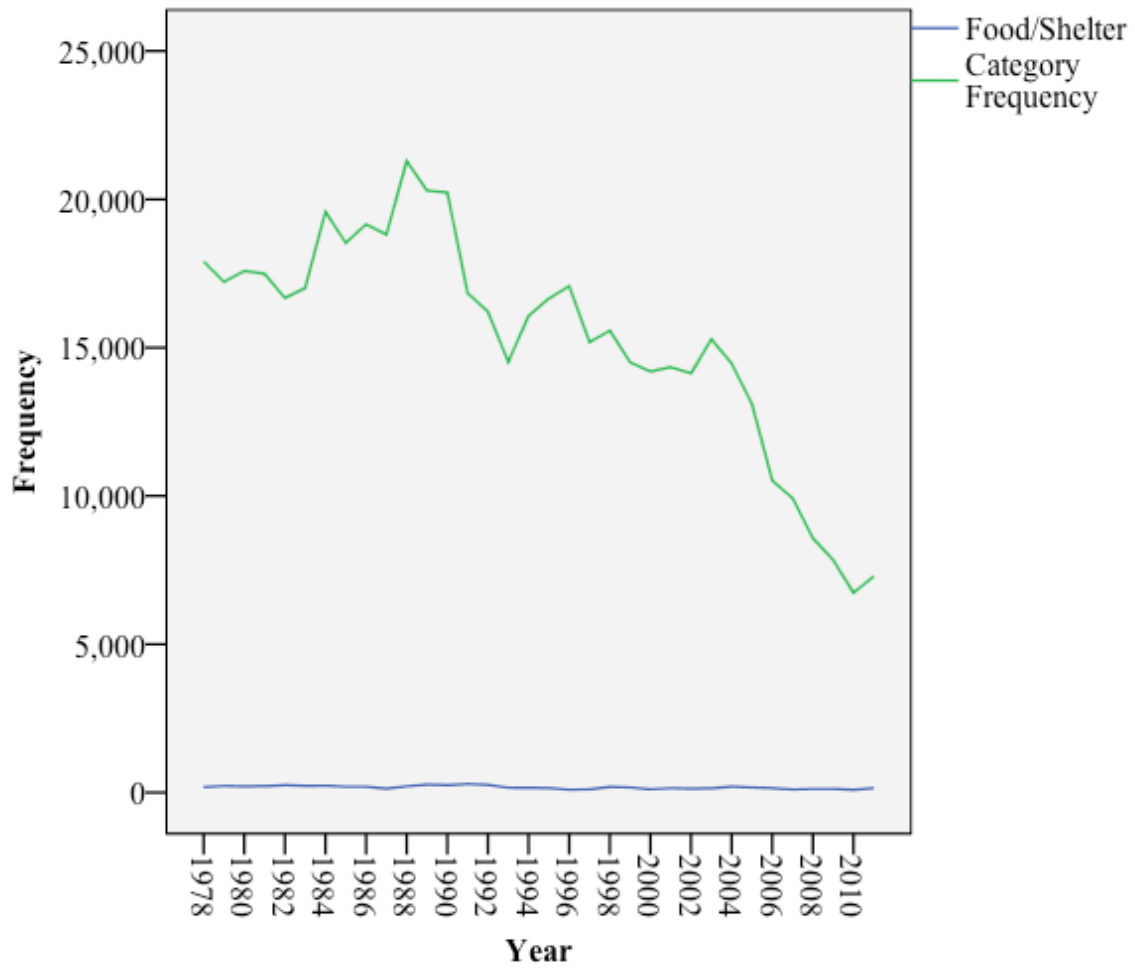


Figure 4.100 Multiple Line Chart for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data(1978-2011)

*Descriptive Statistics for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The food/shelter category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). A descriptive statistical analysis was conducted to evaluate the food/shelter frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) years of archival data (1978-2011). The results of the descriptive statistical analysis reported a sum of 40.20% for the food/shelter category of the annual total of the crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 1.18% and a standard deviation of 0.31%. Descriptive statistical analysis reported a minimum frequency of 0.57% and a maximum frequency of 2.04% for the food/shelter category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the food/shelter category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1970-2011) are reported in Table 4.61. Figure 4.101 provides a visual representation for the food/shelter category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011). Figure 4.102 provides a visual representation for the food/shelter category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call

category frequency as a simple bar chart encompassing thirty-four (34) complete years of the archival data (1970-2011) with a percentage (%) food/shelter category mean line (1.18%). Black bars represents years reported with highest (2011) and lowest (1996) frequency.

Table 4.61  
 Descriptive Statistics for Food/Shelter Category Frequency of Annual Total of Crisis Center Call  
 Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency  
 (1978-2011)

Descriptive Statistics		
		Food/Shelter Frequency as Ratio (%) of Category Frequency
N	Valid	34
	Missing	0
Minimum		0.57%
Maximum		2.04%
Sum		40.20%
Mean		1.18%
Standard Deviation		0.31%

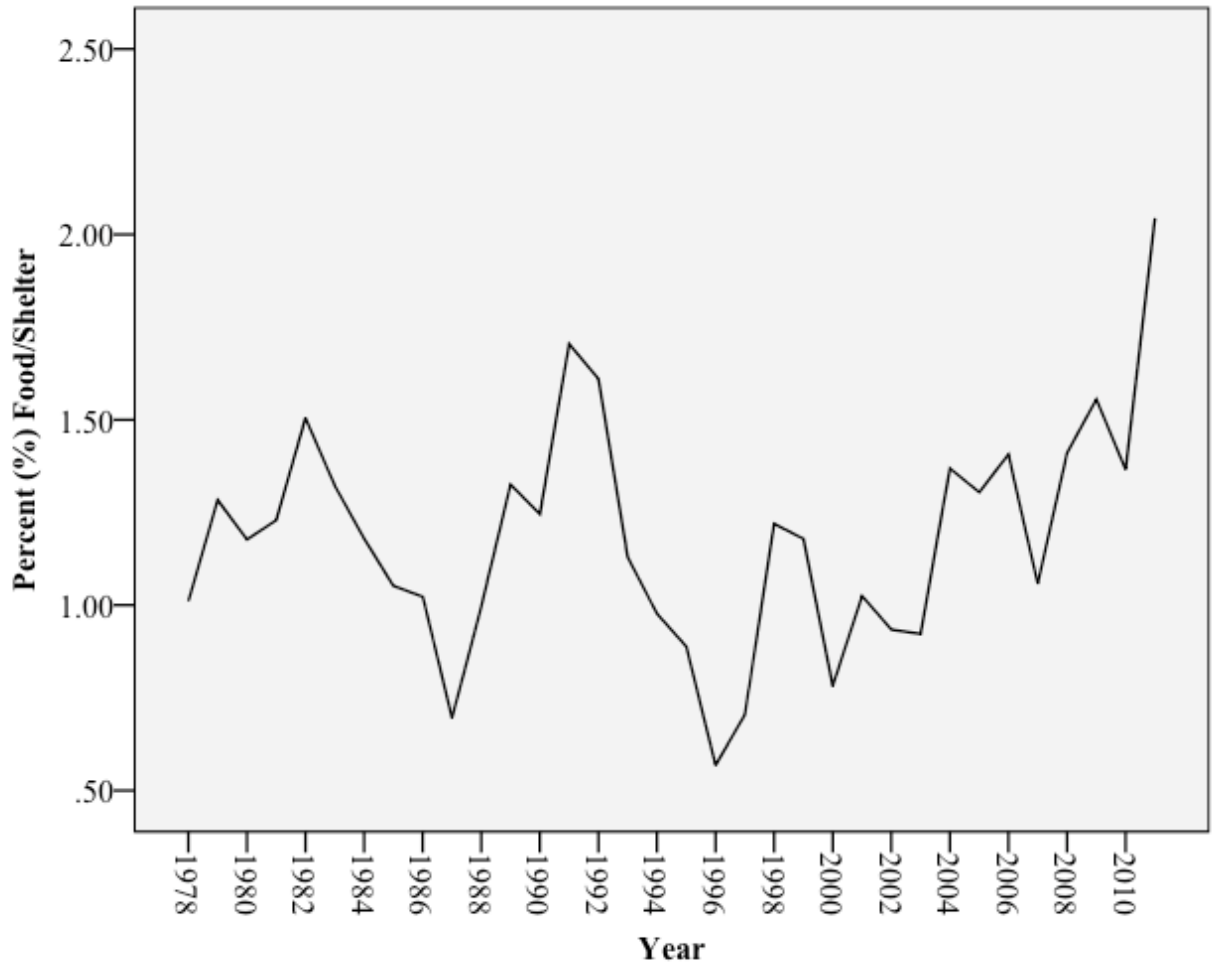


Figure 4.101 Simple Line Chart for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

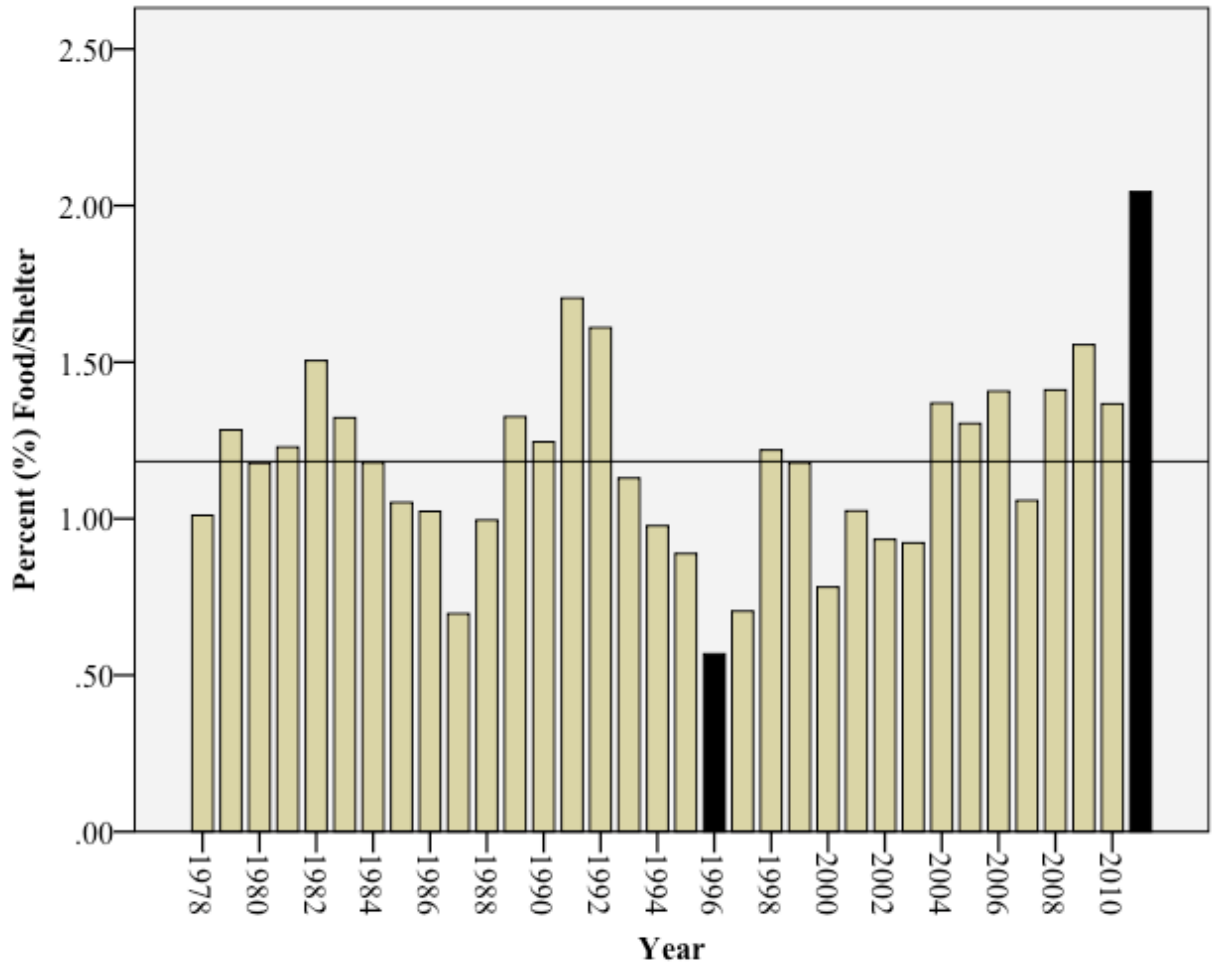


Figure 4.102 Simple Bar Chart for Food/Shelter Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Food/Shelter Category Mean Line (1.18% of archival data (1978-2011))

Examination of the descriptive statistical results for the food/shelter category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the finances category frequency has fluctuated consistently since 1978 and has remained a relatively small proportion of the annual total of crisis center call category frequency (between 0.5% and 1.5%) until 2011. The recent increase in



proportion in 2011 may be reflective of general economic conditions. However, even with the increase in proportion, the 2011 percentage was 2.04% of crisis center call frequency.

## Annual Total of Crisis Center Call Category Frequency and Grief

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Grief Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (14) Grief was coded for nine (9) years of the archival data (2003-2011). Although the archival data for the grief frequency of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as an individual call category. When zero (0) is reported in the grief frequency of the annual total of crisis center call category frequency for years 1969-2002, the number reflects the absence of data for the grief category. When zero (0) is reported in grief frequency of the annual total of crisis center call category frequency for years 2003-2011, the number reflects the absence of call frequency related to the grief category rather than the absence of data for the depression category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Nine (9) complete grief category years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No

assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the grief category frequency of the annual total of crisis center call category frequency encompassing nine (9) complete years of the archival data (2003-2011). Results of the descriptive statistical analysis reported a sum of 1,010 for the grief category of the annual total of crisis center call category frequency with a mean of 112.22 and a standard deviation of 84.32. Descriptive statistical analysis reported a minimum frequency of 41 and a maximum frequency of 305 for the grief category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing nine (9) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 93,747 for the annual total of crisis center call category frequency with a mean of 10,416.33 and a standard deviation of 3,181.11. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 15,287 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the grief category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing nine (9) years of the archival data (2003-2011) are reported in Table

4.62. Figure 4.103 provides a visual representation for the grief category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing nine (9) complete years of the archival data (2003-2011). Figure 4.104 provides a visual representation for the grief frequency of the annual total of crisis center call frequency as a simple bar chart encompassing nine (9) complete years of the archival data (2003-2011) with a grief category mean line (112.22). Figure 4.105 provides a visual representation for the grief category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing nine (9) years of the archival data (2003-2011).

Table 4.62

Descriptive Statistics for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011)

Descriptive Statistics			
		Grief Frequency	Category Frequency
N	Valid	9	9
	Missing	0	0
Minimum		41	6,733
Maximum		305	15,287
Sum		1,010	93,747
Mean		112.22	10,416.33
Standard Deviation		84.32	3,181.11

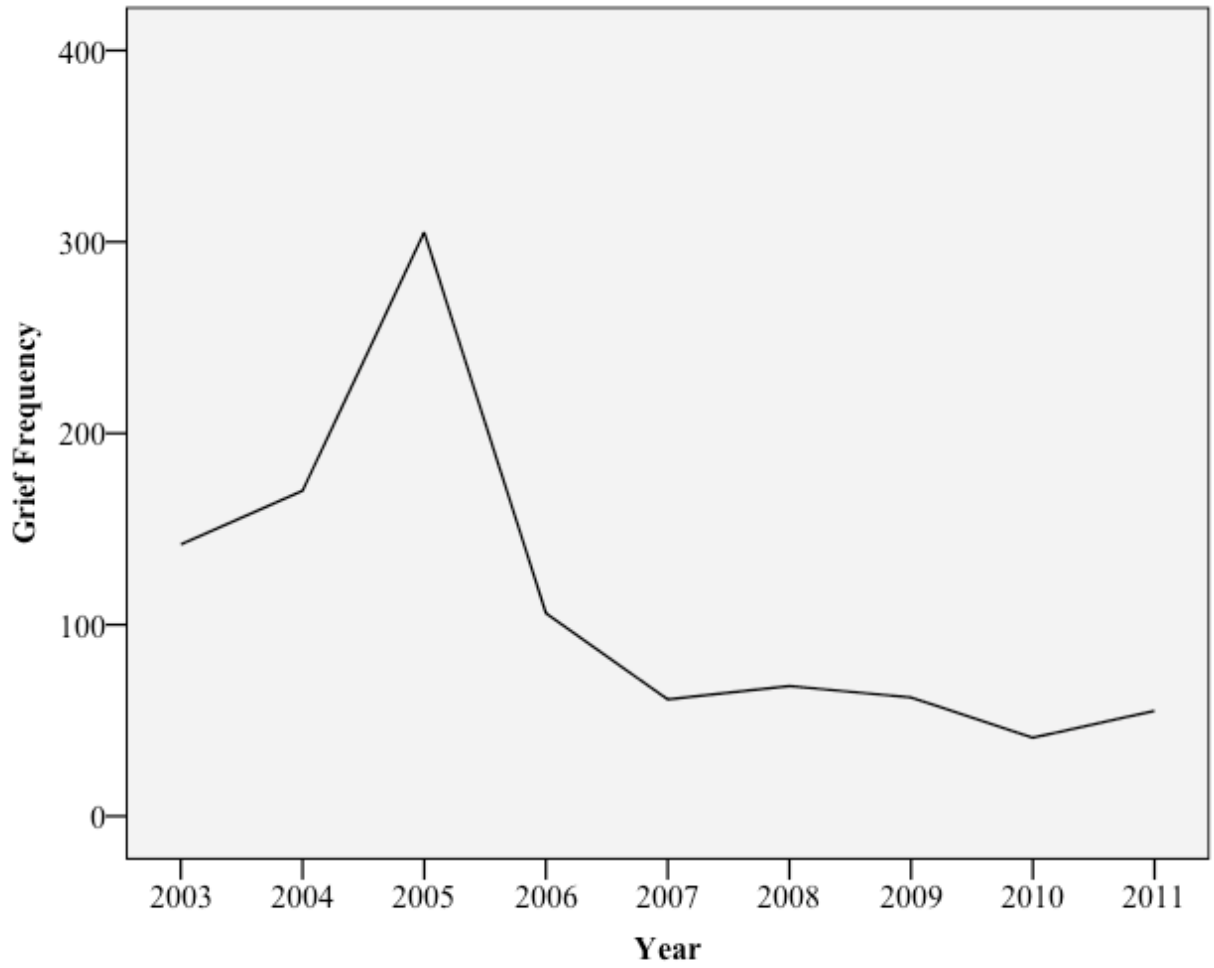


Figure 4.1003 Simple Line Chart for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011)

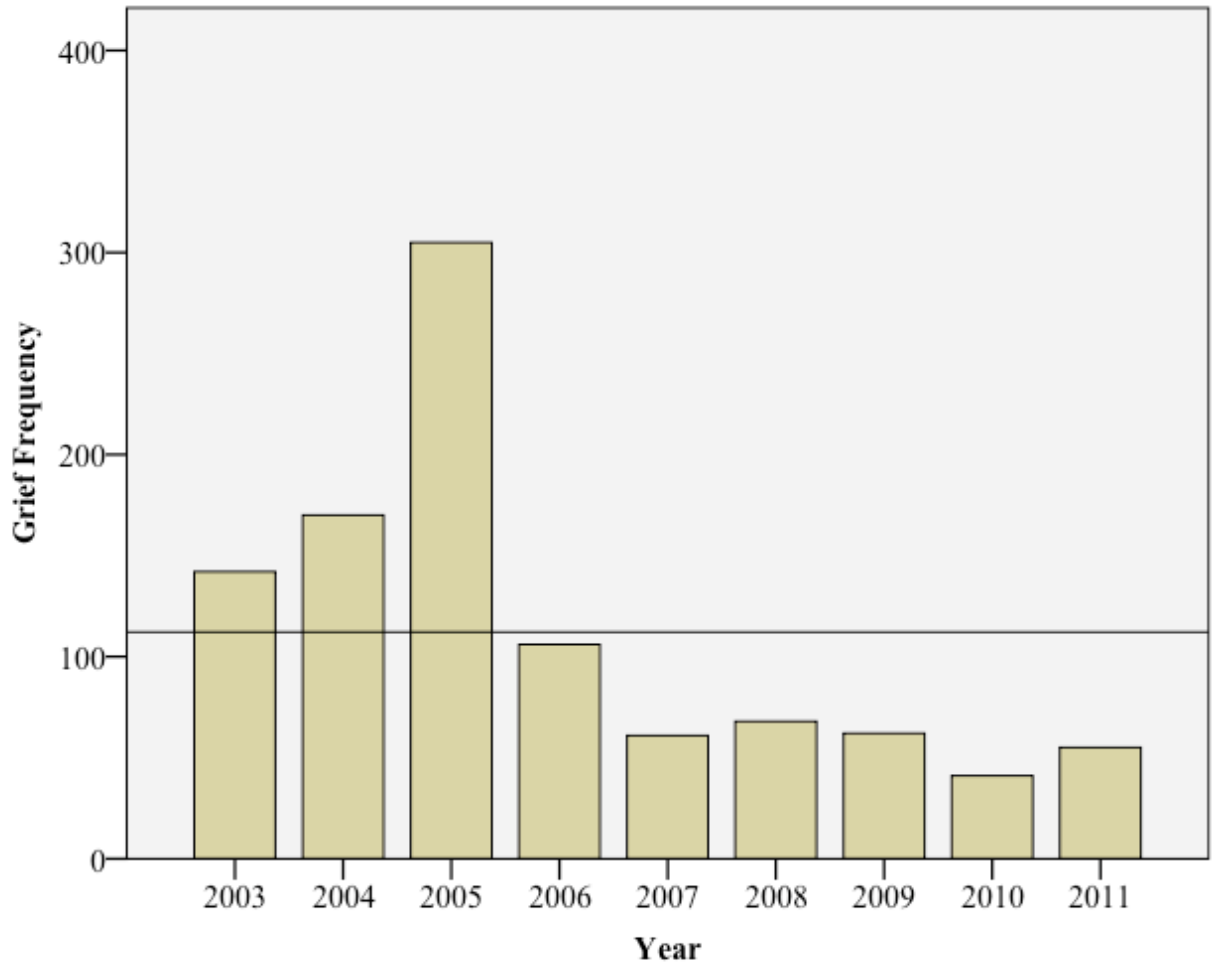


Figure 4.104 Simple Bar Chart for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency with Grief Category Mean Line (112.22) of archival data (1970-2011)

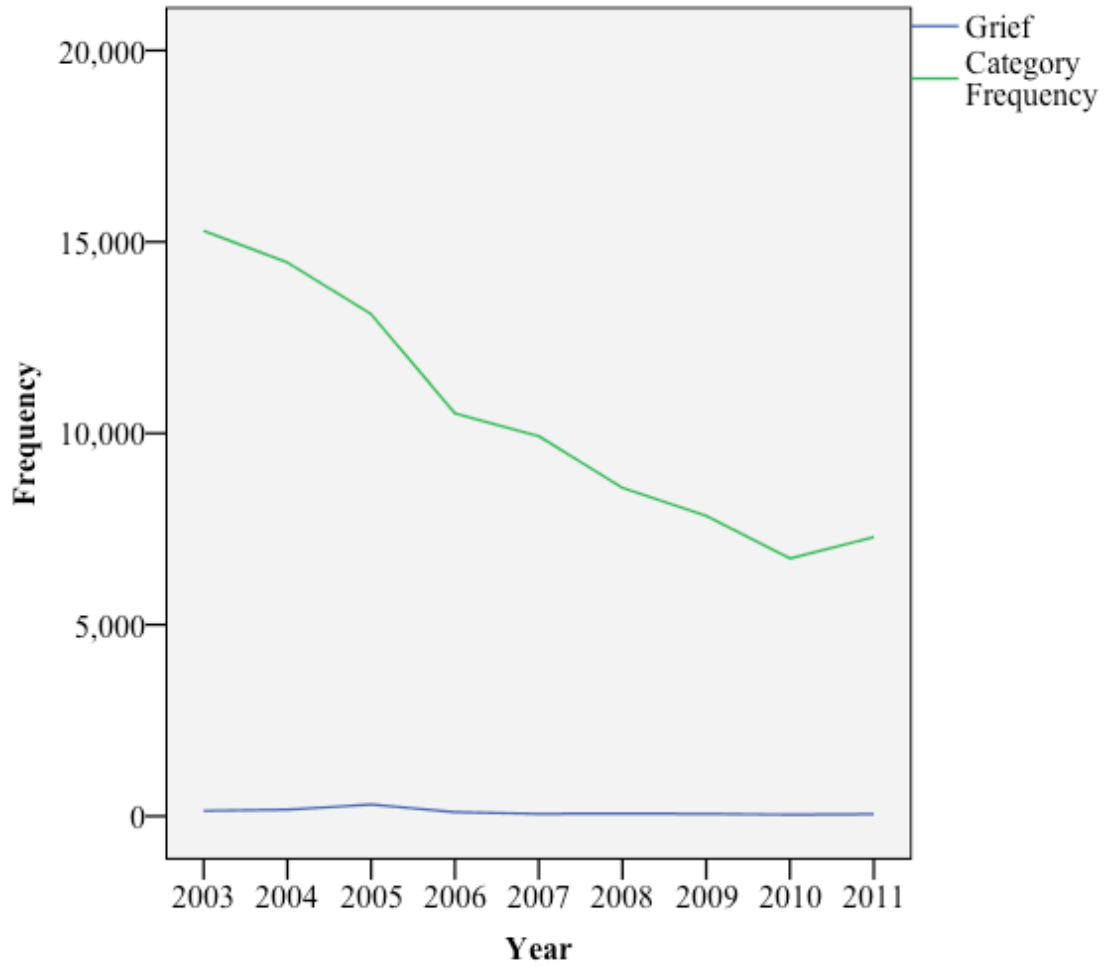


Figure 4.105 Multiple Line Chart for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011)



*Descriptive Statistics for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The grief category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing nine (9) complete years of the archival data (2003-2011). A descriptive statistical analysis was conducted to evaluate the grief frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing nine (9) years of archival data (2003-2011). The results of the descriptive statistical analysis reported a sum of 9.00% for the grief category of the annual total of the crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 1.00% and a standard deviation of 0.53%. Descriptive statistical analysis reported a minimum frequency of 0.61% and a maximum frequency of 2.33% for the grief category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the grief category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing nine (9) complete years of the archival data (2003-2011) are reported in Table 4.63. Figure 4.106 provides a visual representation for the grief category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing nine (9) complete years of the archival data (2003-2011). Figure 4.107 provides a visual representation for the grief category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing nine (9) complete years of the archival data (2003-2011) with a percentage (%)

grief category mean line (0.53%). Black bars represents years reported to have the highest (2005) and lowest (2007) frequency.

Table 4.63

Descriptive Statistics for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011)

Descriptive Statistics		
		Grief Frequency as Ratio (%) of Category Frequency
N	Valid	9
	Missing	0
Minimum		0.61%
Maximum		2.33%
Sum		9.00%
Mean		1.00%
Standard Deviation		0.53%

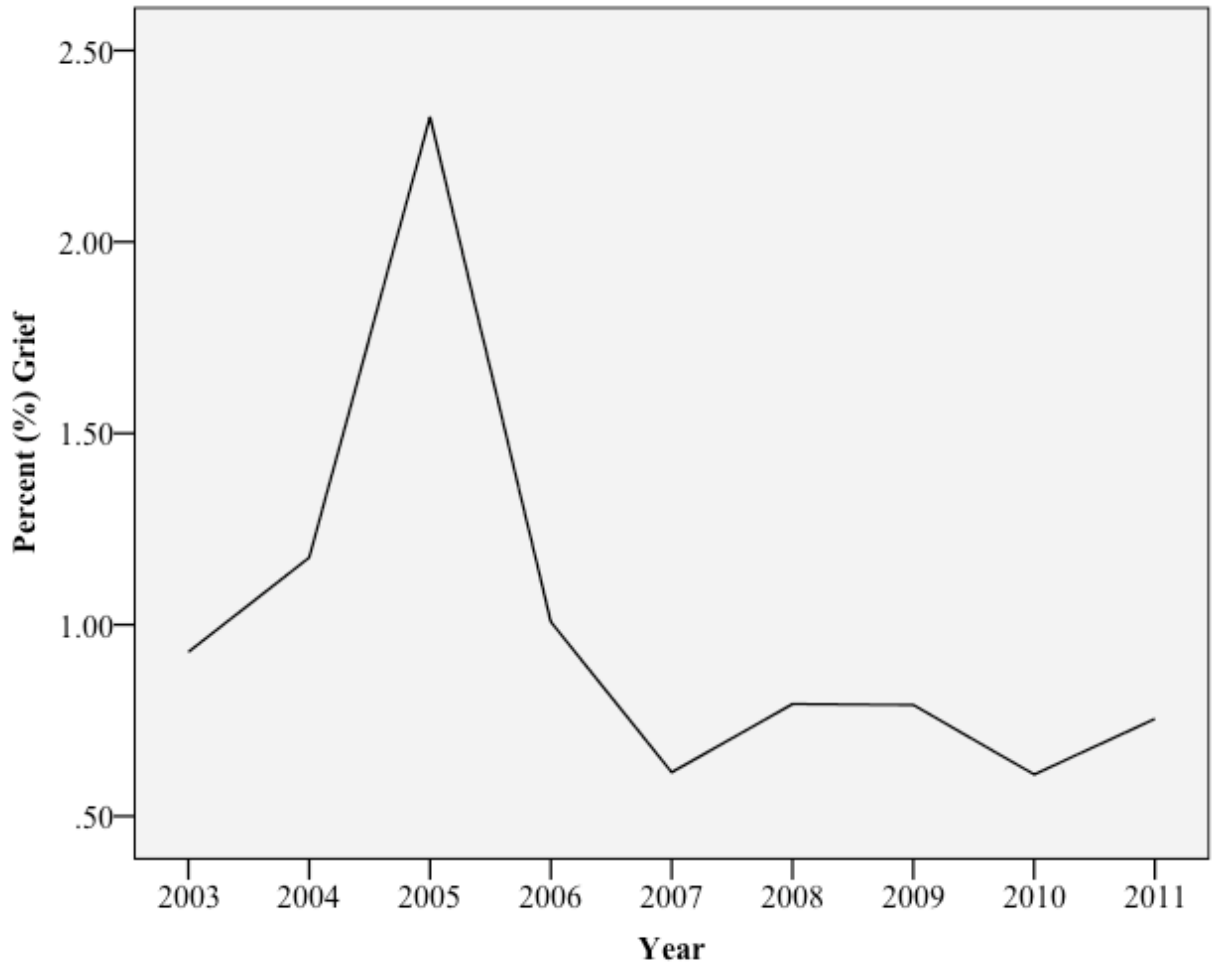


Figure 4.106 Simple Line Chart for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (2003-2011)

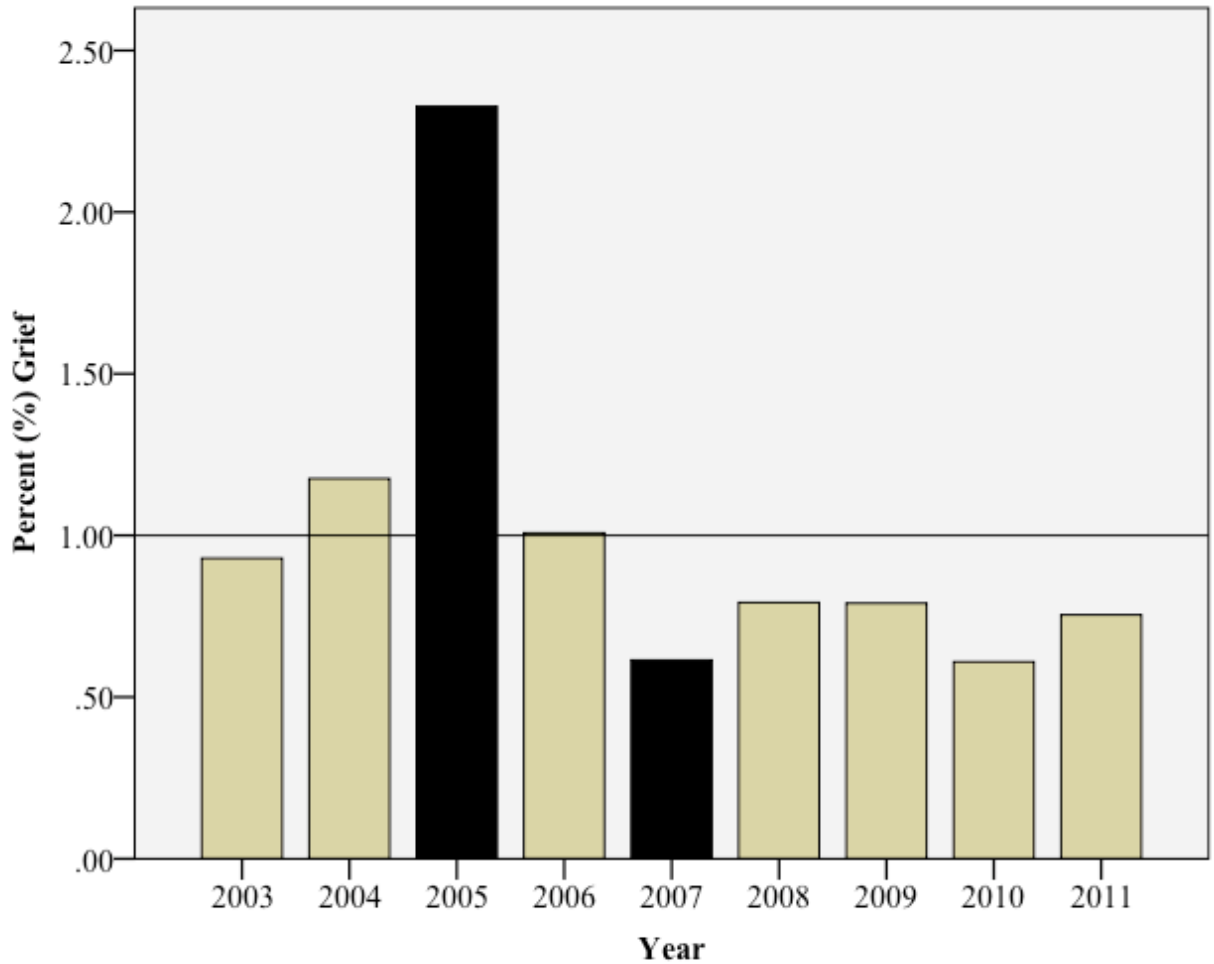


Figure 4.107 Simple Bar Chart for Grief Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Grief Category Mean Line (0.53%) of archival data (2003-2011)

Examination of the descriptive statistical results for the grief category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the grief category frequency has remained relatively consistent since 2003 and has remained a relatively small proportion of the annual total of crisis center call category frequency (between 0.5% and 1.25%) with the exception of a marked

increase in 2005. Anecdotal evidence gathered from conversation with administrative personnel suggests the 2005 increase in proportion of grief category frequency was reflective of an individual in chronic crisis rather than an increase in frequency due to multiple individuals experiencing an acute crisis episode.

## Annual Total of Crisis Center Call Category Frequency and Health

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Health Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (15) Health was coded on VCLs throughout forty-three (43) years of archival data (1969-2011). When zero (0) is reported in health frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the health category rather than the absence of data for the health category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the health category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 24,963 for the health category of the annual total of crisis center call category frequency with a mean of 42.07 and a standard deviation of 49.25. Descriptive statistical analysis reported a minimum frequency of 291 and a maximum frequency of 928 for the health category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.437. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the health category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.64. Figure 4.108 provides a visual representation for the health category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.109 provides a visual representation for the health category frequency of the annual total of crisis



center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a health category mean line (594.36). Figure 4.110 provides a visual representation for the health category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.64

Descriptive Statistics for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Health Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		291	6,733
Maximum		928	21,292
Sum		24,963	639,102
Mean		594.36	15,216.71
Standard Deviation		168.80	3,470.44

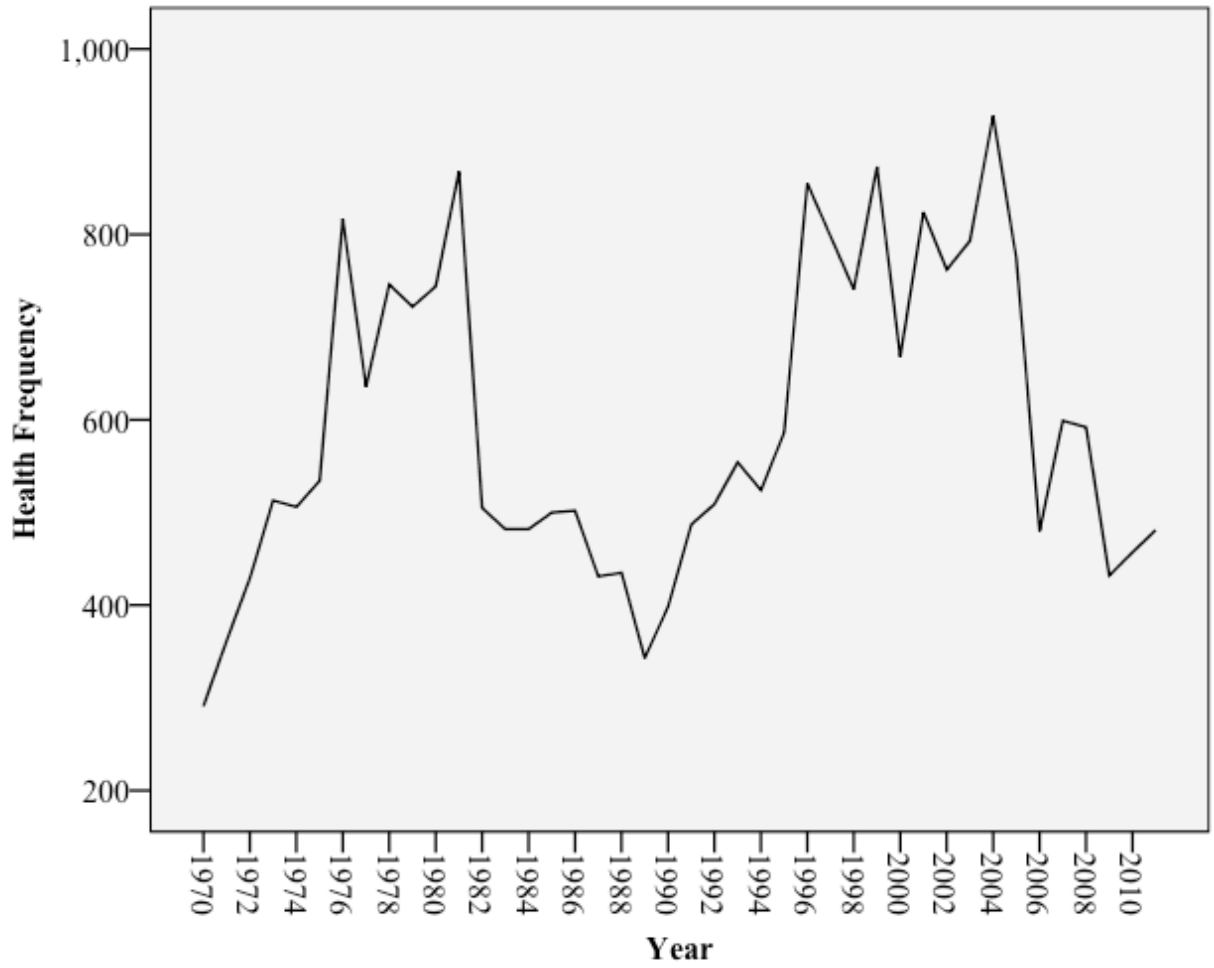


Figure 4.108 Simple Line Chart for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

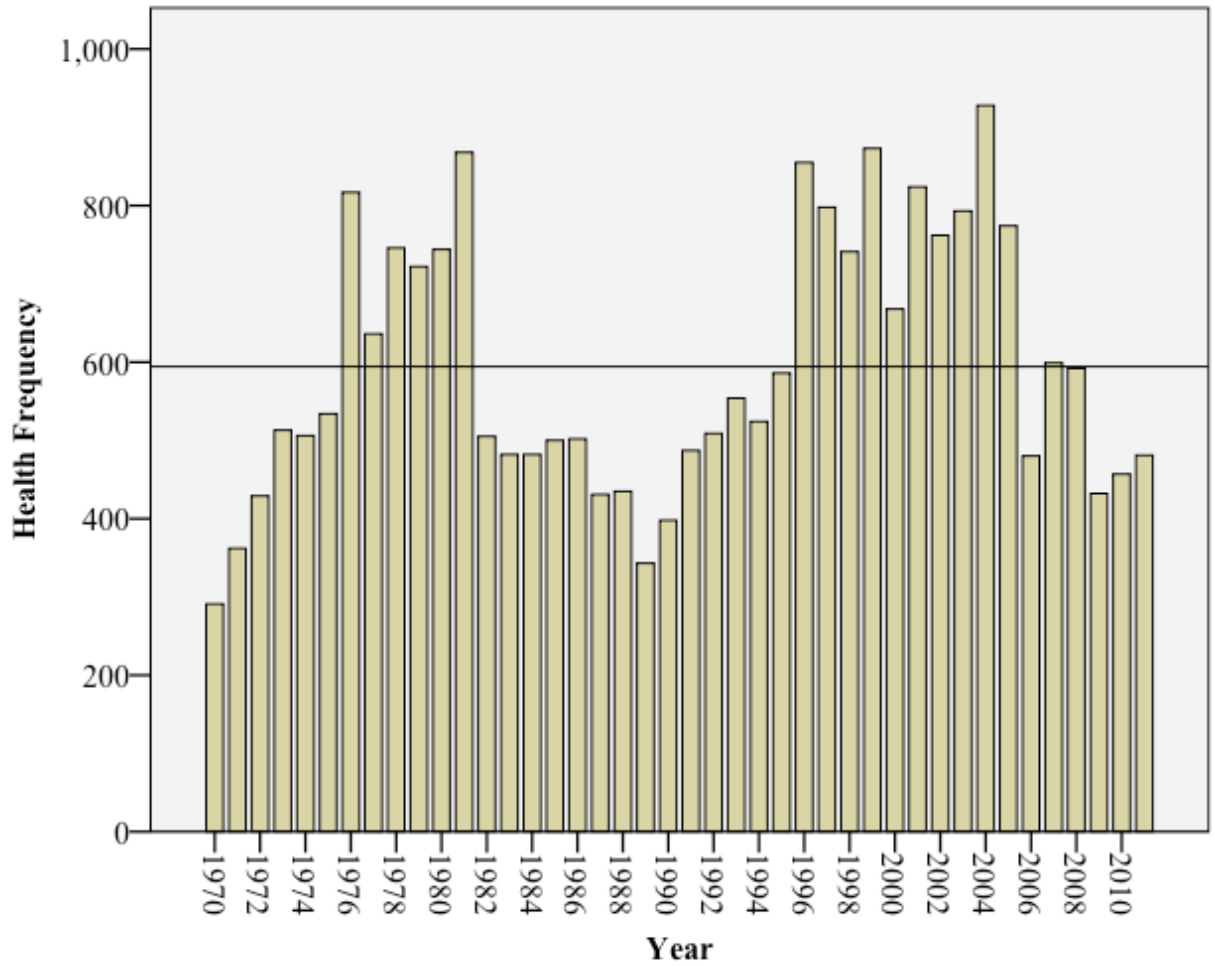


Figure 4.109 Simple Bar Chart for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency with Health Category Mean Line (594.36) of archival data (1970-2011)

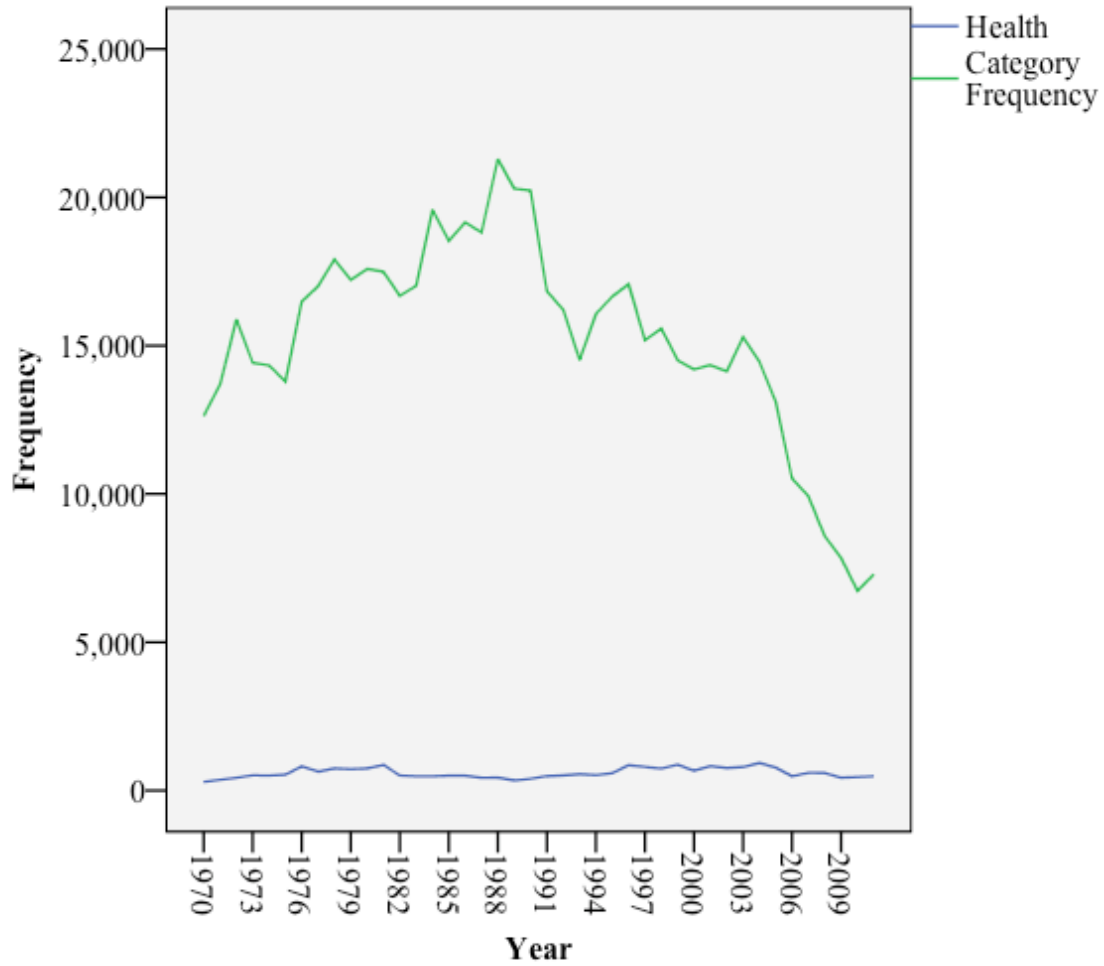


Figure 4.110 Multiple Line Chart for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The health category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the health category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 173.89% for the health category of the annual total of the crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 4.14% and a standard deviation of 0.147%. Descriptive statistical analysis reported a minimum frequency of 1.69% and a maximum frequency of 6.90% for the health category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.65. Figure 4.111 provides a visual representation for the health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.112 provides a visual representation for the health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart

encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) health category mean line (4.14%). Black bar represents year reported with highest (2008) and lowest (1989) frequency,

Table 4.65

Descriptive Statistics for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Health Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		1.69%
Maximum		6.90%
Sum		173.89%
Mean		4.14%
Standard Deviation		1.47





Figure 4.111 Simple Line Chart for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

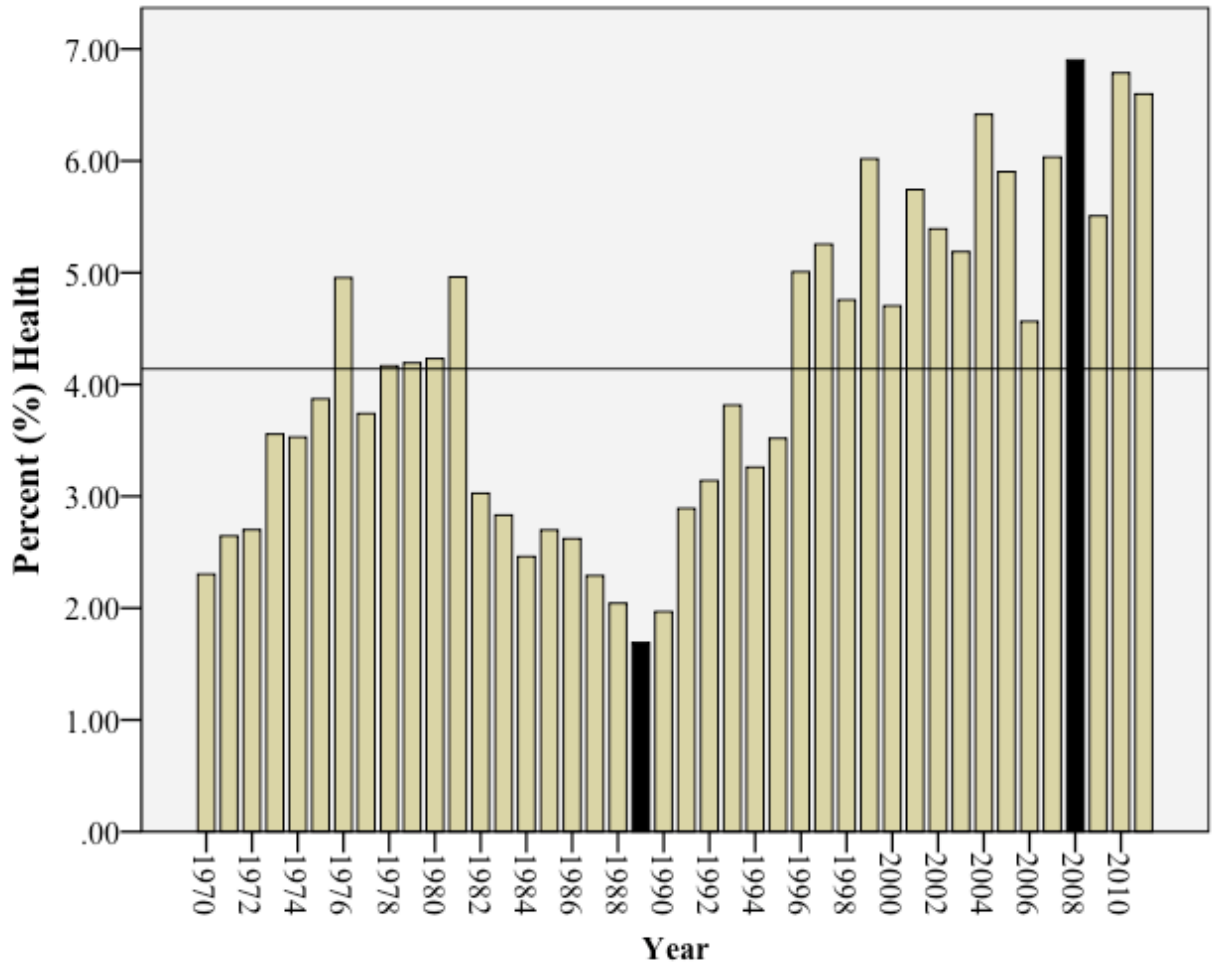


Figure 4.112 Simple Bar Chart for Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Health Category Mean Line (4.14%) of archival data (1970-2011)

Examination of the descriptive statistical results for the health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the health category frequency has been increasing relatively consistently since 1990 and has remained a relatively small proportion of the annual total of crisis center call category frequency (between 4% and 7%) since 1995. Anecdotal

evidence gathered from conversation with administrative personnel suggests any sudden increase in proportion of grief category frequency and then subsequent decrease was reflective of an individual in chronic crisis rather than an increase in frequency due to multiple individuals experiencing an acute crisis episode.

## Annual Total of Crisis Center Call Category Frequency and Homosexuality

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Homosexual Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (16) Homosexual was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in homosexual frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the homosexual category rather than the absence of data for the homosexual category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the homosexual category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 6,834 for the homosexual category of the annual total of crisis center call category frequency with a mean of 162.71 and a standard deviation of 114.20. Descriptive statistical analysis reported a minimum frequency of 11 and a maximum frequency of 491 for the homosexual category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.437. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the homosexual category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.66. Figure 4.113 provides a visual representation for the homosexual category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.114 provides a visual representation for the homosexual category frequency of the annual total

of crisis center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a homosexual category mean line (162.71). Figure 4.115 provides a visual representation for the homosexual category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.66

Descriptive Statistics for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Homosexual Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		11	6,733
Maximum		491	21,292
Sum		6,834	639,102
Mean		162.71	15,216.71
Standard Deviation		114.19	3,470.44

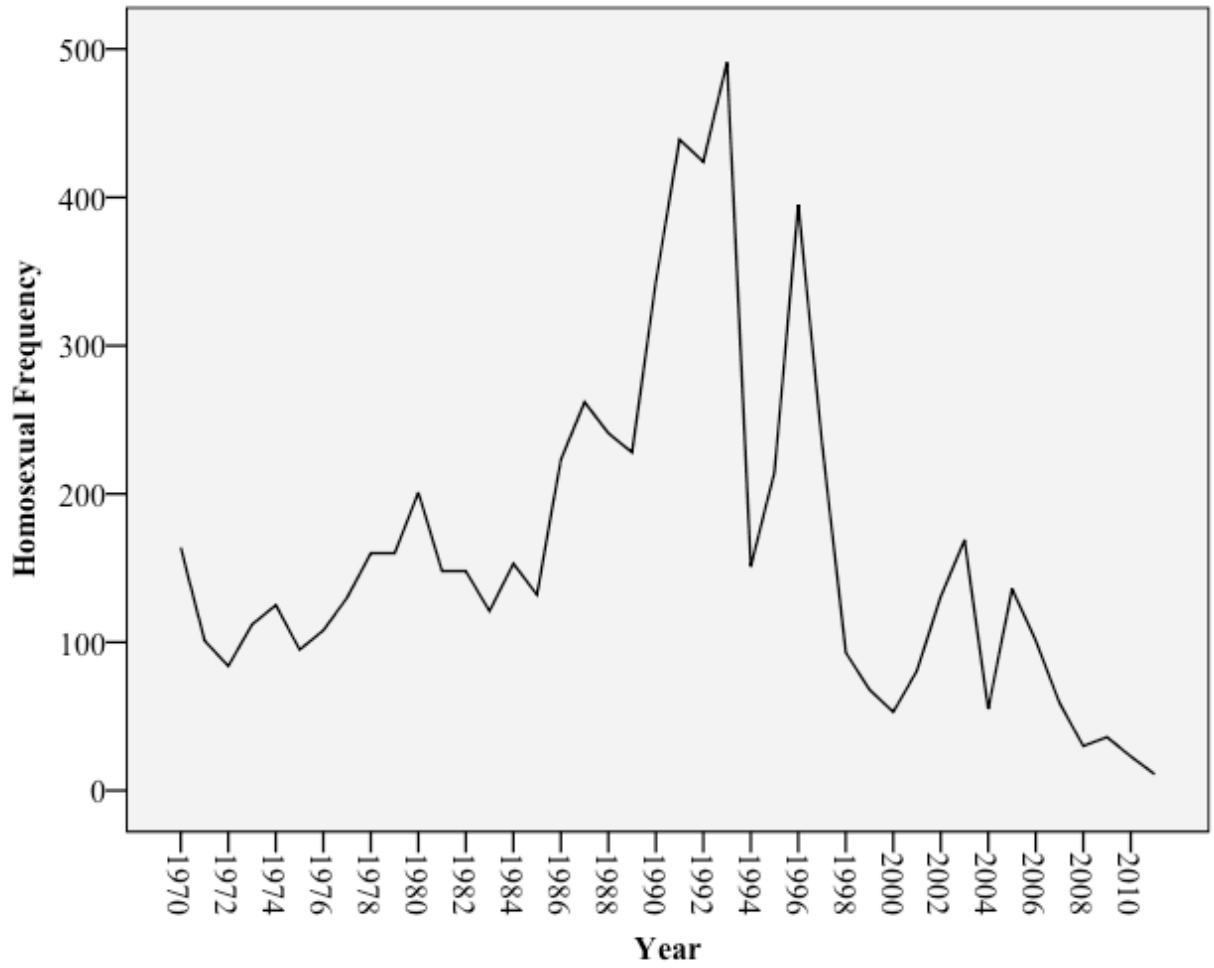


Figure 4.113 Simple Line Chart for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)



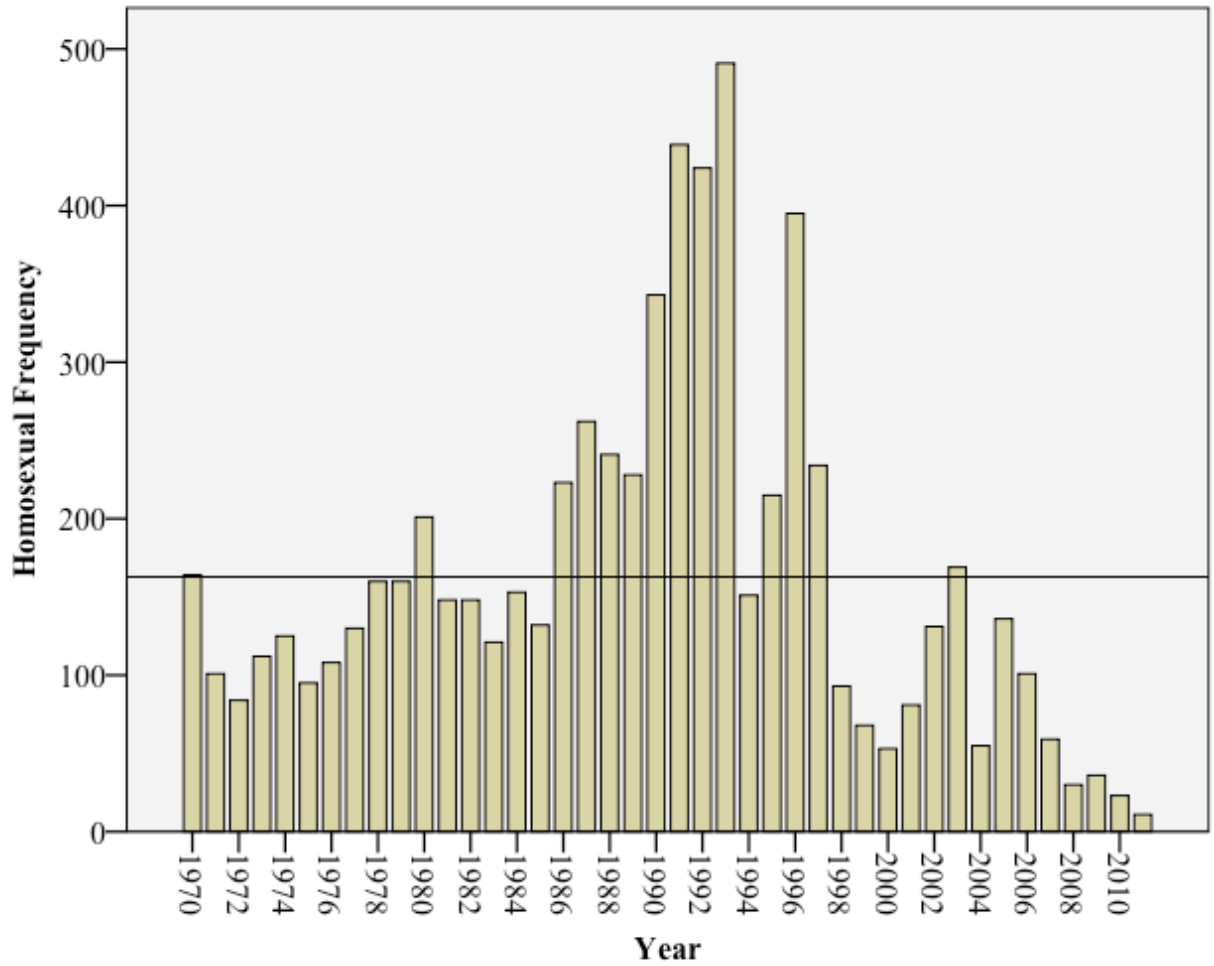


Figure 4.114 Simple Bar Chart for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency with Homosexual Category Mean Line (162.71) of archival data (1970-2011)

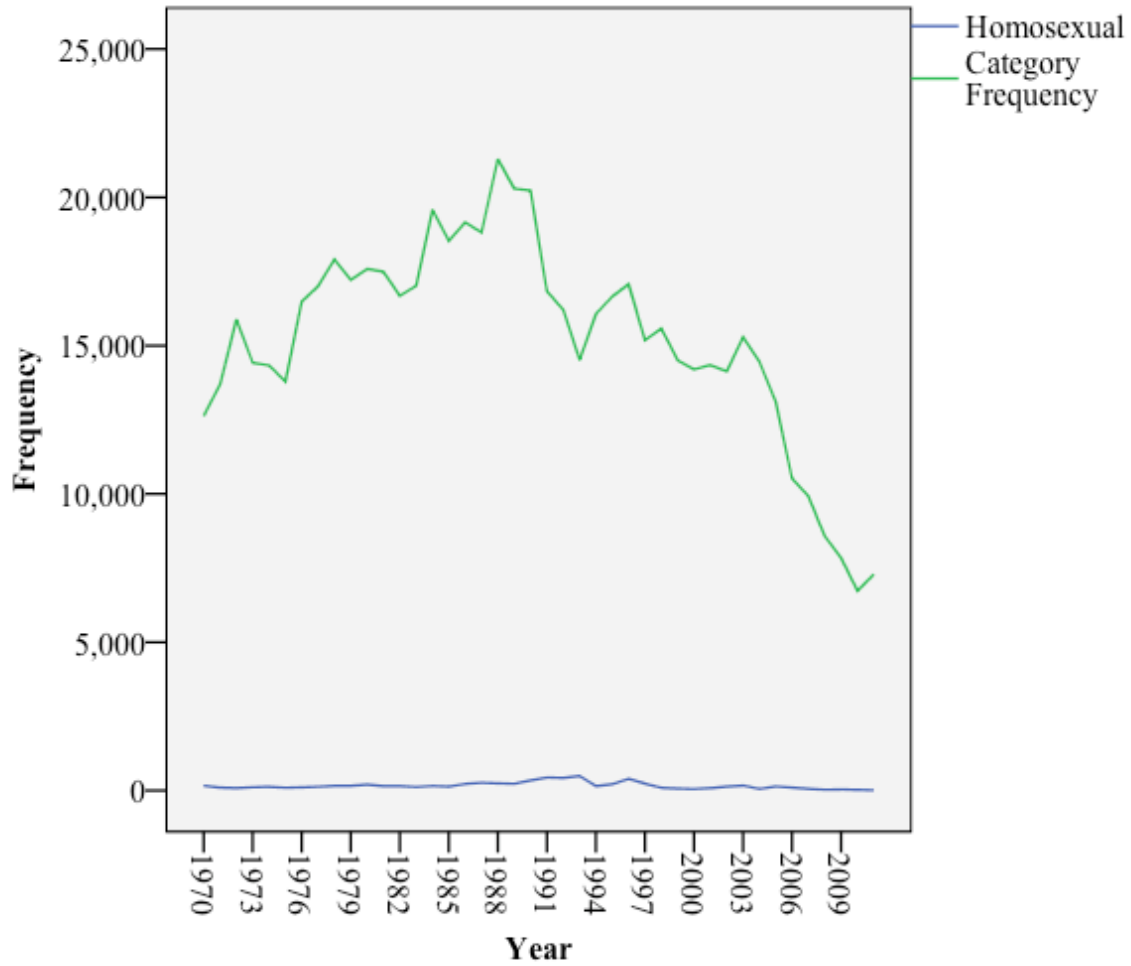


Figure 4.115 Multiple Line Chart for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The homosexual category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the homosexual frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 42.73% for the homosexual category of the annual total of the crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 1.02% and a standard deviation of 0.67%. Descriptive statistical analysis reported a minimum frequency of 0.15% and a maximum frequency of 3.38% for the homosexual category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the homosexual category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.67. Figure 4.116 provides a visual representation for the homosexual category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.117 provides a visual representation for the homosexual category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call

category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) homosexual category mean line (0.2745%). Black bars represent years reported as having the highest (1993) and lowest (2011) frequency,

Table 4.67

Descriptive Statistics for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Homosexual Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.15%
Maximum		3.38%
Sum		42.73%
Mean		1.02%
Standard Deviation		0.66%

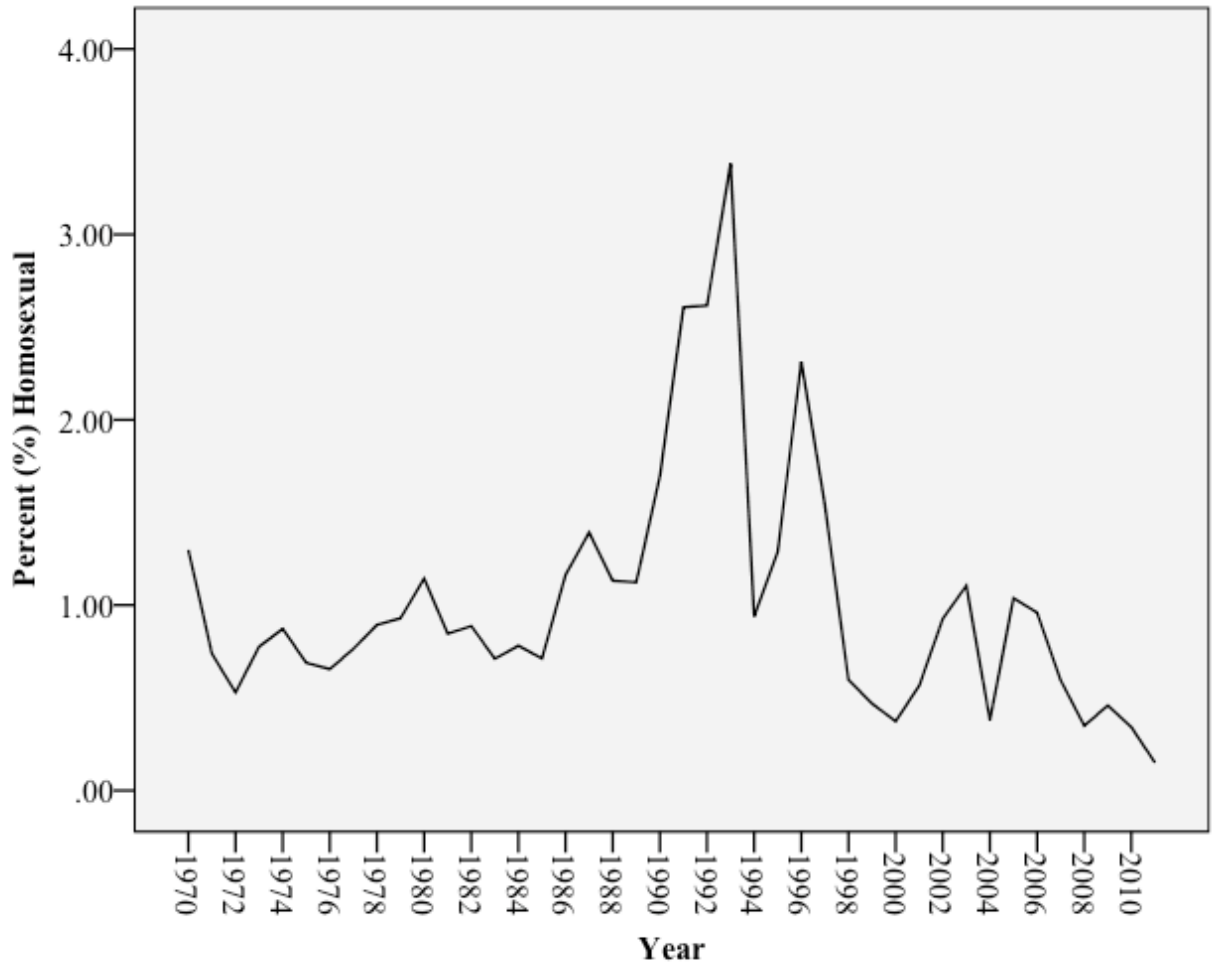


Figure 4.116 Simple Line Chart for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

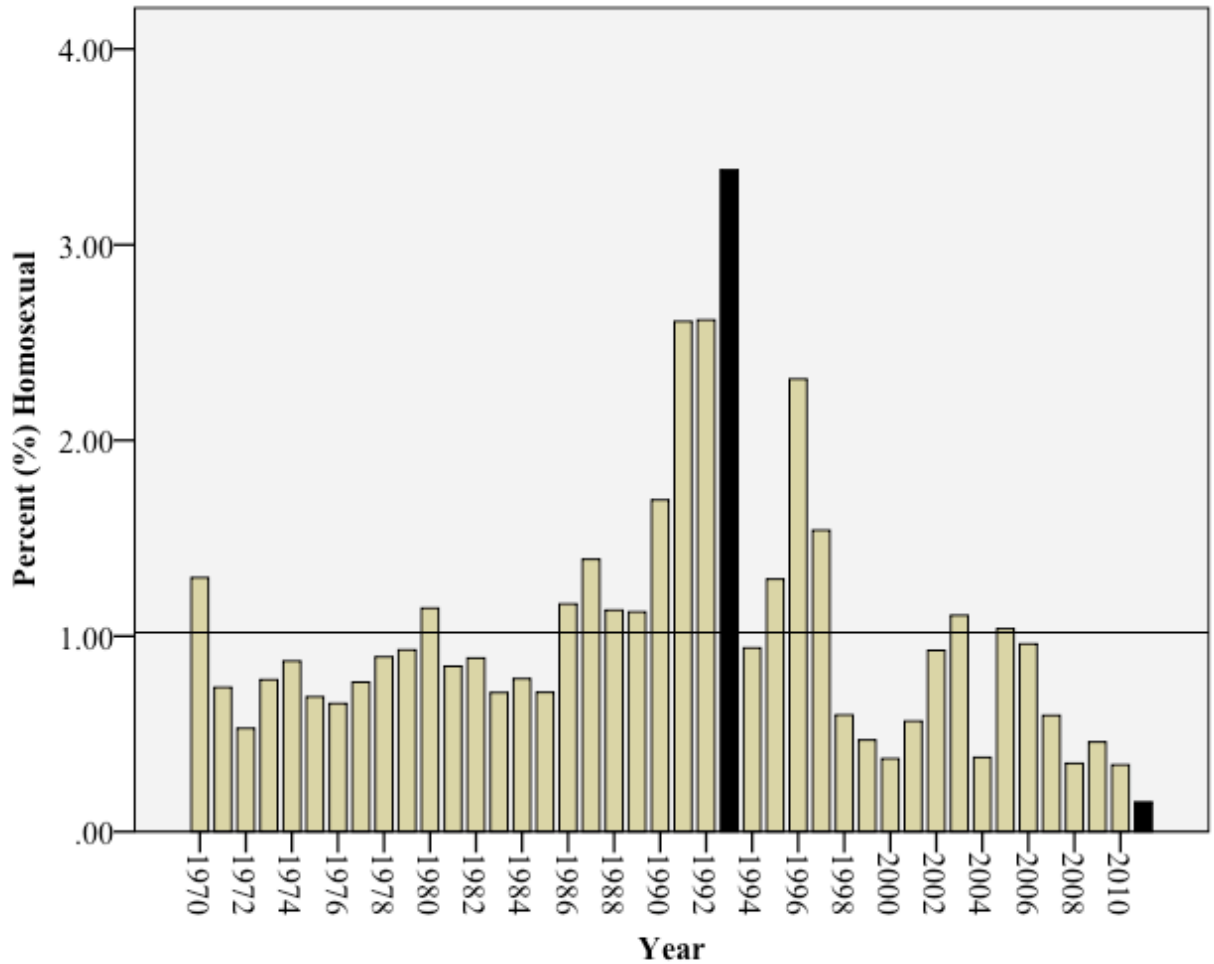


Figure 4.117 Simple Bar Chart for Homosexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Homosexual Category Mean Line (1.02%) of archival data (1970-2011)

Examination of the descriptive statistical results for the homosexual category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the homosexual category frequency has remained relatively consistent throughout the forty-two (42) complete years of archival data (1970-2011) and has remained a relatively small proportion of the annual total of crisis center

call category frequency (< 1.5%). In 1992, Bill Clinton campaigned on a platform of “putting people first.” He promised health care reform, gay rights legislation and an end to threats against abortion rights. In 1993, the homosexual category did reflect a significant increase in frequency. Of interest to note, the significant increase in homosexual category frequency corresponds to Congress’ passage of Don’t Ask, Don’t Tell, Don’t Pursue: Policy concerning homosexuality in the arm forces. While it is impossible to know the nature of the increase in call frequency, the increase in frequency is statistically significant (3.38%) and unlikely due to chance ( $m = 1.02\%$ ;  $SD = 0.66\%$ ).

For 2011, the homosexual category frequency is 0.15% and represents 11 crisis center calls that were coded for this category. Suggestion: consider merging the homosexual category as a subcategory within the sexual category.



## Annual Total of Crisis Center Call Category Frequency and Information

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Information Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (17) Information was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in information frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the information category rather than the absence of data for the information category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the information category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 71,996 for the information category of the annual total of crisis center call category frequency with a mean of 1,714.19 and a standard deviation of 724.33. Descriptive statistical analysis reported a minimum frequency of 344 and a maximum frequency of 3,077 for the information category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.437. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the information category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.68. Figure 4.118 provides a visual representation for the information category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.119 provides a visual representation for the information category frequency of the annual total

of crisis center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with an information category mean line (1,714.19). Figure 4.120 provides a visual representation for the information category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.68

Descriptive Statistics for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Information Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		344	6,733
Maximum		3,077	21,292
Sum		71,996	639,102
Mean		1,714.19	15,216.71
Standard Deviation		724.33	3,470.44



Figure 4.118 Simple Line Chart for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

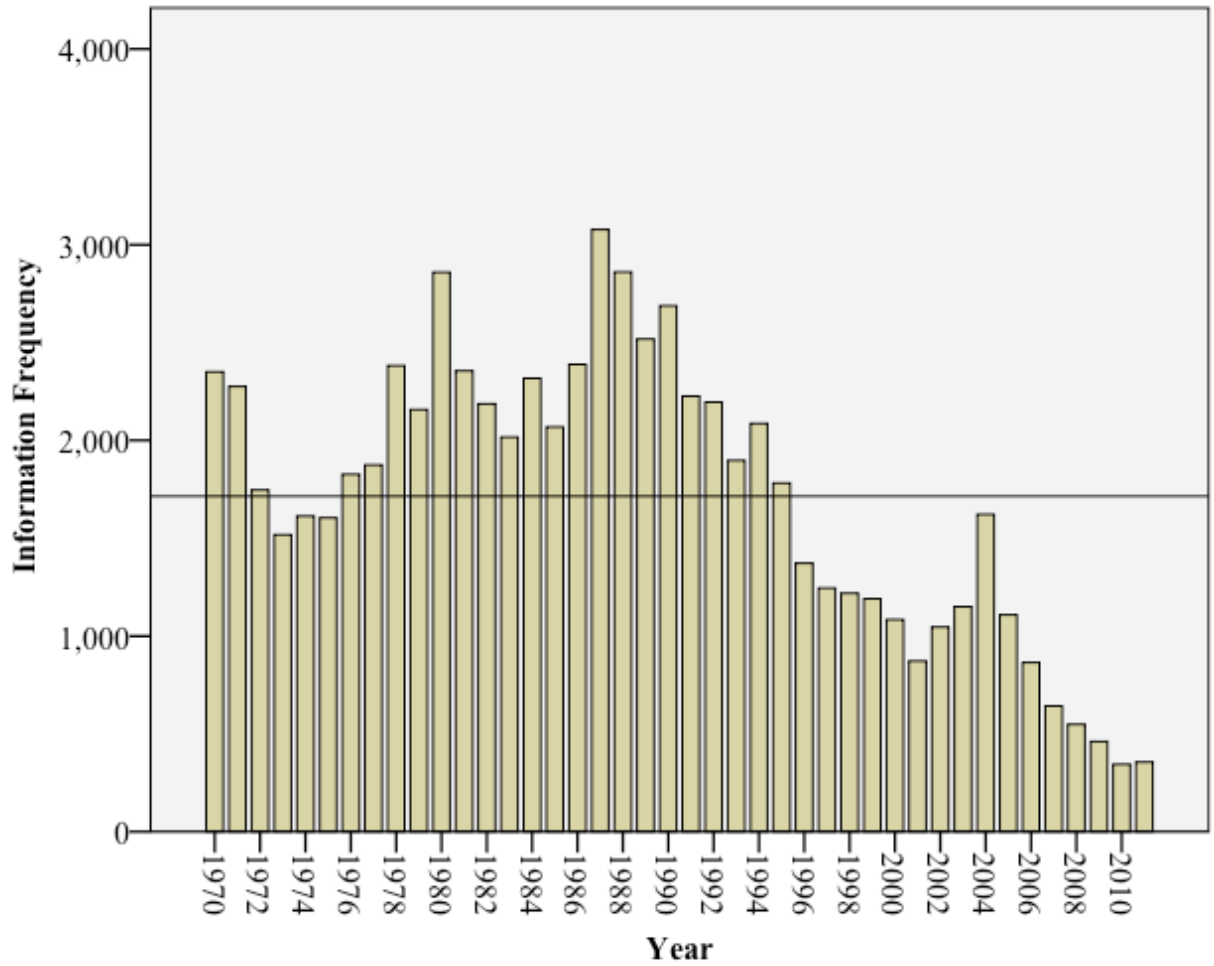


Figure 4.119 Simple Bar Chart for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency with Information Category Mean Line (1,714.19) of archival data (1970-2011)

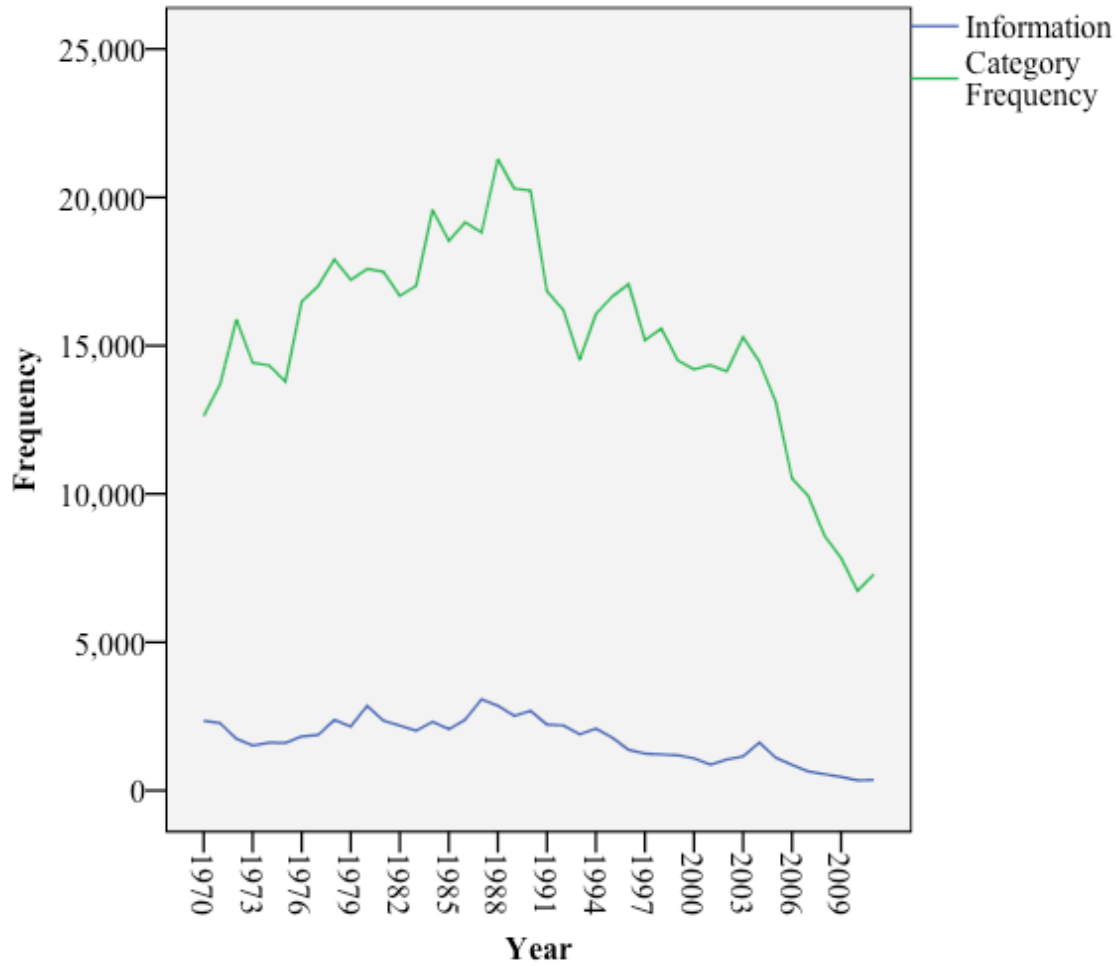


Figure 4.120 Multiple Line Chart for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The information category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the information category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 454.24% for the information category of the annual total of the crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 10.82% and a standard deviation of 3.31%. Descriptive statistical analysis reported a minimum frequency of 4.88% and a maximum frequency of 18.61% for the information category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the information category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.69. Figure 4.121 provides a visual representation for the information category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.122 provides a visual representation for the information category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call



category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) information category mean line (3.31%). Black bars represent years reported as having the highest(1970) and lowest (2011) frequency.

Table 4.69

Descriptive Statistics for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Information Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		4.88%
Maximum		18.61%
Sum		454.24%
Mean		10.82%
Standard Deviation		3.31%



Figure 4.121 Simple Line Chart for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

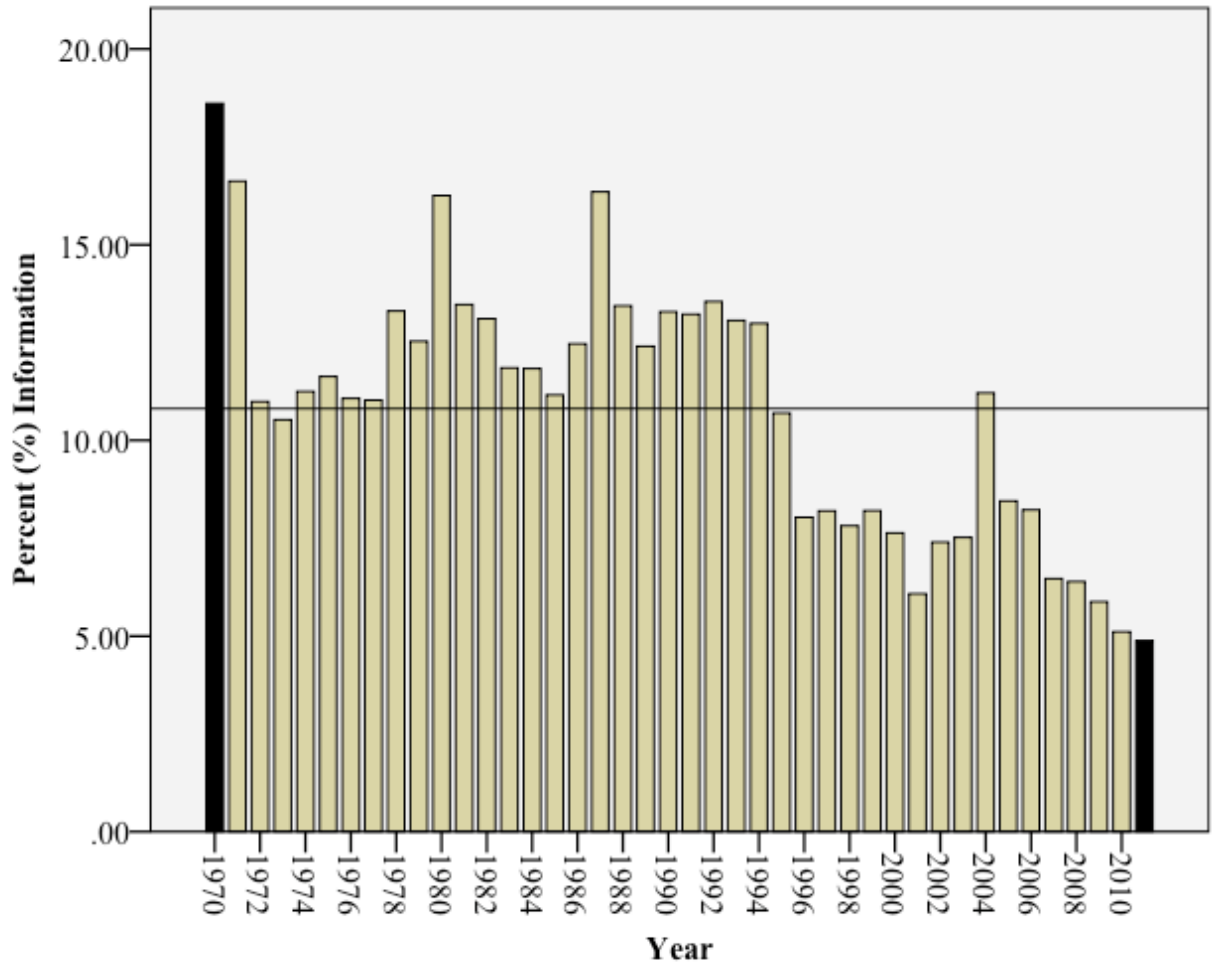


Figure 4.122 Simple Bar Chart for Information Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Information Category Mean Line (3.31%) of archival data (1970-2011)

Examination of the descriptive statistical results for the information category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the information category frequency has consistently decreased since 1970 when it was at its highest frequency(3,077). Since 1996, it has remained a relatively moderate proportion of the annual total of crisis center call category

frequency (between 5% and 10%). Anecdotal evidence gathered from conversations with administrative personnel identifies the information category frequency as calls made to the crisis call center by individuals seeking factual information (e.g. a telephone number or correct spelling of a word) and do not reflect an individual in any state of clinical crisis.

## Annual Total of Crisis Center Call Category Frequency and Juvenile

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Juvenile Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (14) Juvenile was coded for nine (9) years of the archival data (1969-1977). Although the archival data for the juvenile frequency of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as an individual call category. When zero (0) is reported in the juvenile frequency of the annual total of crisis center call category frequency for years 1969-1977, the number reflects the absence of call frequency related to the juvenile category rather than the absence of data for the juvenile category. When zero (0) is reported in juvenile frequency of the annual total of crisis center call category frequency for years 1978-2011, the number reflects the absence of data for the juvenile category

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-1977). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Eight (8) complete juvenile category years were identified and used for statistical analysis (1970-1977).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No

assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the juvenile category frequency of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). Results of the descriptive statistical analysis reported a sum of 14,698 for the juvenile category of the annual total of crisis center call category frequency with a mean of 1,837.25 and a standard deviation of 704.22. Descriptive statistical analysis reported a minimum frequency of 1,077 and a maximum frequency of 3,057 for the juvenile category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing eight (8) complete years of archival data (1970-1977). Results of the descriptive statistical analysis reported a sum of 118,243 for the annual total of crisis center call category frequency with a mean of 14,780.38 and a standard deviation of 1,521.90. Descriptive statistical analysis reported a minimum frequency of 12,629 and a maximum frequency of 17,006 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the juvenile category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977) are reported

in Table 4.70. Figure 4.123 provides a visual representation for the juvenile category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of the archival data (1970-1977). Figure 4.124 provides a visual representation for the juvenile category frequency of the annual total of crisis center call frequency as a simple bar chart encompassing eight (8) complete years of the archival data (1970-1977) with a juvenile category mean line (1,837.25). Figure 4.125 provides a visual representation for the juvenile category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing eight (8) complete years of the archival data (1970-1977).



Table 4.70

Descriptive Statistics for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

Descriptive Statistics			
		Juvenile Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		1,077	12,629
Maximum		3,047	17,006
Sum		14,698	118,243
Mean		1,837.25	14,780.38
Standard Deviation		704.22	1,521.90



Figure 4.123 Simple Line Chart for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

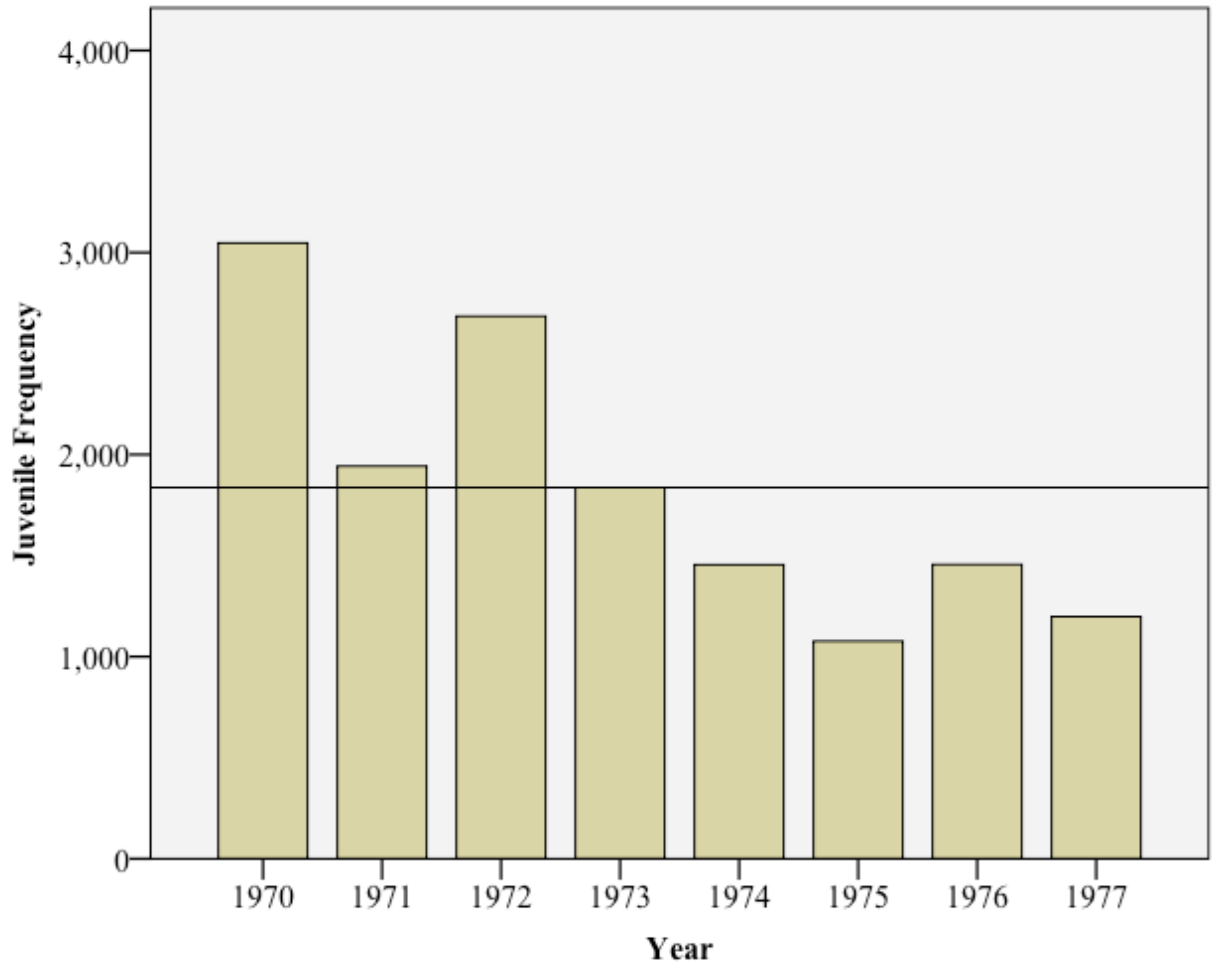


Figure 4.124 Simple Bar Chart for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency with Juvenile Category Mean Line (1,837.25) of archival data (1970-1977)

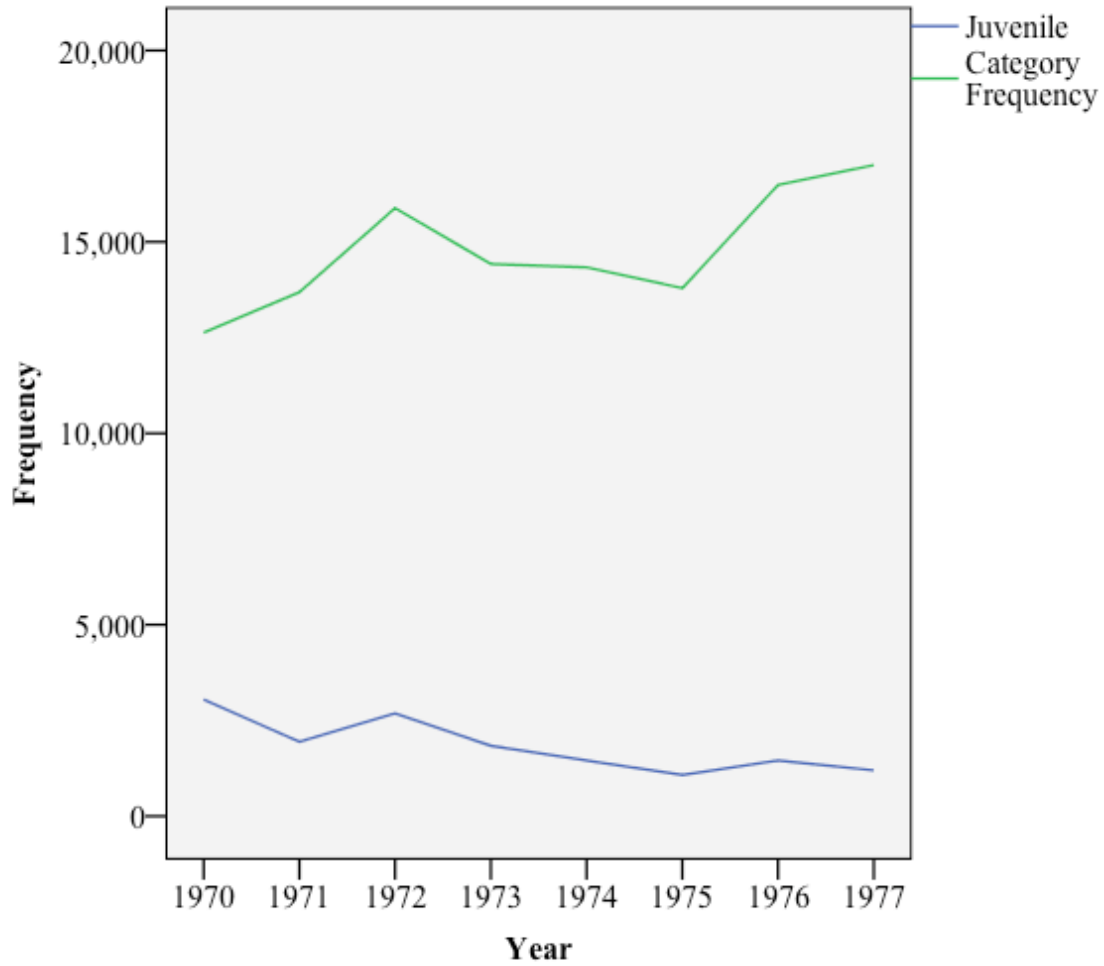


Figure 4.125 Multiple Line Chart for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

*Descriptive Statistics for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The juvenile category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). A descriptive statistical analysis was conducted to evaluate the juvenile frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). The results of the descriptive statistical analysis reported a sum of 101.80% for the juvenile category of the annual total of the crisis center call category frequency as a ratio(%) of the annual total of crisis center call category frequency with a mean of 12.72% and a standard deviation of 5.71%. Descriptive statistical analysis reported a minimum frequency of 7.04% and a maximum frequency of 24.13% for the juvenile category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the juvenile category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977) are reported in Table 4.71. Figure 4.126 provides a visual representation for the juvenile category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of the archival data (1970-1977). Figure 4.127 provides a visual representation for the juvenile category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart

encompassing eight (8) complete years of the archival data (1970-1977) with a percentage (%) juvenile category mean line (12.72%). Black bars represent years reported as having the highest (1970) and lowest (1977) frequency.

Table 4.71

Descriptive Statistics for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

Descriptive Statistics		
		Juvenile Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		7.04%
Maximum		24.13%
Sum		101.80%
Mean		12.72%
Standard Deviation		5.71%

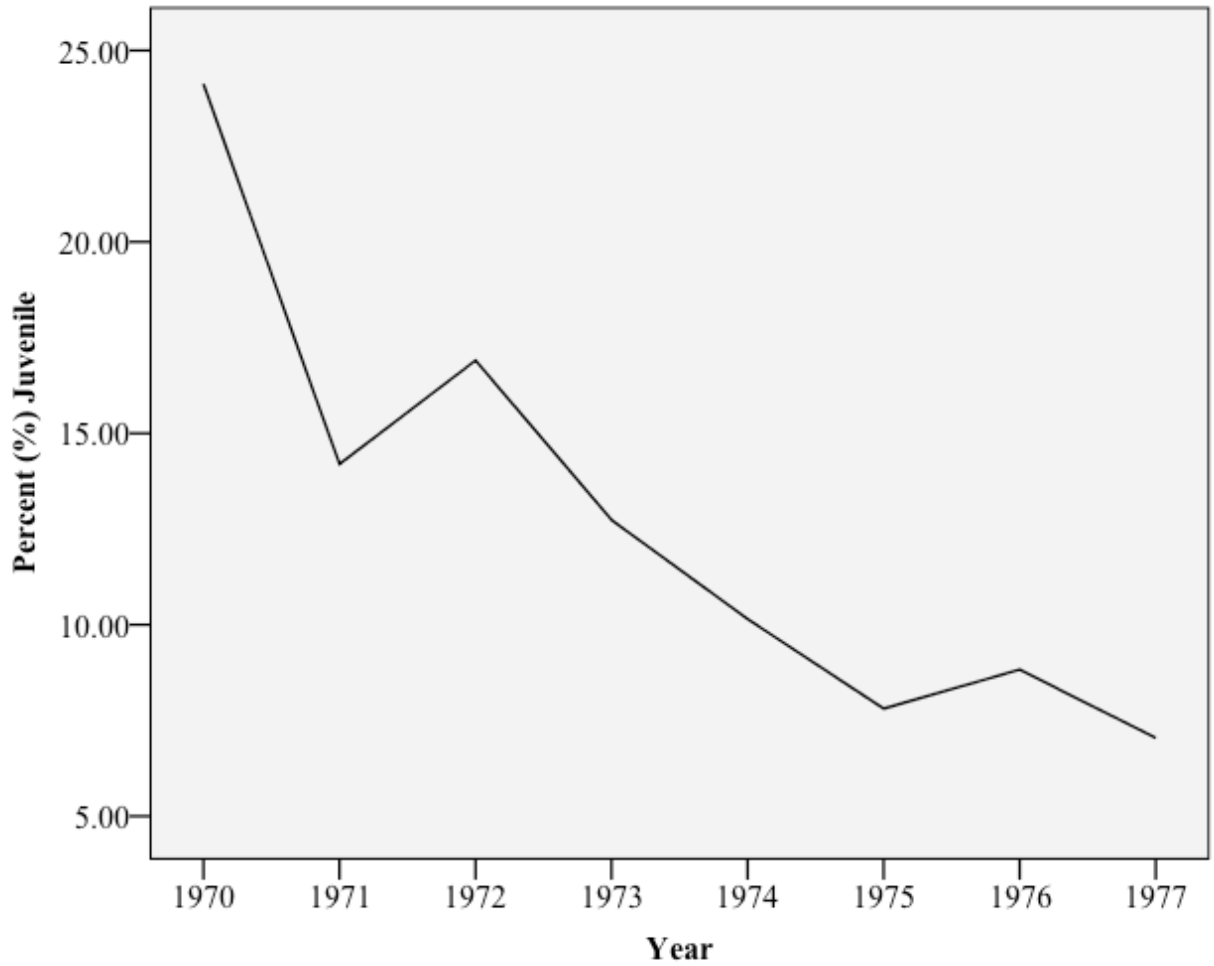


Figure 4.126 Simple Line Chart for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)



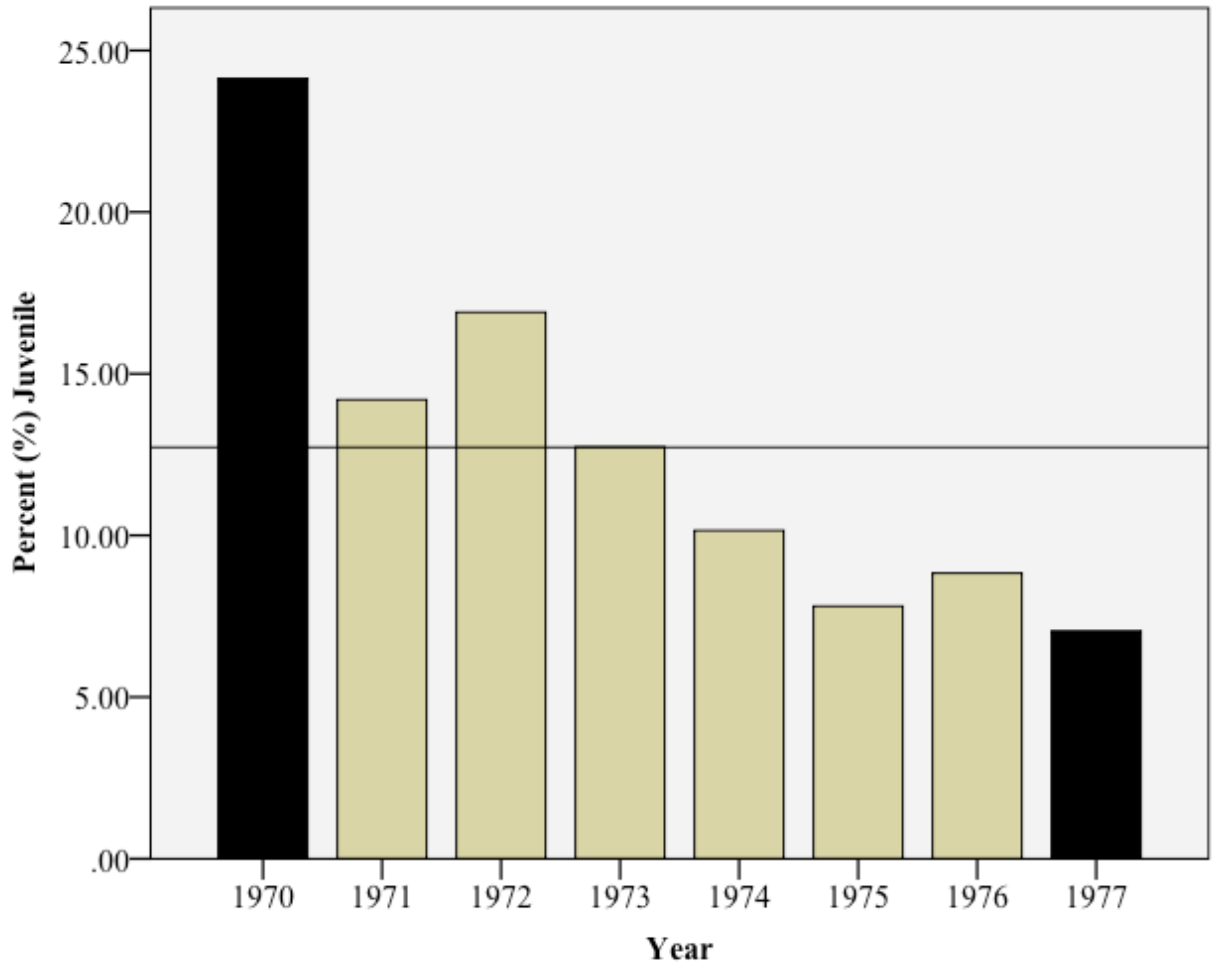


Figure 4.127 Simple Bar Chart for Juvenile Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Juvenile Category Mean Line (12.72%) of archival data (1970-1977)

Examination of the descriptive statistical results for the juvenile category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the juvenile category frequency consistently decreased (from 24.13% to 7.04%) during the years for which it was coded (1970-1977). In 1978, the juvenile category was discontinued and no further data is available.

## Annual Total of Crisis Center Call Category Frequency and Legal

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Legal Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (19) Legal was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in the legal frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the legal category rather than the absence of data for the legal category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the legal category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 5,315 for the legal category of the annual total of crisis center call category frequency with a mean of 126.55 and a standard deviation of 70.02. Descriptive statistical analysis reported a minimum frequency of 45 and a maximum frequency of 283 for the legal category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the legal category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.72. Figure 4.128 provides a visual representation for the legal category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.129 provides a visual representation for the legal category frequency of the annual total of crisis

center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a legal category mean line (126.55). Figure 4.130 provides a visual representation for the legal category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.72

Descriptive Statistics for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Legal Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		45	6,733
Maximum		283	21,292
Sum		5,315	639,102
Mean		126.55	15,216.71
Standard Deviation		70.02	3,470.44

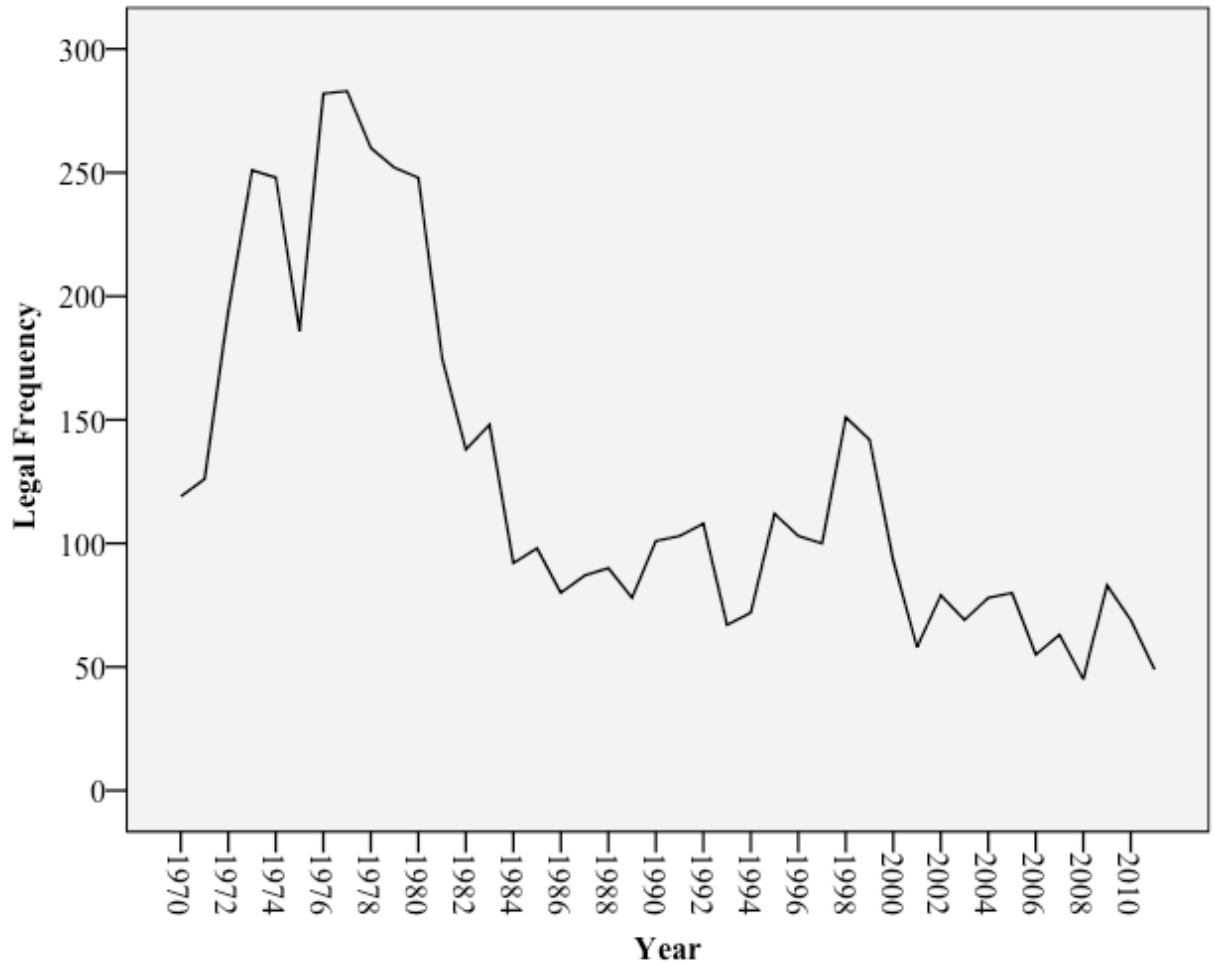


Figure 4.128 Simple Line Chart for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

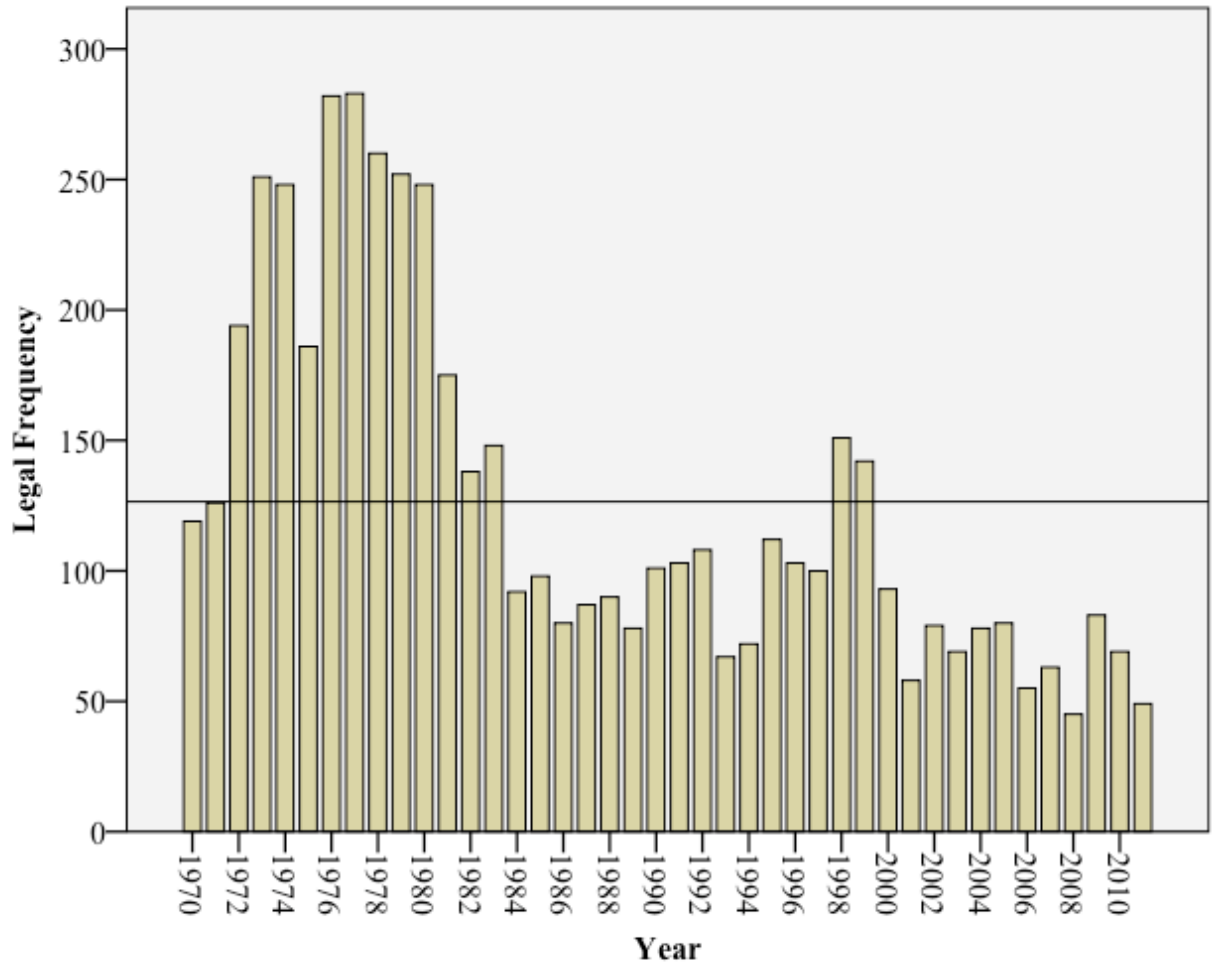


Figure 4.129 Simple Bar Chart for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency with Legal Category Mean Line (126.55) of archival data (1970-2011)

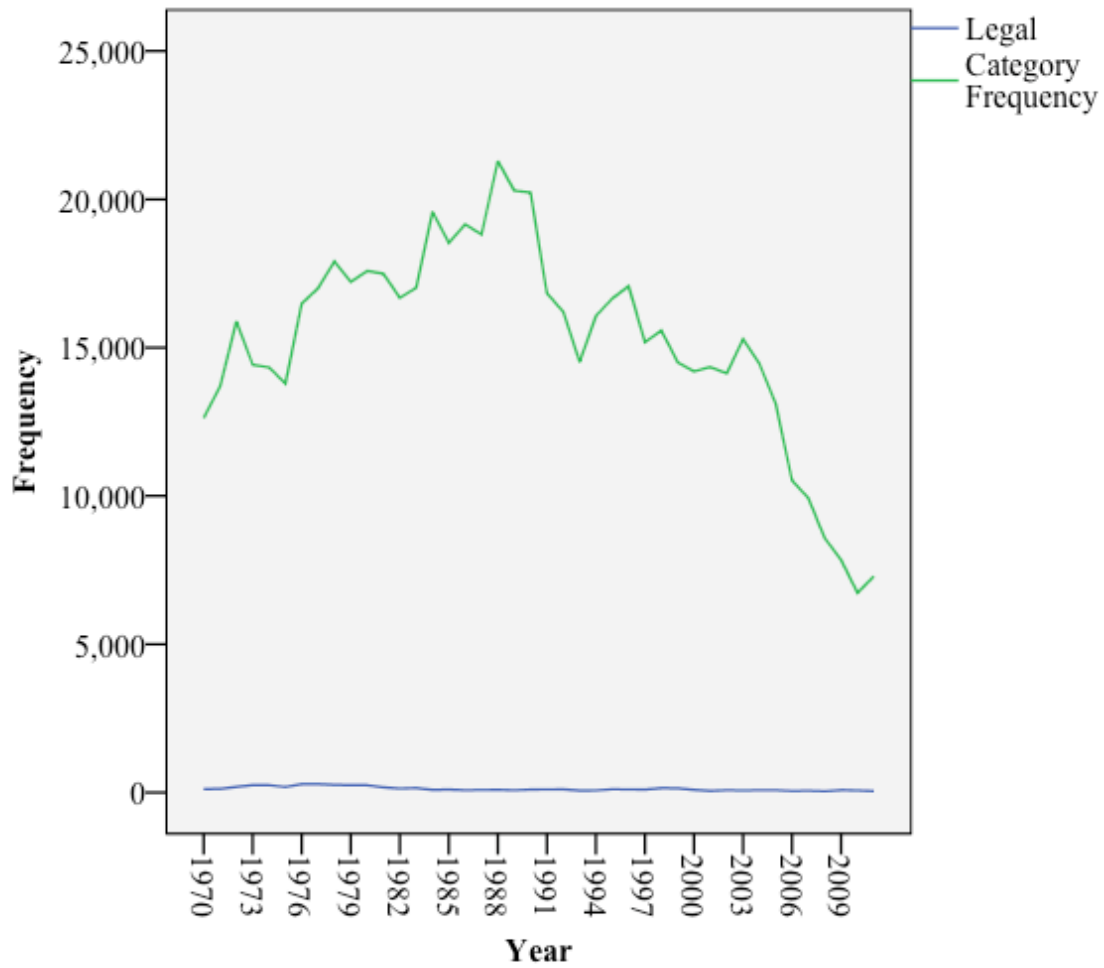


Figure 4.130 Multiple Line Chart for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)



*Descriptive Statistics for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The legal category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the legal frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 35.21% for the legal category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 0.84% and a standard deviation of 0.42%. Descriptive statistical analysis reported a minimum frequency of 0.38% and a maximum frequency of 1.74% for the legal category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the legal category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.73. Figure 4.131 provides a visual representation for the legal category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.132 provides a visual representation for the legal category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage

(%) legal category mean line (0.84%). Black bars represent years reported as having the highest (1973) and lowest (1989) frequency.

Table 4.73

Descriptive Statistics for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Legal Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.38%
Maximum		1.74%
Sum		35.21%
Mean		0.84%
Standard Deviation		0.42%

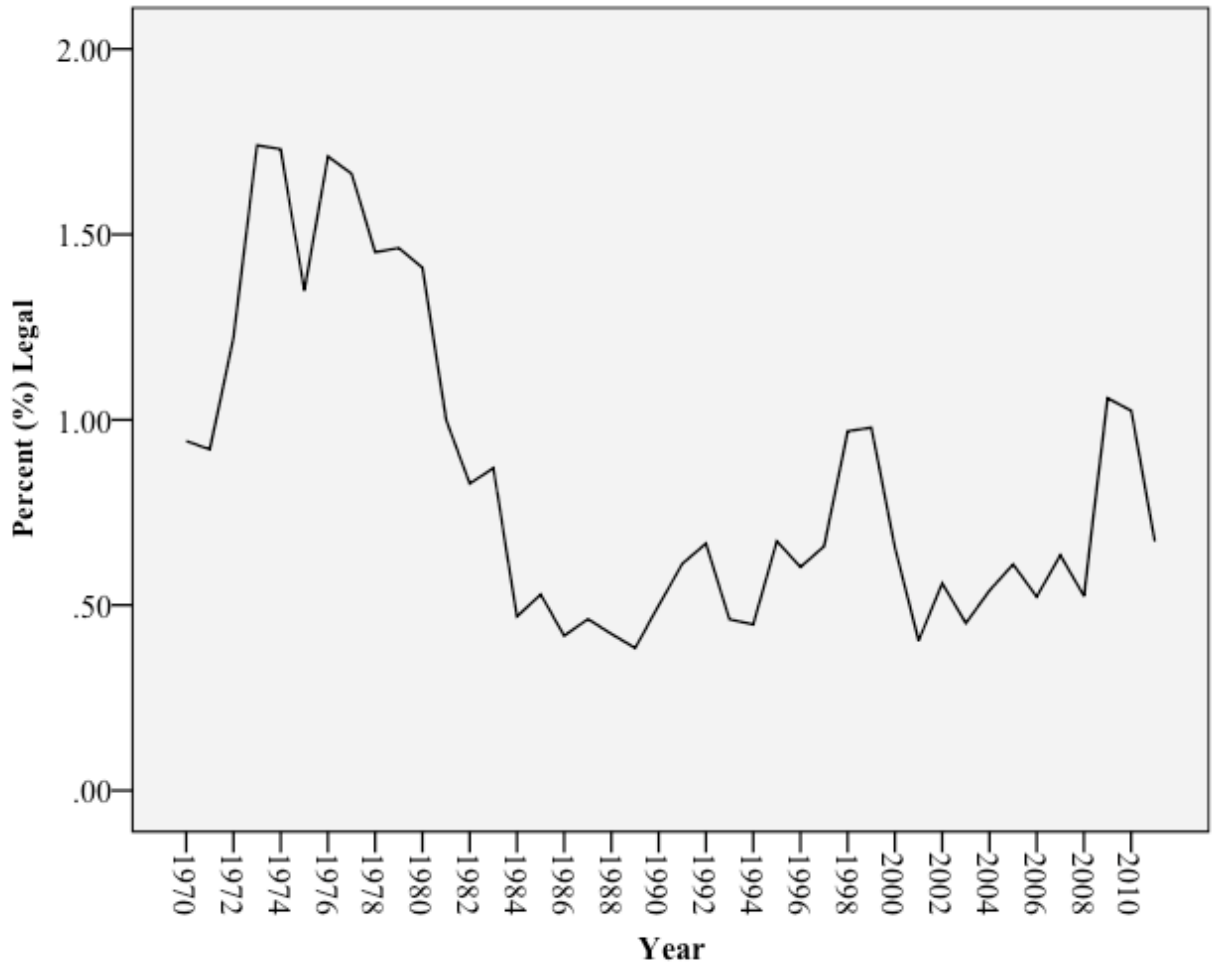


Figure 4.131 Simple Line Chart for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

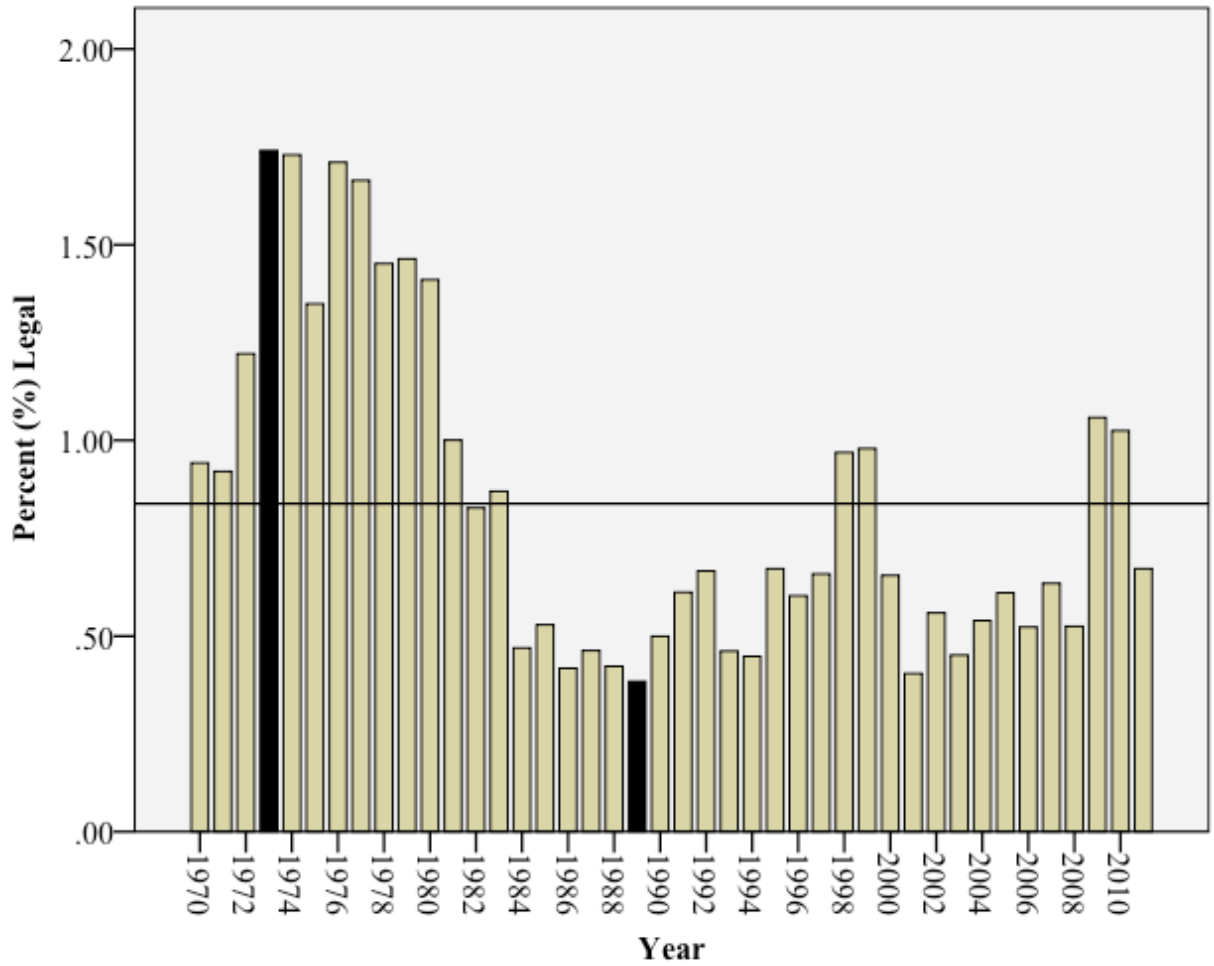


Figure 4.132 Simple Bar Chart for Legal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Legal Category Mean Line (0.84%) of archival data (1970-2011)

## Annual Total of Crisis Center Call Category Frequency and Loneliness

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Lonely Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (20) Lonely was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in the lonely frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the lonely category rather than the absence of data for the lonely category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the lonely category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 99,877 for the lonely category of the annual total of crisis center call category frequency with a mean of 2,378.02 and a standard deviation of 766.97. Descriptive statistical analysis reported a minimum frequency of 664 and a maximum frequency of 4,594 for the lonely category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the lonely category frequency of the annual total of crisis center call frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.74. Figure 4.133 provides a visual representation for the lonely category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.134 provides a visual representation for the lonely category frequency of the annual total of crisis center call frequency as a simple bar chart encompassing forty-two (42) complete

years of the archival data (1970-2011) with a lonely category mean line (766.50). Figure 4.135 provides a visual representation for the lonely category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).



Table 4.74

Descriptive Statistics for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Lonely Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		664	6,733
Maximum		4,594	21,292
Sum		99,877	639,102
Mean		2,378.02	15,216.71
Standard Deviation		766.97	3,470.44



Figure 4.133 Simple Line Chart for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

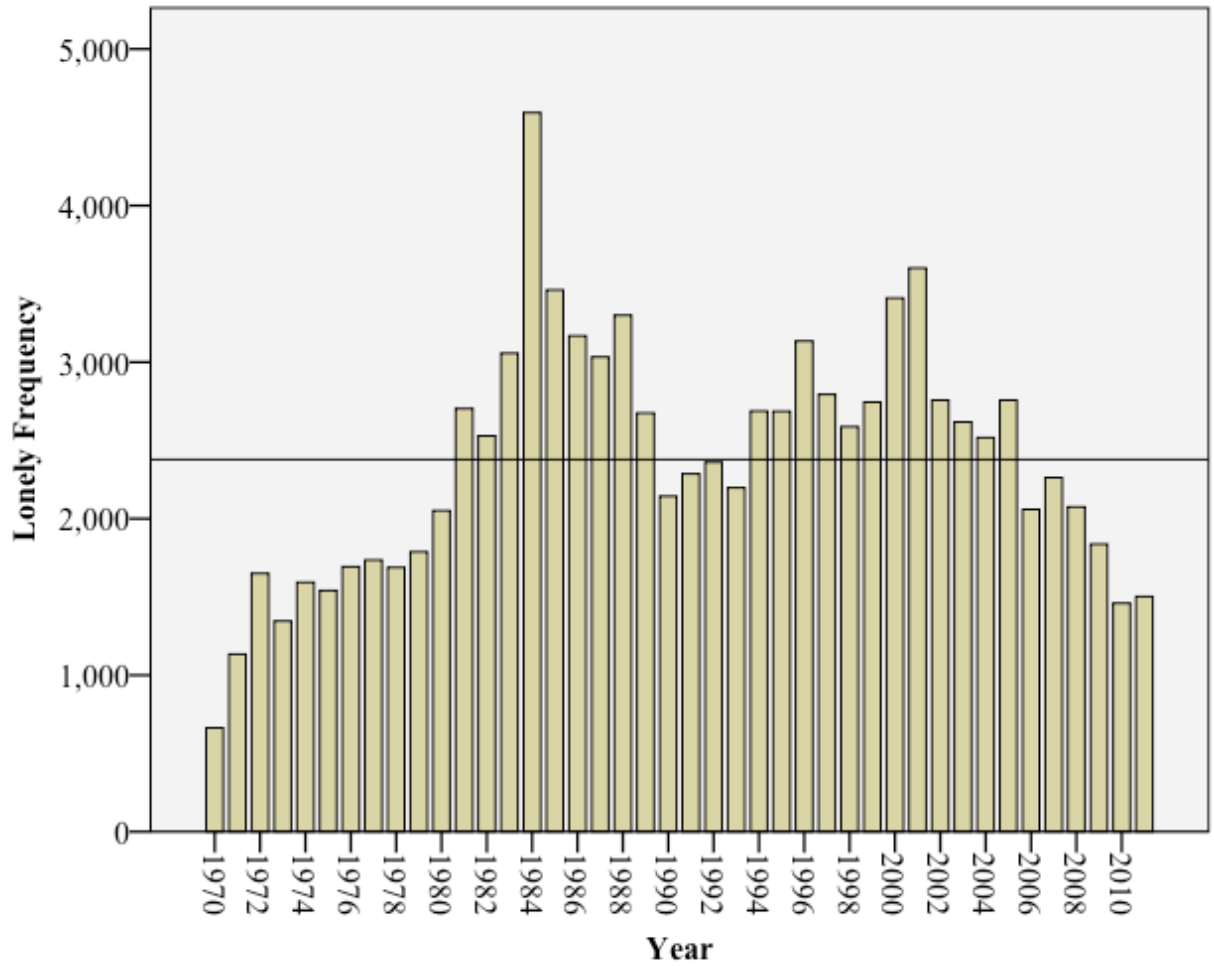


Figure 4.134 Simple Bar Chart for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency with Lonely Category Mean Line (766.97) of archival data (1970-2011)

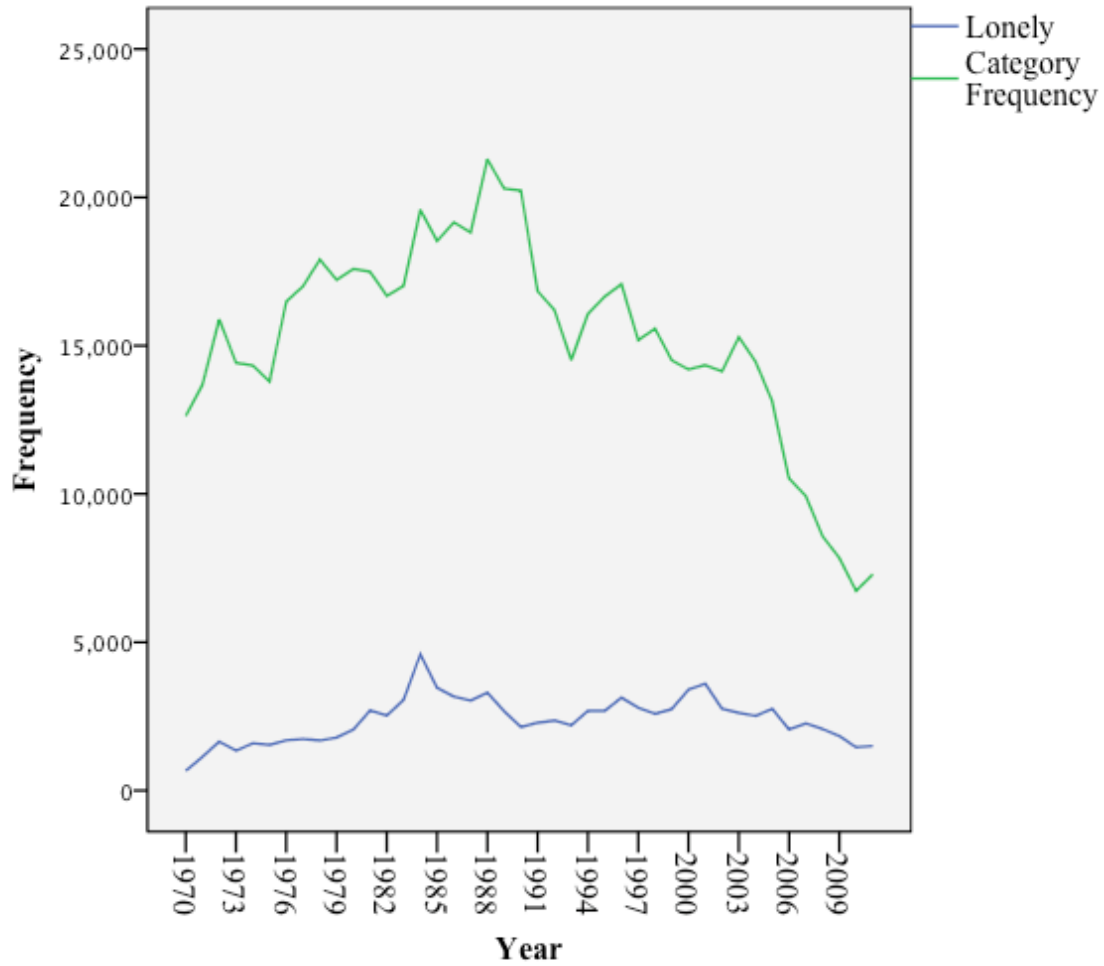


Figure 4.135 Multiple Line Chart for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The lonely category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the lonely frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 675.00% for the lonely category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 16.07% and a standard deviation of 4.98%. Descriptive statistical analysis reported a minimum frequency of 5.26% and a maximum frequency of 25.10% for the lonely category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results the lonely category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.75. Figure 4.136 provides a visual representation for the lonely category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.137 provides a visual representation for the lonely category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage

(%) lonely category mean line (16.07%). Black bars represent years reported as having the highest (2001) and lowest (1970) frequency.

Table 4.75

Descriptive Statistics for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Lonely Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		5.26%
Maximum		25.10%
Sum		675%
Mean		16.07%
Standard Deviation		4.98%

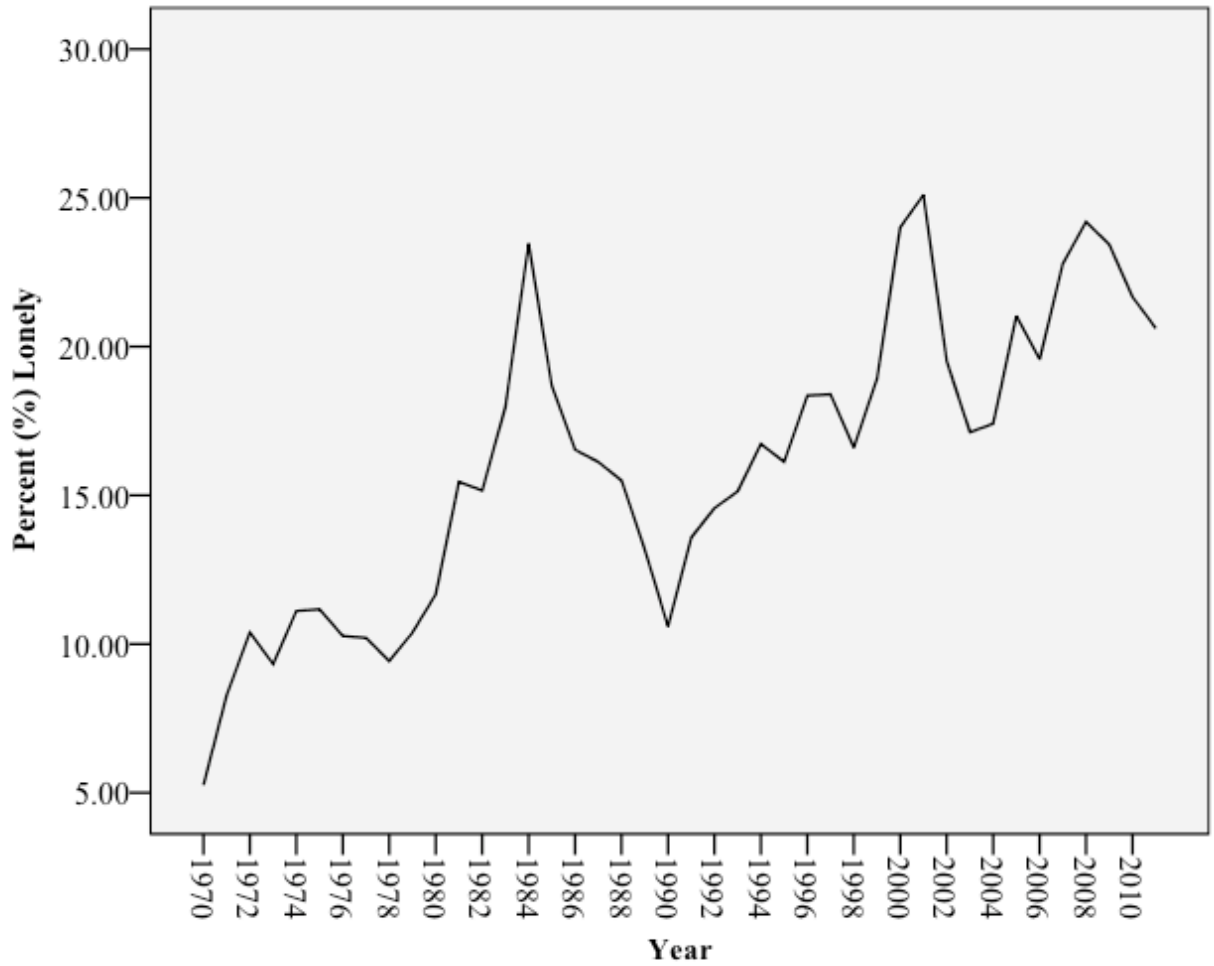


Figure 4.136 Simple Line Chart for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)



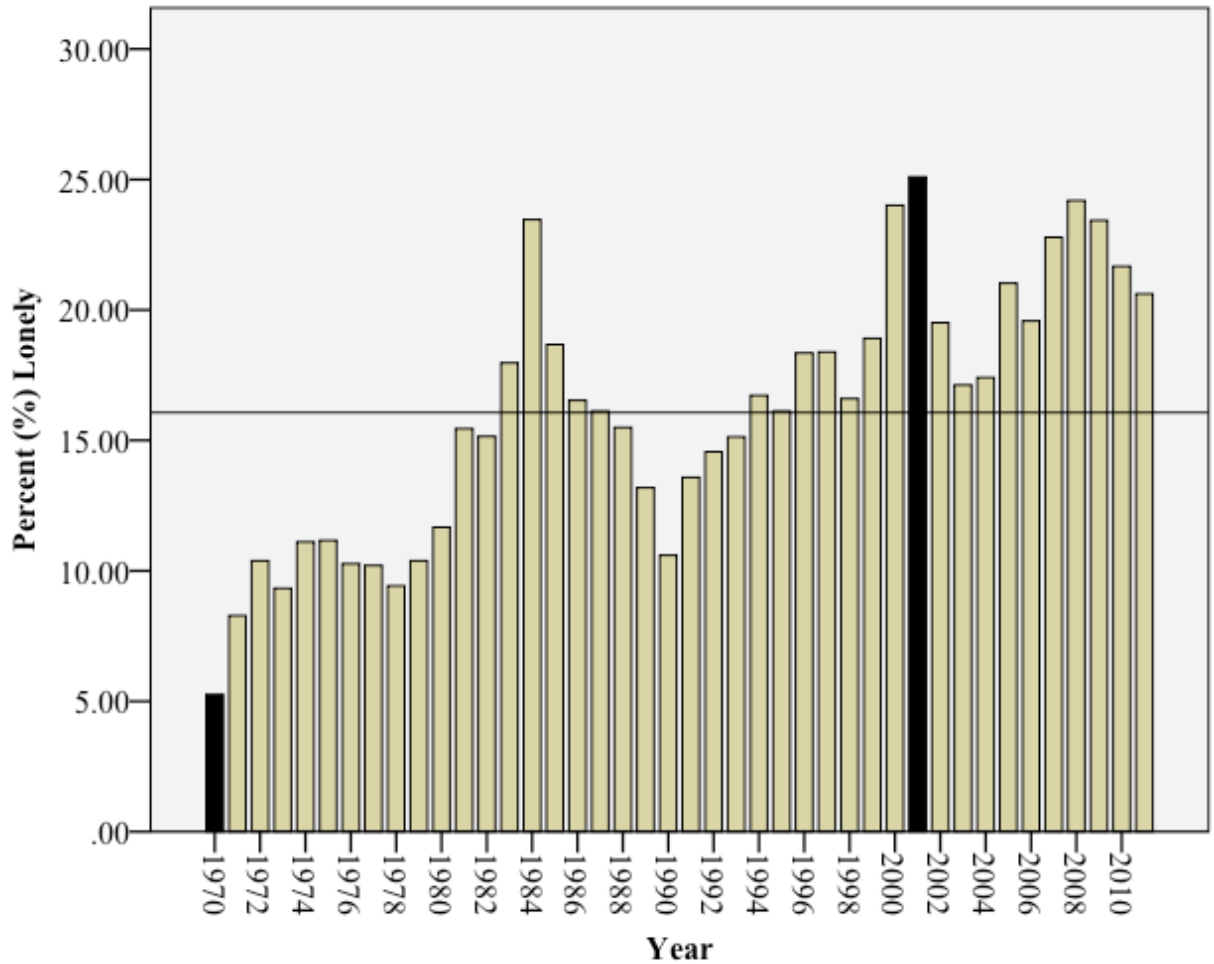


Figure 4.137 Simple Bar Chart for Lonely Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Lonely Category Mean Line (16.07%) of archival data (1970-2011)

Examination of the descriptive statistical results for the lonely category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the lonely category frequency has statistically increased since 1970 (from 5.26% in 1970 to 20.62% in 2011) and that this increase is

statistically significant ( $m = 16.07\%$ ;  $SD = 4.98\%$ ). Descriptive statistical results report the lonely category as having the highest average frequency of all crisis call categories. ( $m = 16.07\%$ )

## Annual Total of Crisis Center Call Category Frequency and Marital Issues

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Marital Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (21) Marital was coded on VCLs throughout thirty-four (34) years of the archival data (1978-2011). Although the archival data for the marital frequency of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as an individual call category. When zero (0) is reported in marital frequency of the annual total of crisis center call category frequency for years 1969-1977, the number reflects the absence of data for the marital category. When zero (0) is reported in marital frequency of the annual total of crisis center call category frequency for years 1978-2011, the number reflects the absence of call frequency related to the marital category rather than the absence of data for the marital category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Thirty-four (34) complete years were identified and used for statistical analysis (1978-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No

assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the marital category frequency of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). Results of the descriptive statistical analysis reported a sum of 21,696 for the marital category of the annual total of crisis center call category frequency with a mean of 638.12 and a standard deviation of 286.23. Descriptive statistical analysis reported a minimum frequency of 114 and a maximum frequency of 1,147 for the marital category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of archival data (1978-2011). Results of the descriptive statistical analysis reported a sum of 520,859 for the annual total of crisis center call category frequency with a mean of 15,319.38 and a standard deviation of 3,796.76. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the marital category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011) are

reported in Table 4.76. Figure 4.138 provides a visual representation for the marital category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011). Figure 4.139 provides a visual representation for the marital category frequency of the annual total of crisis center call frequency as a simple bar chart encompassing thirty-four (34) complete years of the archival data (1978-2011) with a marital category mean line (638.12). Figure 4.140 provides a visual representation for the marital category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011).

Table 4.76

Descriptive Statistics for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

Descriptive Statistics			
		Marital Frequency	Category Frequency
N	Valid	34	34
	Missing	0	0
Minimum		114	6,733
Maximum		1,147	21,292
Sum		21,696	520,859.38
Mean		638.12	15,319.38
Standard Deviation		286.23	3,796.76

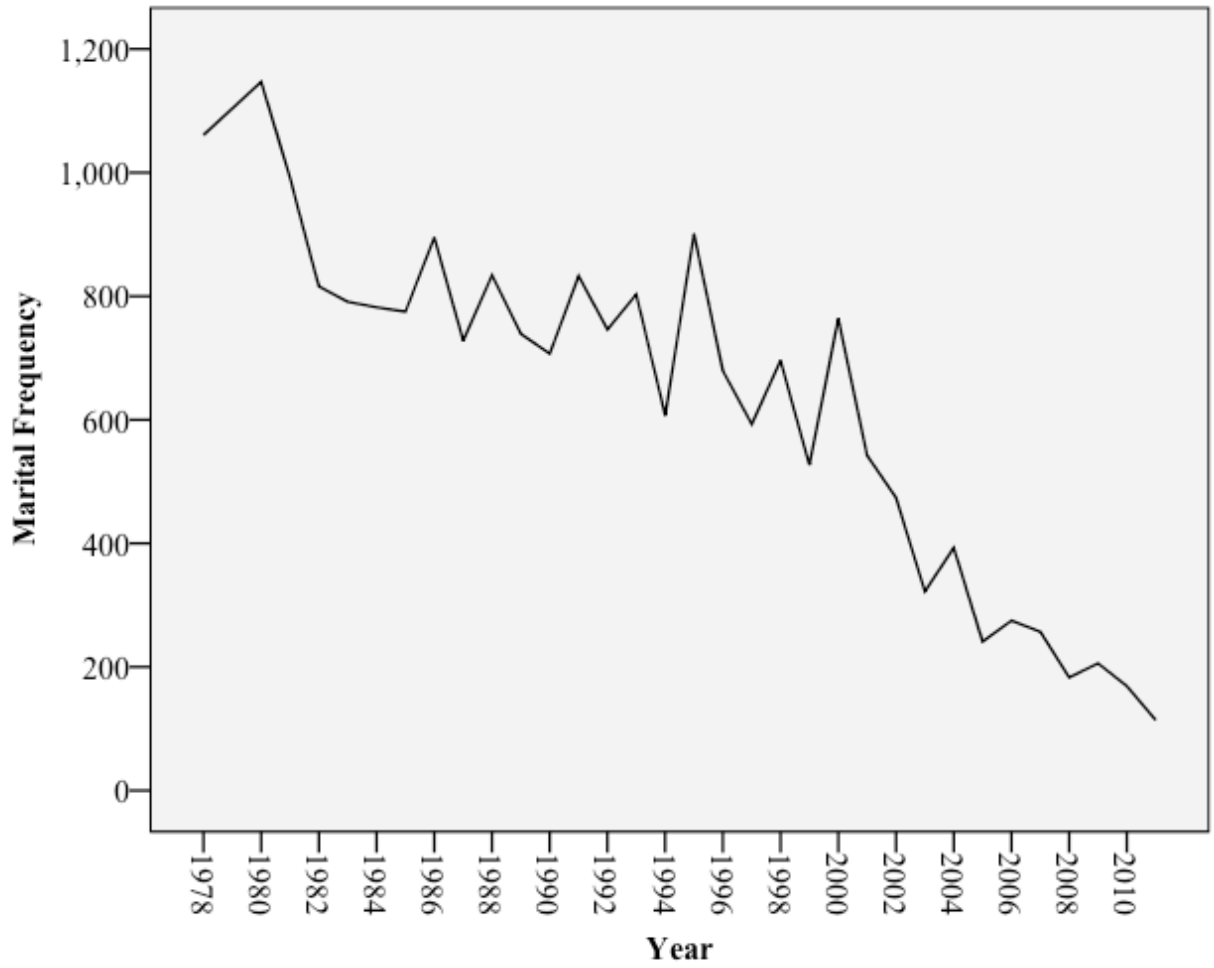


Figure 4.138 Simple Line Chart for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

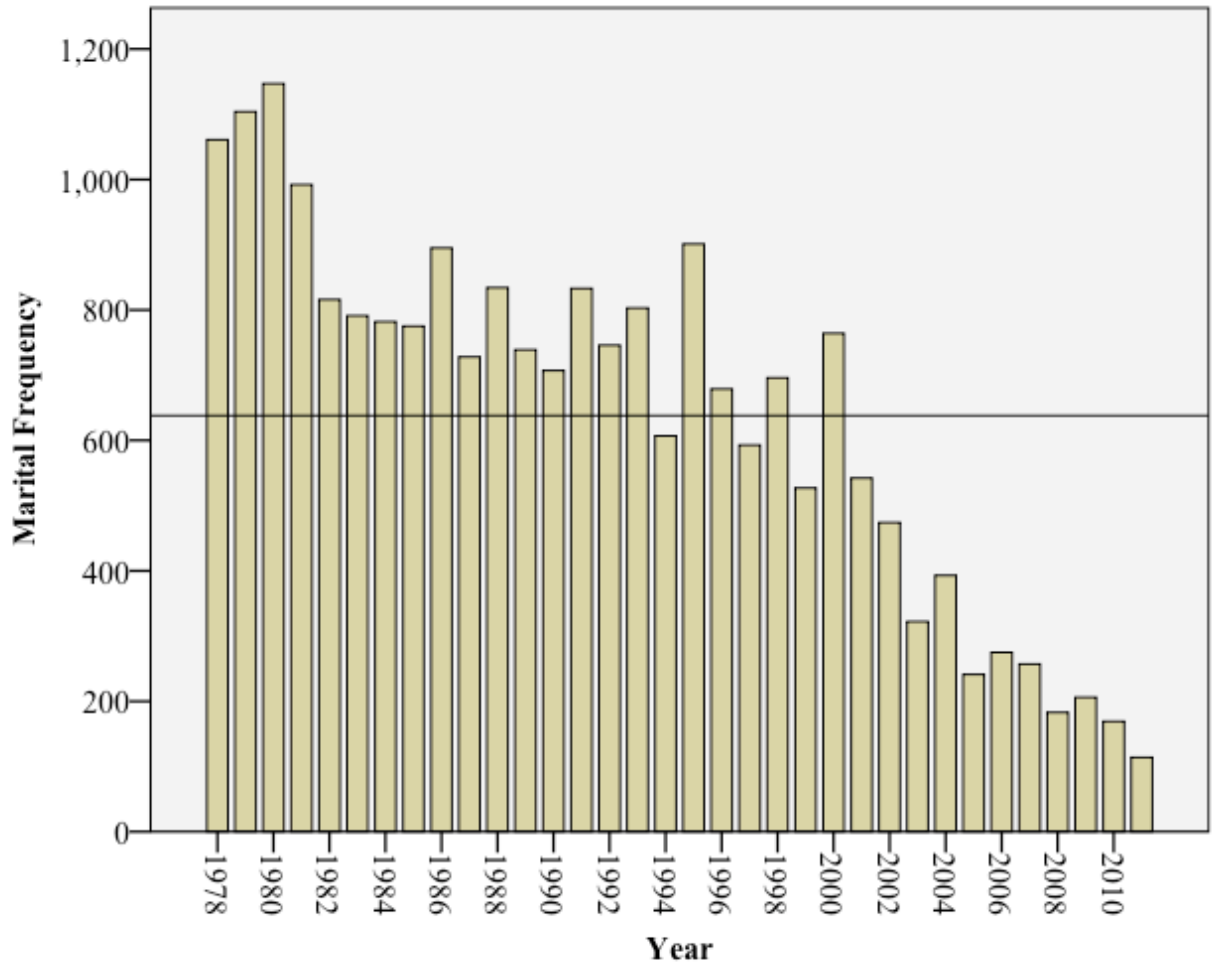


Figure 4.139 Simple Bar Chart for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency with Marital Category Mean Line (638.12) of archival data (1978-2011)



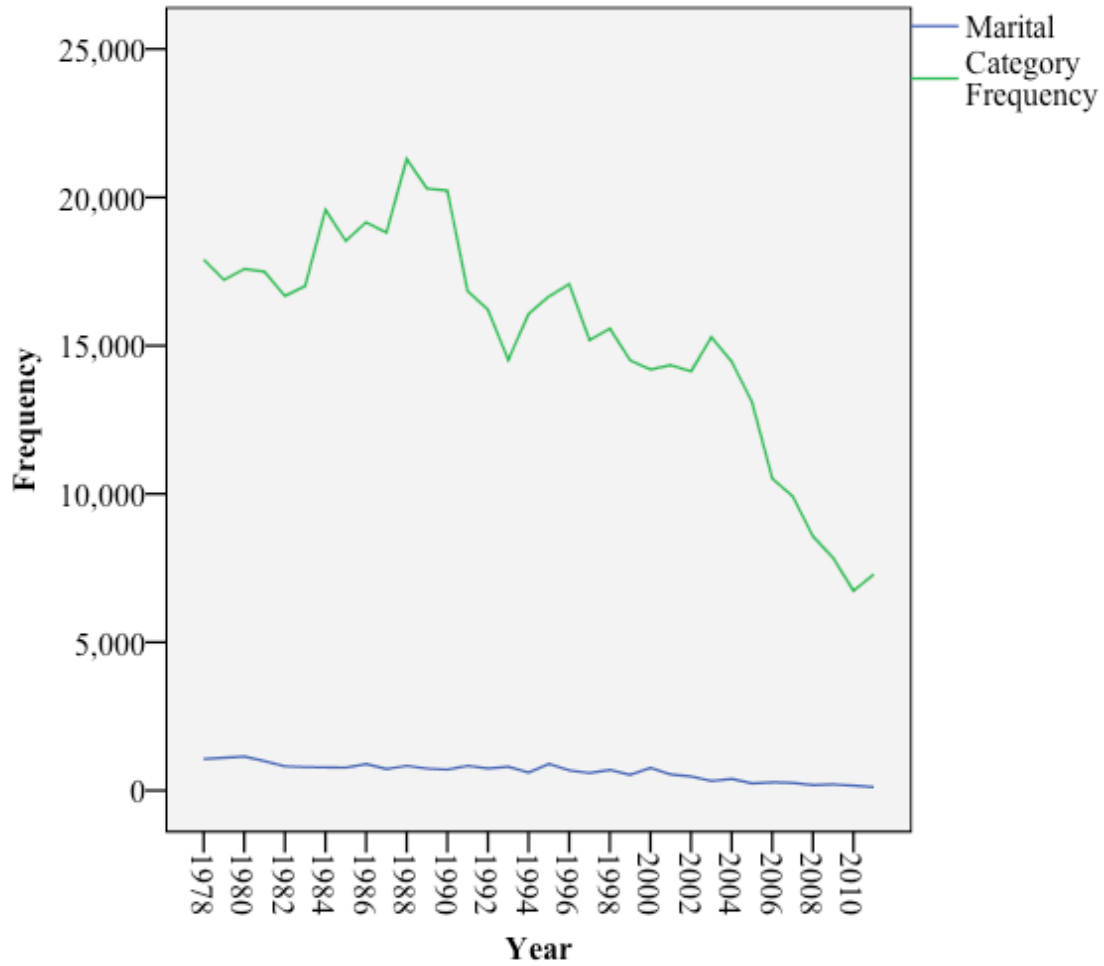


Figure 4.141 Multiple Line Chart for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

*Descriptive Statistics for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The marital category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). A descriptive statistical analysis was conducted to evaluate the marital category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). The results of the descriptive statistical analysis reported a sum of 135.50% for the marital category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 3.98% and a standard deviation of 1.31%. Descriptive statistical analysis reported a minimum frequency of 1.56% and a maximum frequency of 6.52% for the marital category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the marital category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011) are reported in Table 4.77. Figure 4.141 provides a visual representation for the marital category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011). Figure 4.142 provides a visual representation for the marital category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category

frequency as a simple bar chart encompassing thirty-four (34) complete years of the archival data (1978-2011) with a percentage (%) marital category mean line (3.98%). Black bars represent years reported as having the highest (1980) and lowest (2011) frequency.

Table 4.77

Descriptive Statistics for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

Descriptive Statistics		
		Marital Frequency as Ratio (%) of Category Frequency
N	Valid	34
	Missing	0
Minimum		1.56%
Maximum		6.52%
Sum		135.50%
Mean		3.98%
Standard Deviation		1.31%

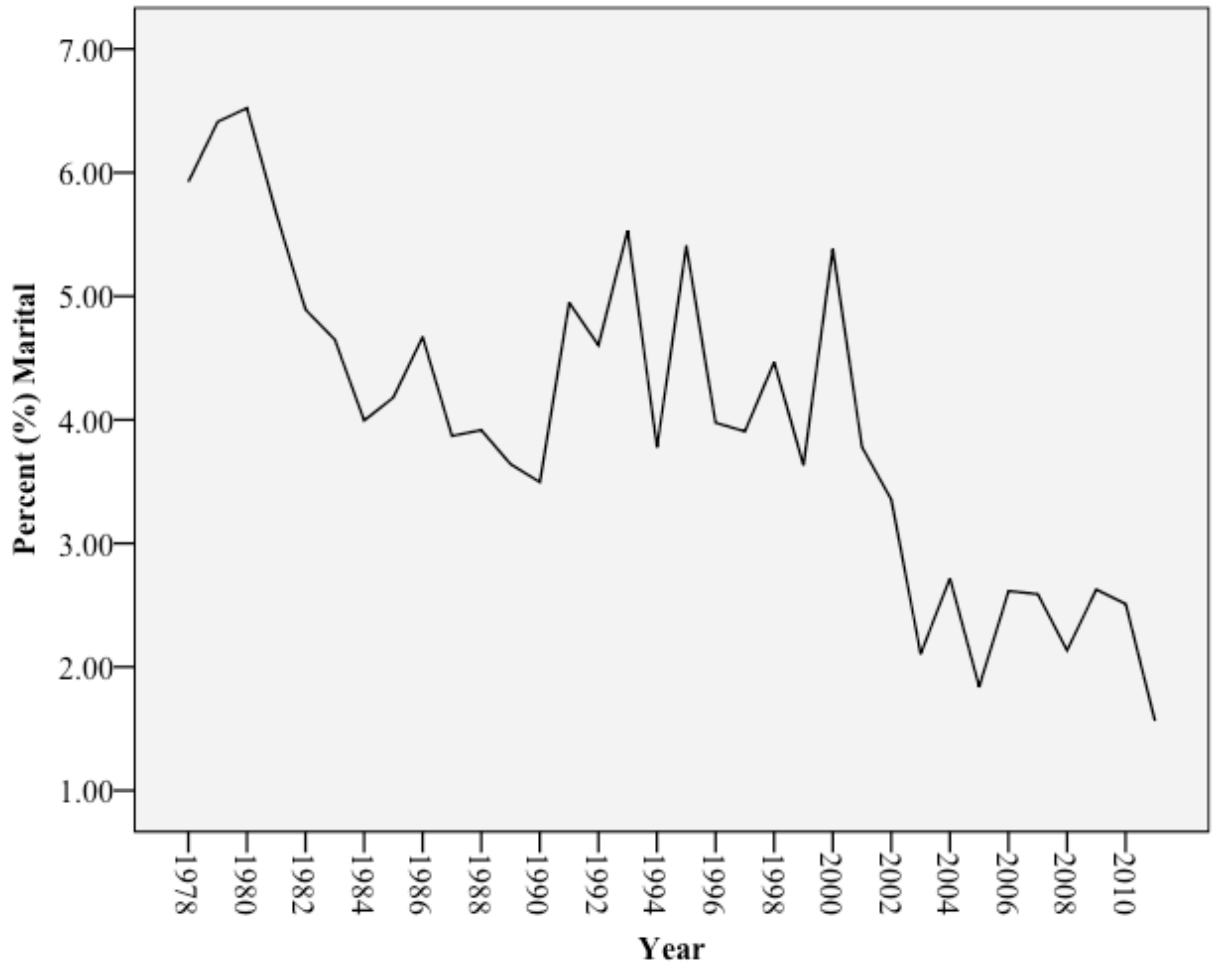


Figure 4.141 Simple Line Chart for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

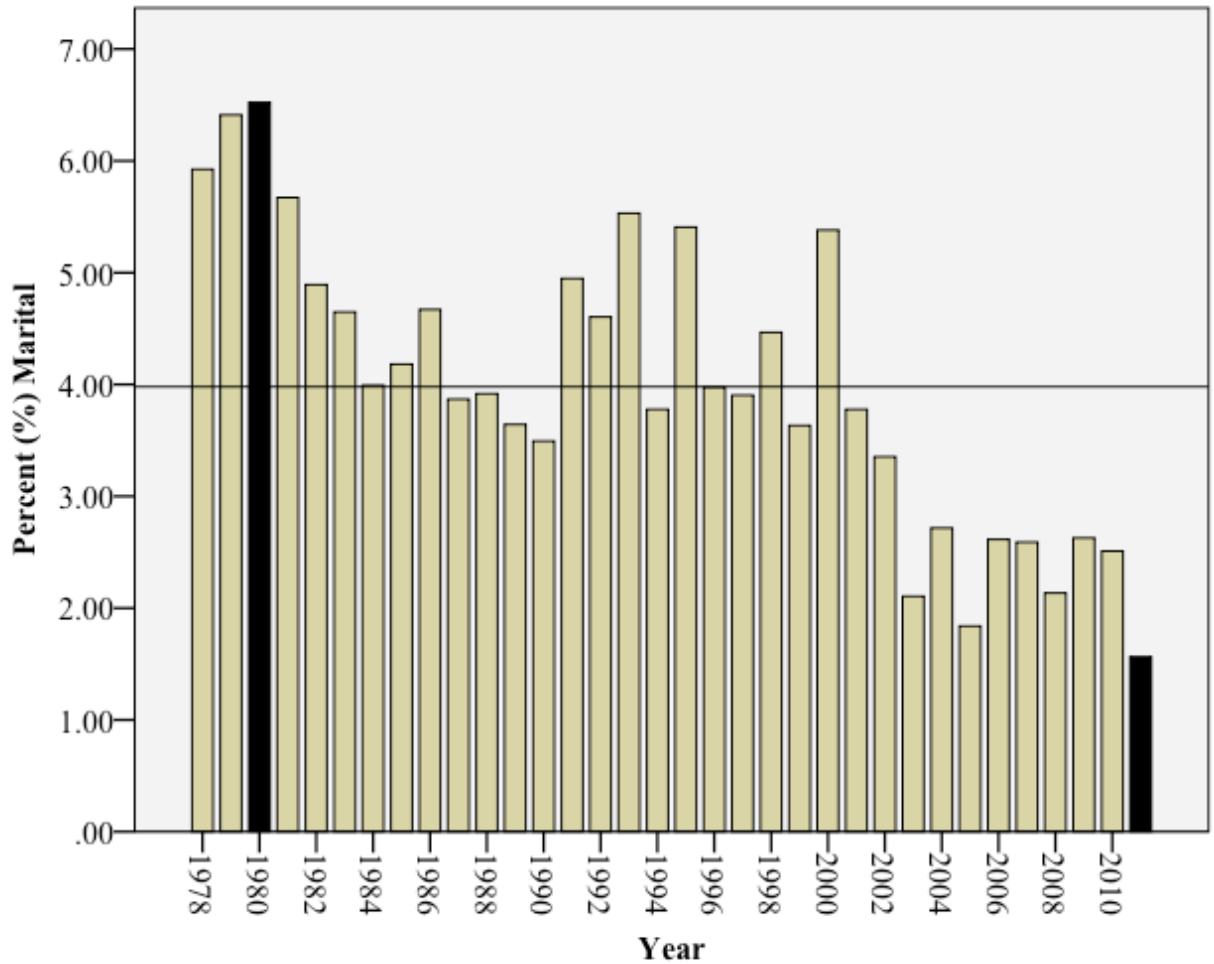


Figure 4.143 Simple Bar Chart for Marital Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Marital Category Mean Line (3.98%) of archival data (1978-2011)

Examination of the descriptive statistical results for the marital category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the marital category frequency has decreased significantly since 1980 and has remained a relatively small proportion of the annual total of crisis center call category frequency (< 3%) since 2002.

## Annual Total of Crisis Center Call Category Frequency and Mental Issues

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Mental Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (22) Mental was coded on VCLs throughout nine (9) years of the archival data (1969-1977). Although the archival data for mental frequency of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as an individual call category. When zero (0) is reported in mental frequency of the annual total of crisis center call category frequency for years 1969-1977, the number reflects the absence of call frequency related to the mental category rather than the absence of data for the mental category. When zero (0) is reported in mental frequency of the annual total of crisis center call category frequency for years 1978-2011, the number reflects the absence of data for the mental category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Eight (8) complete years were identified and used for statistical analysis (1970-1977).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations

were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the mental frequency of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). Results of the descriptive statistical analysis reported a sum of 2,884 for the mental category of the annual total of crisis center call category frequency with a mean of 360.50 and a standard deviation of 200.23. Descriptive statistical analysis reported a minimum frequency of 206 and a maximum frequency of 799 for the mental category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing eight (8) complete years of archival data (1970-1977). Results of the descriptive statistical analysis reported a sum of 118,243 for the annual total of crisis center call category frequency with a mean of 14,780.38 and a standard deviation of 1,521.89. Descriptive statistical analysis reported a minimum frequency of 12,629 and a maximum frequency of 17,006 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the mental category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977) are reported in Table 4.78. Figure 4.143 provides a visual representation for the mental category frequency of



the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of the archival data (1970-1977). Figure 4.144 provides a visual representation for the mental category frequency of the annual total of crisis center call frequency as a simple bar chart encompassing eight (8) complete years of the archival data (1970-1977) with a mental category mean line (360.50). Figure 4.145 provides a visual representation for the mental category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing eight (8) complete years of the archival data (1970-1977).

Table 4.78

Descriptive Statistics for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

Descriptive Statistics			
		Mental Frequency	Category Frequency
N	Valid	8	8
	Missing	0	0
Minimum		206	12,629
Maximum		799	17,006
Sum		2,884	118,243
Mean		360.50	14,780.38
Standard Deviation		200.23	1,521.89

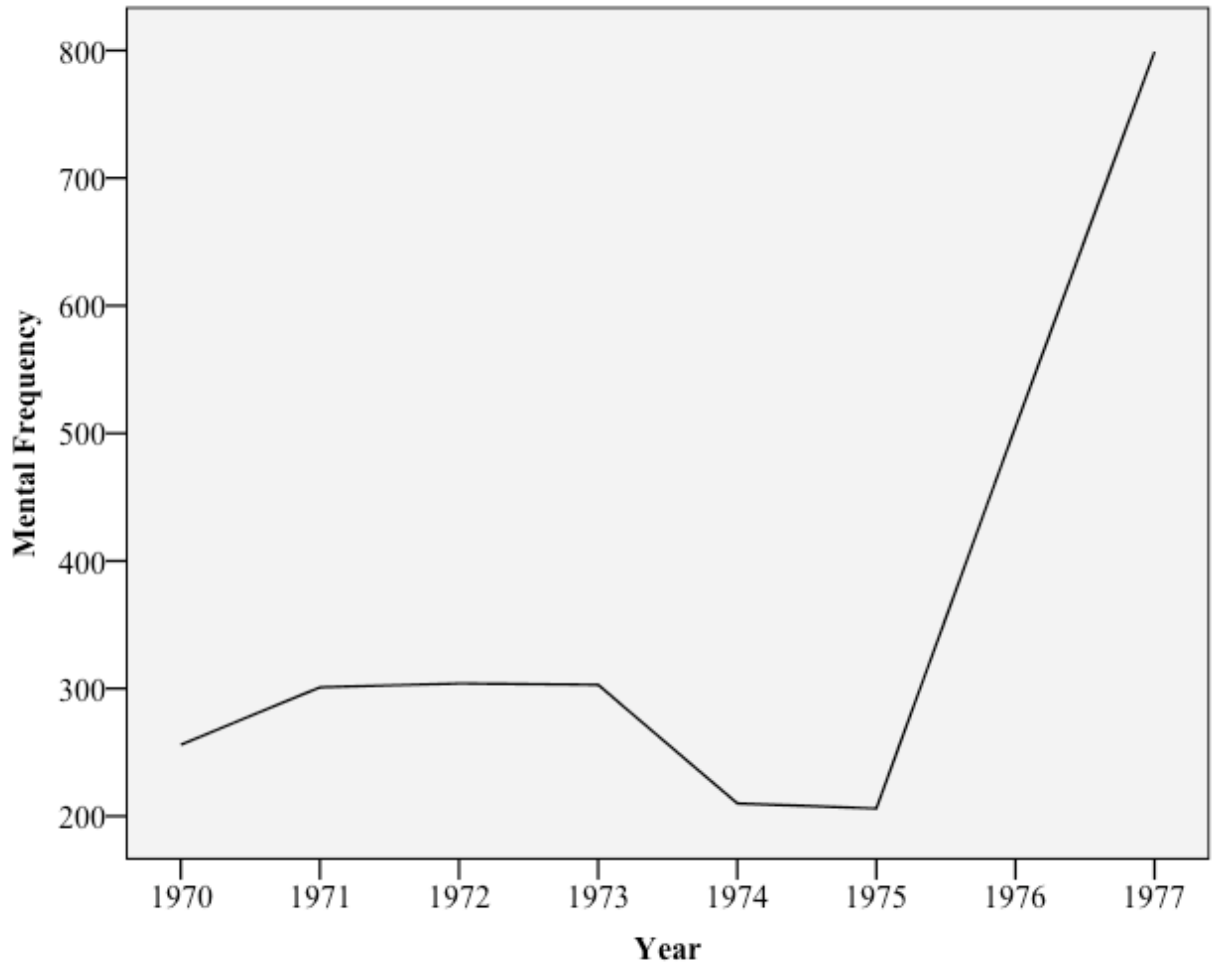


Figure 4.143 Simple Line Chart for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

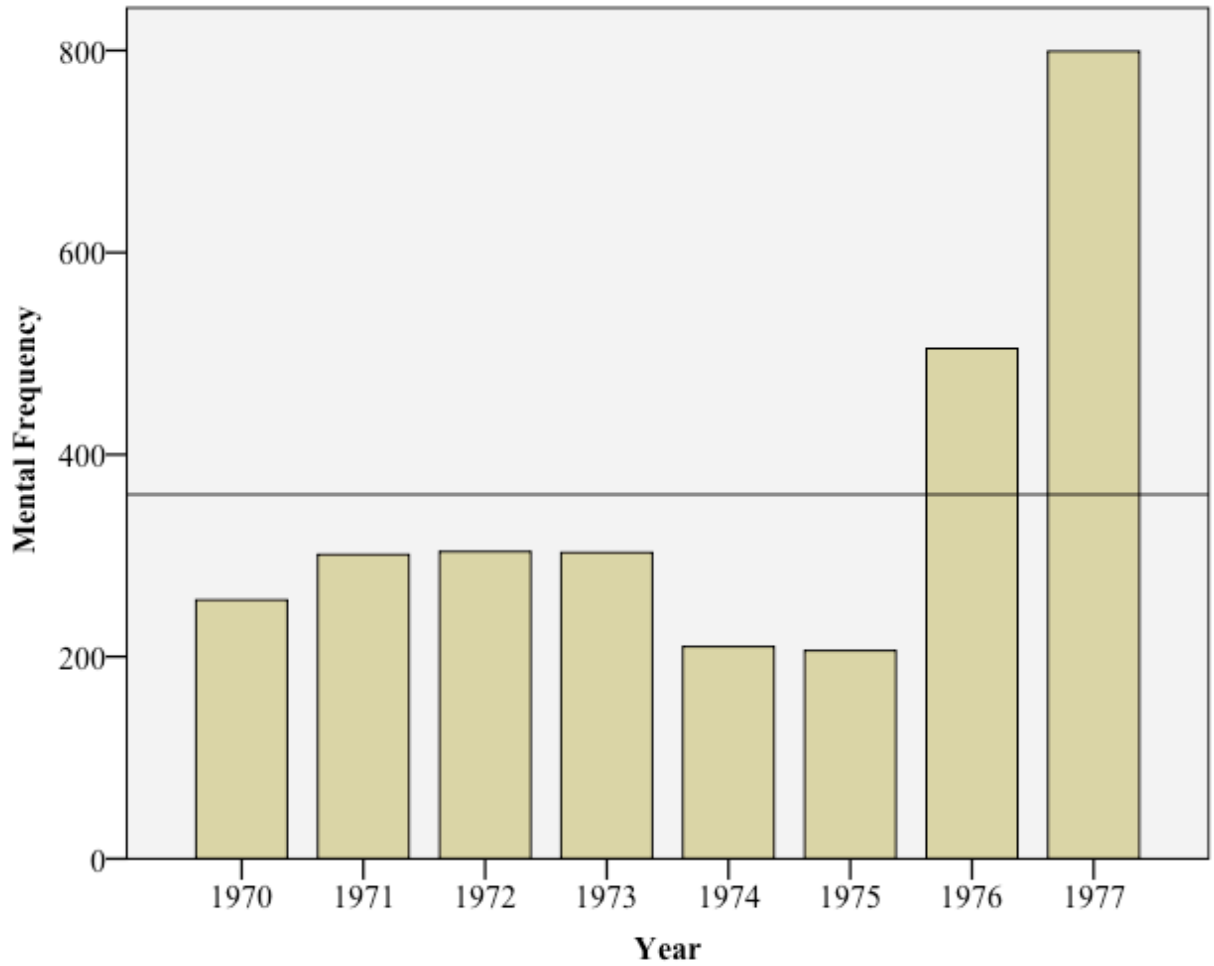


Figure 4.144 Simple Bar Chart for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency with Mental Category Mean Line (360.50) of archival data (1977-2011)

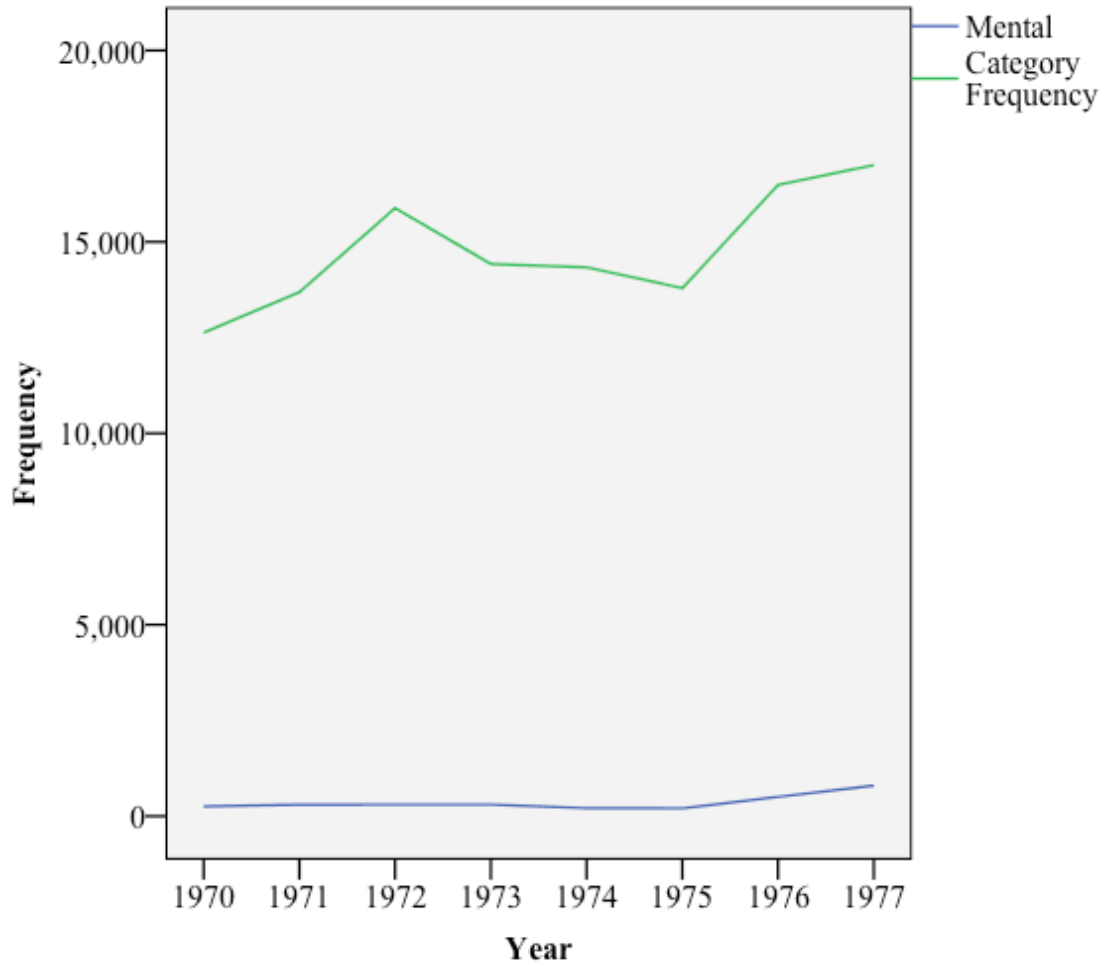


Figure 4.145 Multiple Line Chart for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

*Descriptive Statistics for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The mental category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). A descriptive statistical analysis was conducted to evaluate the mental frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). The results of the descriptive statistical analysis reported a sum of 18.96% for the mental category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 2.37% and a standard deviation of 1.06%. Descriptive statistical analysis reported a minimum frequency of 1.46% and a maximum frequency of 4.70% for the mental category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the mental category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977) are reported in Table 4.79. Figure 4.146 provides a visual representation for the mental category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of the archival data (1970-1977). Figure 4.147 provides a visual representation for the mental category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing eight (8) complete years of the archival data (1970-1977) with a percentage (%)

mental category mean line (2.37%). Black bars represent years reported as having the highest (1977) and lowest (1974) frequency.

Table 4.79

Descriptive Statistics for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

Descriptive Statistics		
		Mental Frequency as Ratio (%) of Category Frequency
N	Valid	8
	Missing	0
Minimum		1.46%
Maximum		4.70%
Sum		18.96%
Mean		2.37%
Standard Deviation		1.06%





Figure 4.146 Simple Line Chart for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

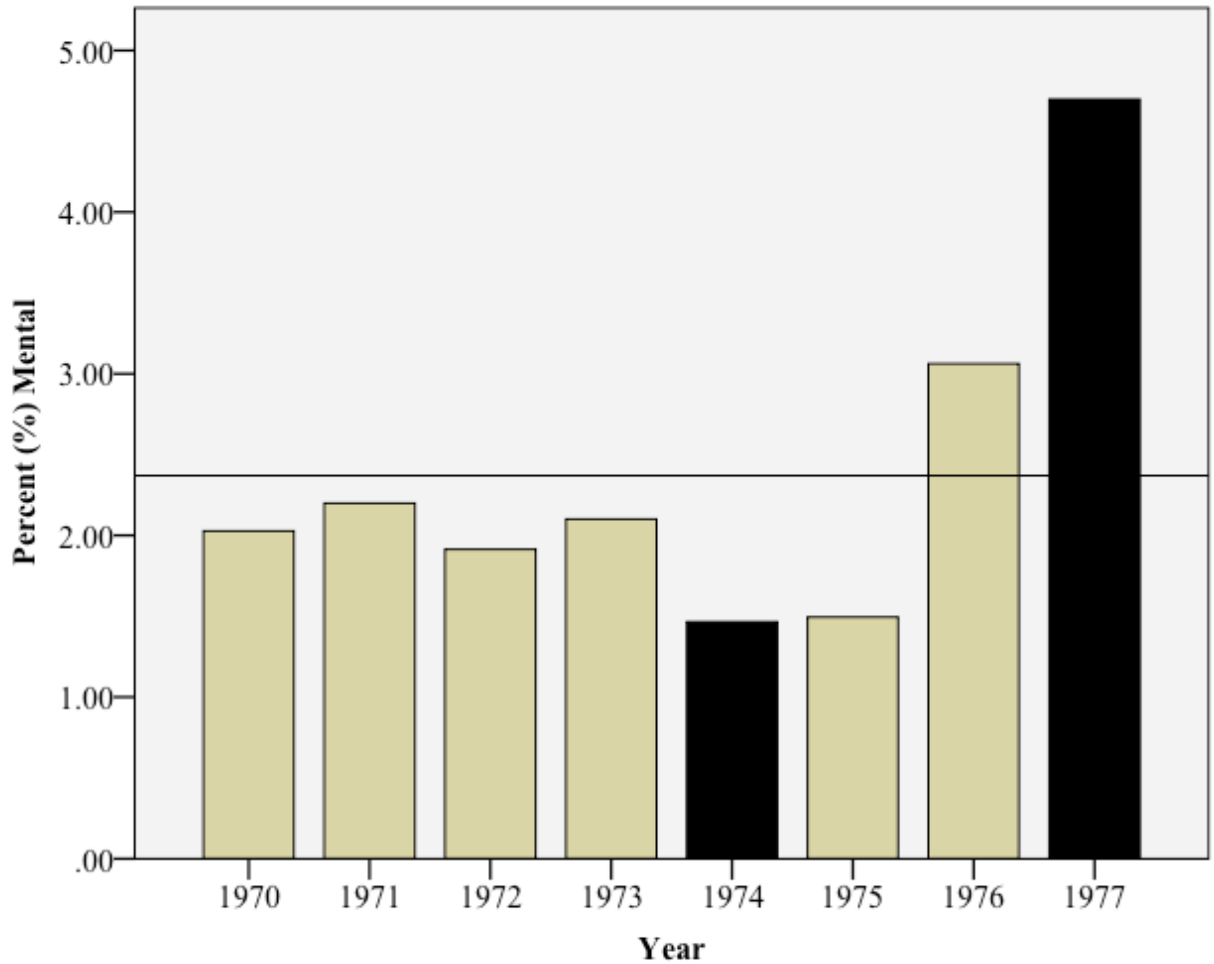


Figure 4.147 Simple Bar Chart for Mental Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Mental Category Mean Line (2.37%) of archival data (1970-1977)

Examination of the descriptive statistical results for the mental category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the juvenile category frequency was inconsistent during the years for which it was coded (1970-1977) experiencing its lowest and highest

frequency within three (3) years (from 1.46% to 4.70%). In 1978, the juvenile category was discontinued and no further data is available.

## Annual Total of Crisis Center Call Category Frequency and Miscellaneous

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Miscellaneous Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (23) Miscellaneous was coded on VCLs throughout nine (9) years of the archival data (1969-1977). Although the archival data for miscellaneous frequency of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as an individual call category. When zero (0) is reported in miscellaneous frequency of the annual total of crisis center call category frequency for years 1969-1977, the number reflects the absence of call frequency related to the miscellaneous category rather than the absence of data for the miscellaneous category. When zero (0) is reported in miscellaneous frequency of the annual total of crisis center call category frequency for years 1978-2011, the number reflects the absence of data for the miscellaneous category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Eight (8) complete years were identified and used for statistical analysis (1970-1977).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations

were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the miscellaneous category frequency of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). Results of the descriptive statistical analysis reported a sum of 8,417 for the miscellaneous category of the annual total of crisis center call category frequency with a mean of 1,052.13 and a standard deviation of 532.74. Descriptive statistical analysis reported a minimum frequency of 404 and a maximum frequency of 1,917 for the miscellaneous category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing eight (8) complete years of archival data (1970-1977). Results of the descriptive statistical analysis reported a sum of 118,243 for the annual total of crisis center call category frequency with a mean of 14,780.38 and a standard deviation of 1,521.89. Descriptive statistical analysis reported a minimum frequency of 12,629 and a maximum frequency of 17,006 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the miscellaneous category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977) are reported in Table 4.80. Figure 4.148 provides a visual representation for the miscellaneous

category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of the archival data (1970-1977). Figure 4.149 provides a visual representation for the miscellaneous category frequency of the annual total of crisis center call frequency as a simple bar chart encompassing eight (8) complete years of the archival data (1970-1977) with a miscellaneous category mean line (1,052.13). Figure 4.150 provides a visual representation for the miscellaneous category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing eight (8) complete years of the archival data (1970-1977)..

Table 4.80

Descriptive Statistics for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

Descriptive Statistics			
		Miscellaneous Frequency	Category Frequency
N	Valid	8	8
	Missing	0	0
Minimum		404	12,629
Maximum		1,917	17,006
Sum		8,417	118,243
Mean		1,052.13	14,780.38
Standard Deviation		532.74	1,521.89

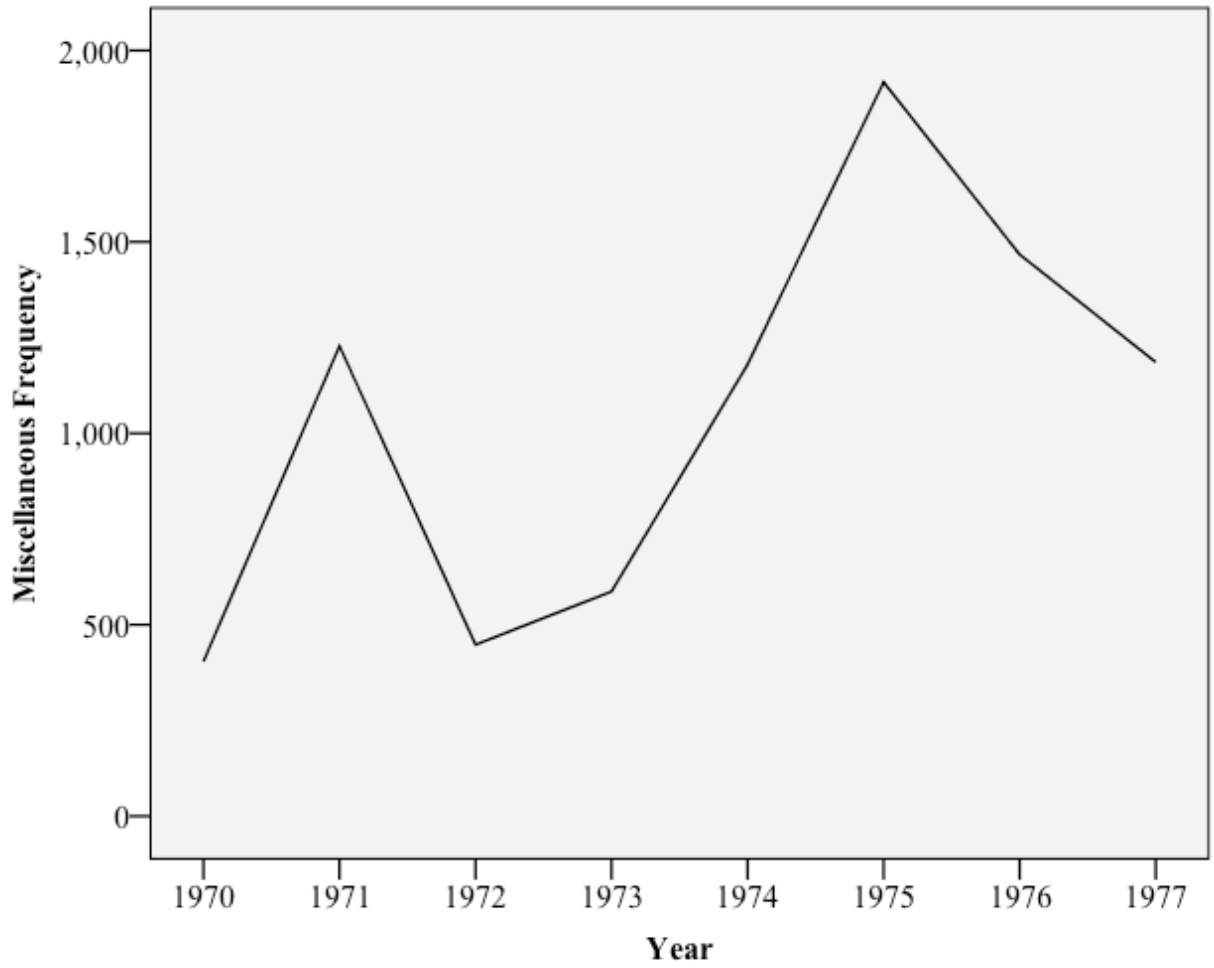


Figure 4.148 Simple Line Chart for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)



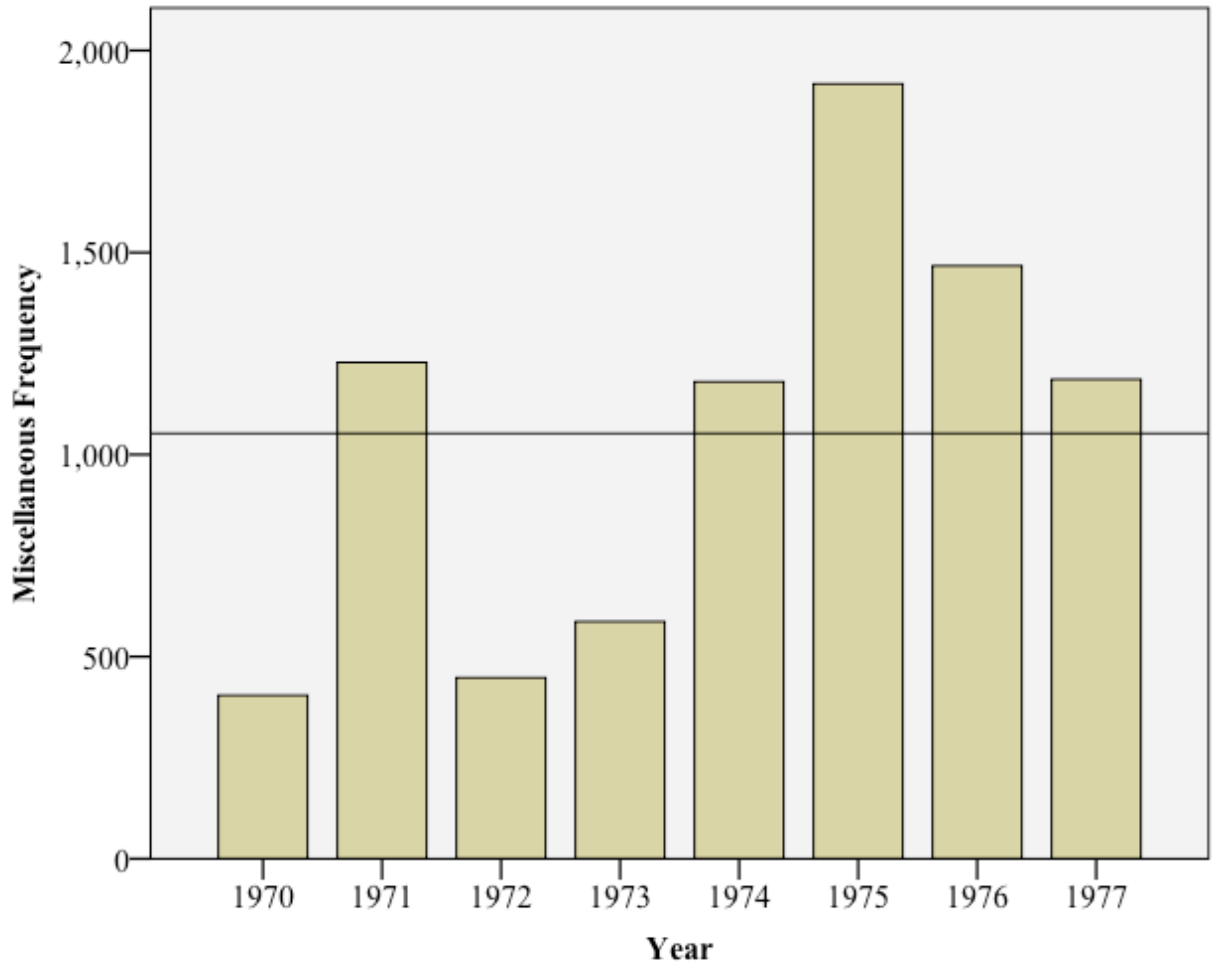


Figure 4.149 Simple Bar Chart for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency with Miscellaneous Category Mean Line (1,052.13) of archival data (1970-1977)

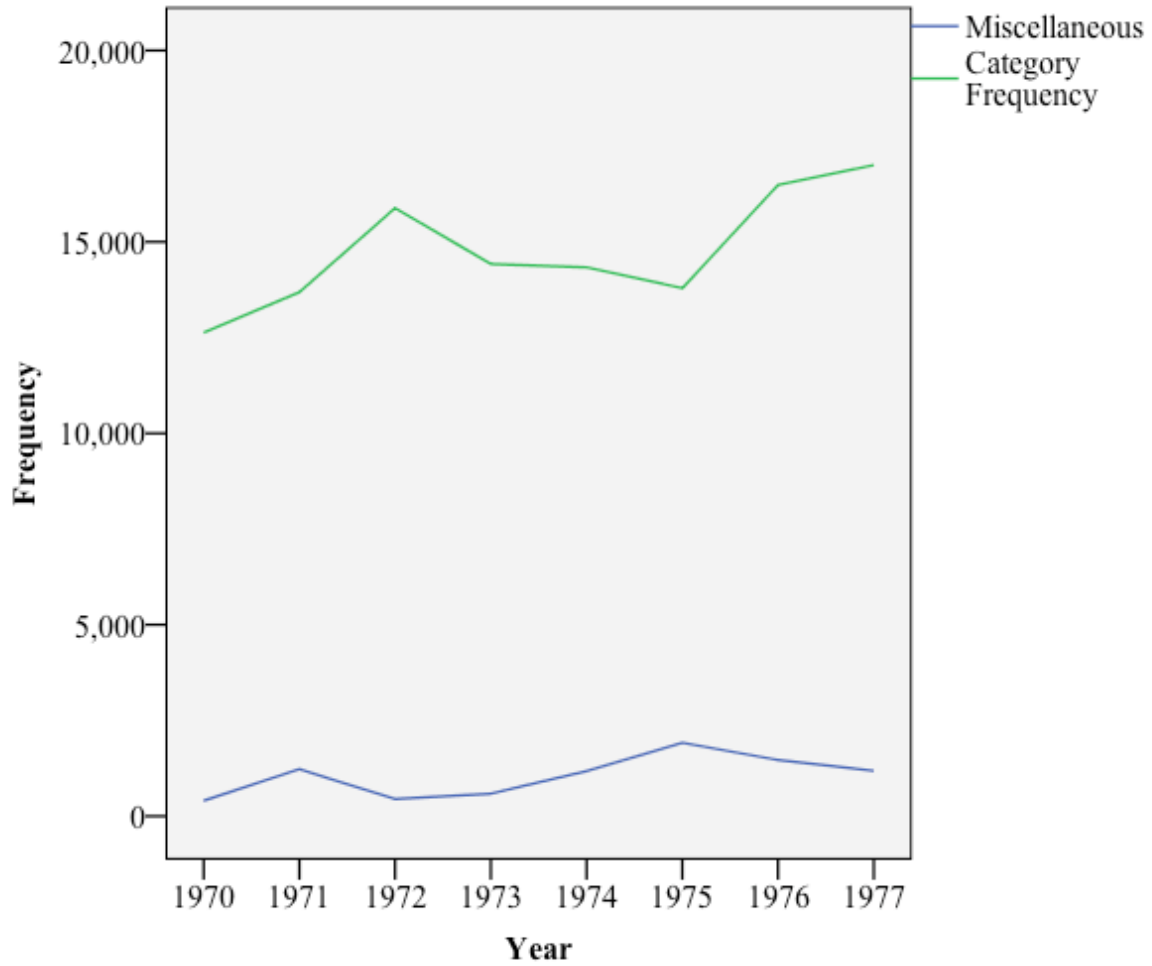


Figure 4.150 Multiple Line Chart for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

*Descriptive Statistics for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The miscellaneous category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). A descriptive statistical analysis was conducted to evaluate the miscellaneous frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977). The results of the descriptive statistical analysis reported a sum of 57.06% for the miscellaneous category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 7.13% and a standard deviation of 3.72%. Descriptive statistical analysis reported a minimum frequency of 2.82% and a maximum frequency of 13.90% for the miscellaneous category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the miscellaneous category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing eight (8) complete years of the archival data (1970-1977) are reported in Table 4.81. Figure 4.151 provides a visual representation for the miscellaneous category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing eight (8) complete years of the archival data (1970-1977). Figure 4.152 provides a visual representation for the miscellaneous category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category

frequency as a simple bar chart encompassing eight (8) complete years of the archival data (1970-1977) with a percentage (%) miscellaneous category mean line (7.13%). Black bars represent years reported as having the highest (1975) and lowest (1972) frequency.

Table 4.81

Descriptive Statistics for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

Descriptive Statistics		
		Miscellaneous Frequency as Ratio (%) of Category Frequency
N	Valid	8
	Missing	0
Minimum		2.82%
Maximum		13.90%
Sum		57.06%
Mean		7.13%
Standard Deviation		3.72%

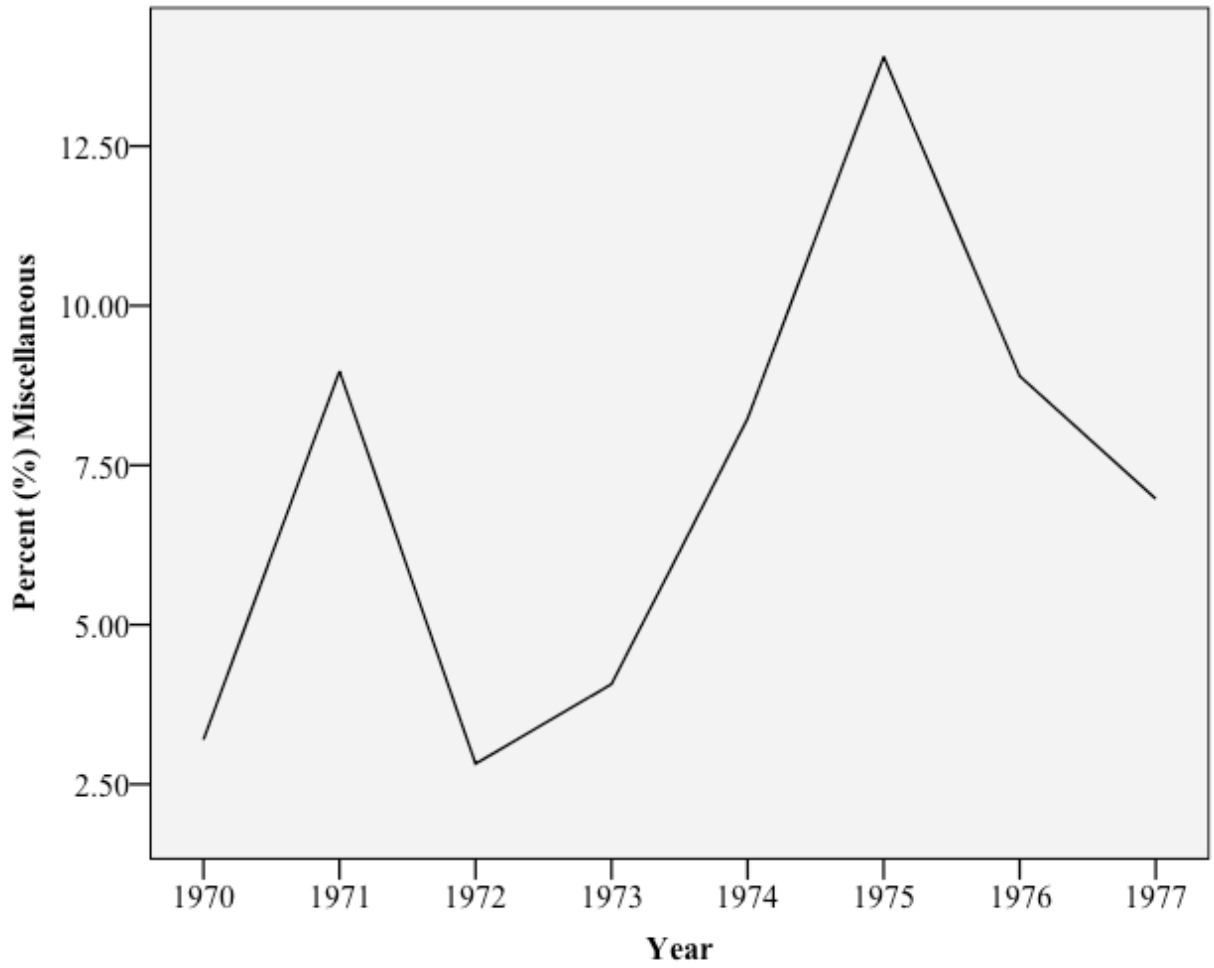


Figure 4.151 Simple Line Chart for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-1977)

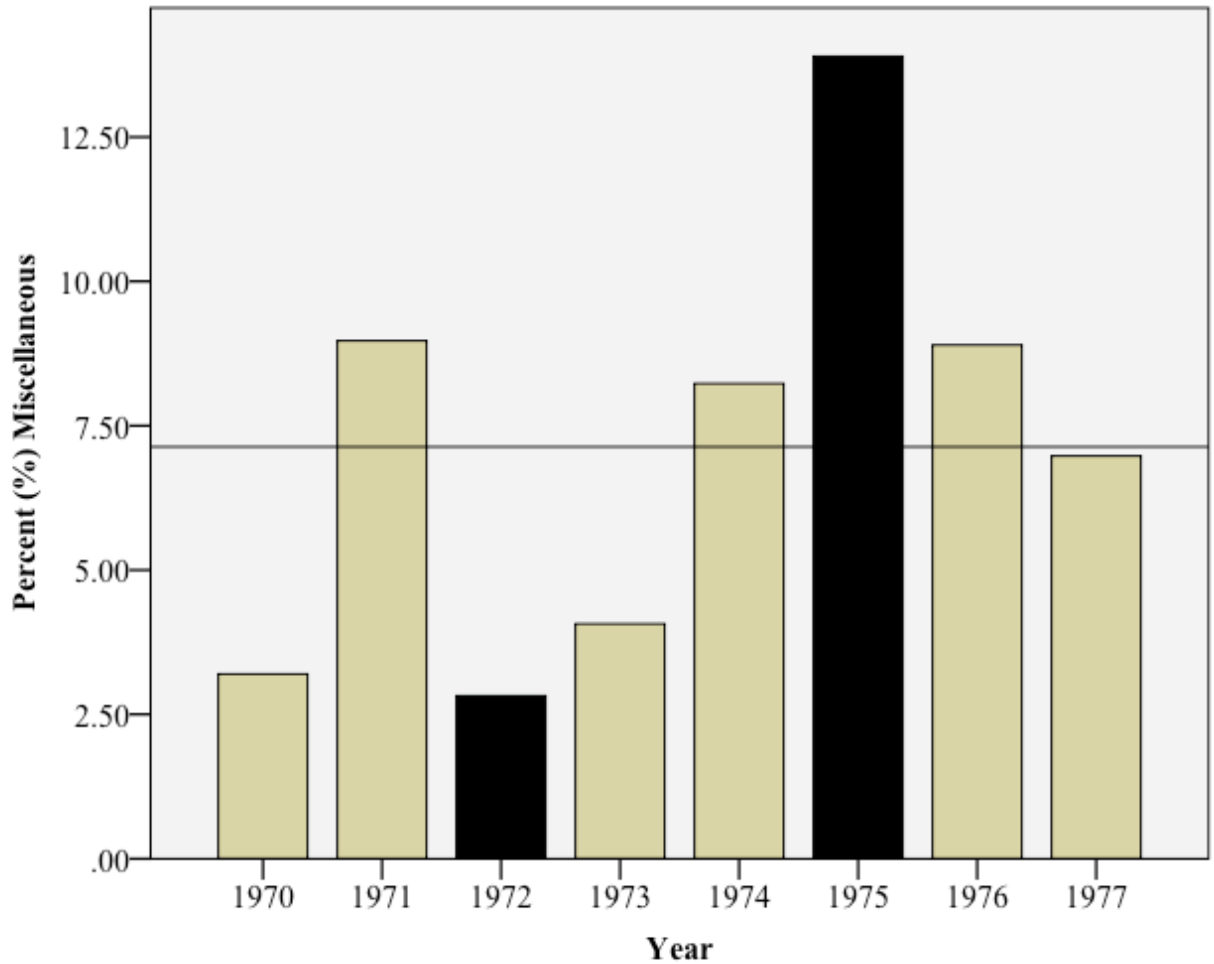


Figure 4.152 Simple Bar Chart for Miscellaneous Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Miscellaneous Category Mean Line (7.13%) of archival data (1970-2011)

Examination of the descriptive statistical results for the miscellaneous category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the miscellaneous category frequency was inconsistent during the years for which it was coded (1970-1977) experiencing its lowest and

highest frequency within three (3) years (from 2.82% to 13.90%). In 1978, the miscellaneous category was discontinued and no further data is available.



## Annual Total of Crisis Center Call Category Frequency and Other Issues

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Other Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (24) Other was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in the other frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the other category rather than the absence of data for the other category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1978-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the other category frequency of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). Results of the descriptive statistical analysis reported a sum of 67,399 for the other category of the annual total of crisis center call category frequency with a mean of 1,982.32 and a standard deviation of 892.90. Descriptive statistical analysis reported a minimum frequency of 830 and a maximum frequency of 5,058 for the other category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of archival data (1978-2011). Results of the descriptive statistical analysis reported a sum of 520,859 for the annual total of crisis center call category frequency with a mean of 15,319.38 and a standard deviation of 3,796.76. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the other category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011) are reported in Table 4.82. Figure 4.153 provides a visual representation for the other category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011). Figure 4.154 provides a visual representation for the other category frequency of the annual total of crisis

center call frequency as a simple bar chart encompassing thirty-four (34) complete years of the archival data (1978-2011) with an other category mean line (1,982.32). Figure 4.155 provides a visual representation for the other category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011).

Table 4.82

Descriptive Statistics for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

Descriptive Statistics			
		Other Frequency	Category Frequency
N	Valid	34	34
	Missing	0	0
Minimum		830	6,733
Maximum		5,038	21,292
Sum		67,399	520,859
Mean		1,982.32	15,319.38
Standard Deviation		892.90	3,796.76

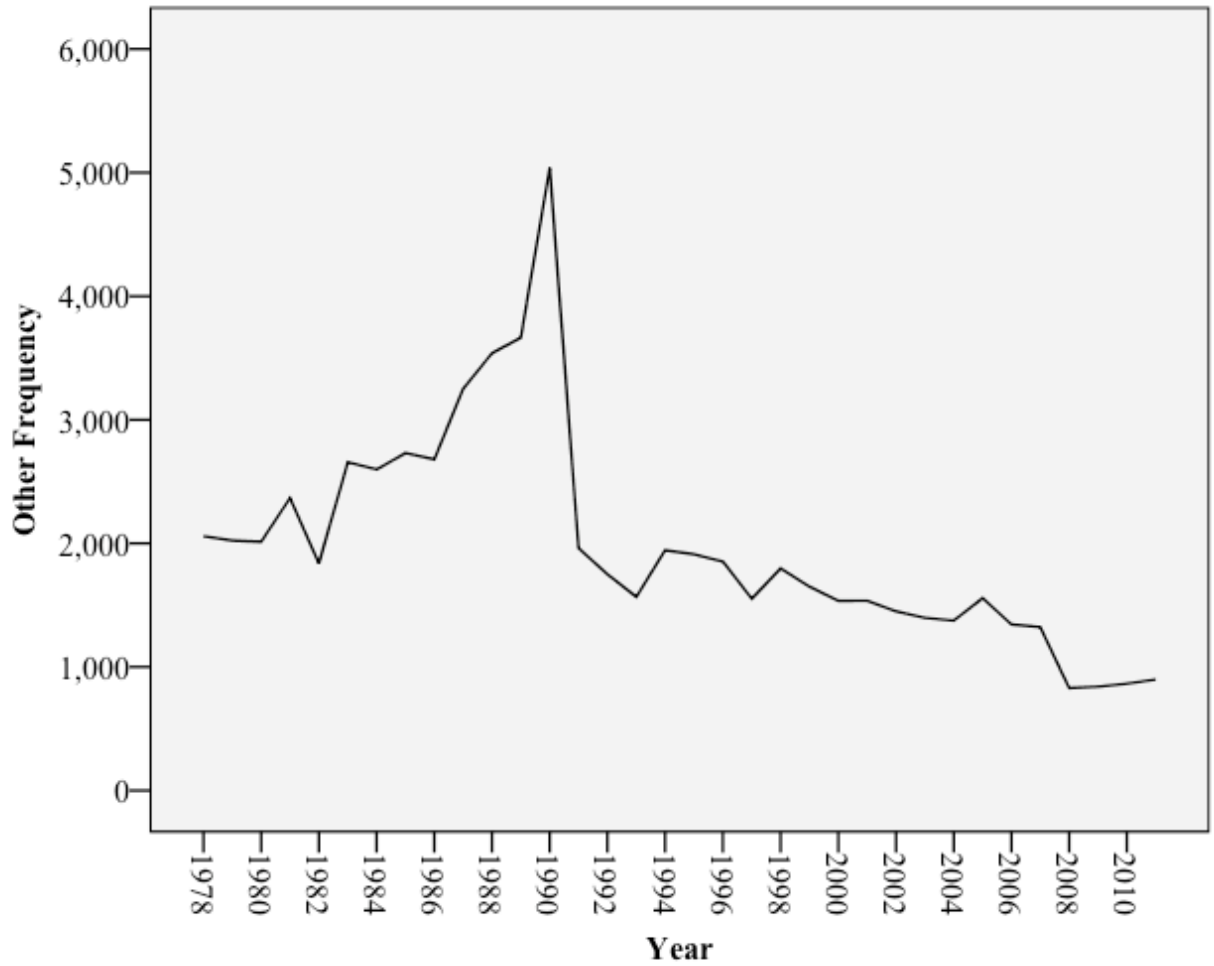


Figure 4.153 Simple Line Chart for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

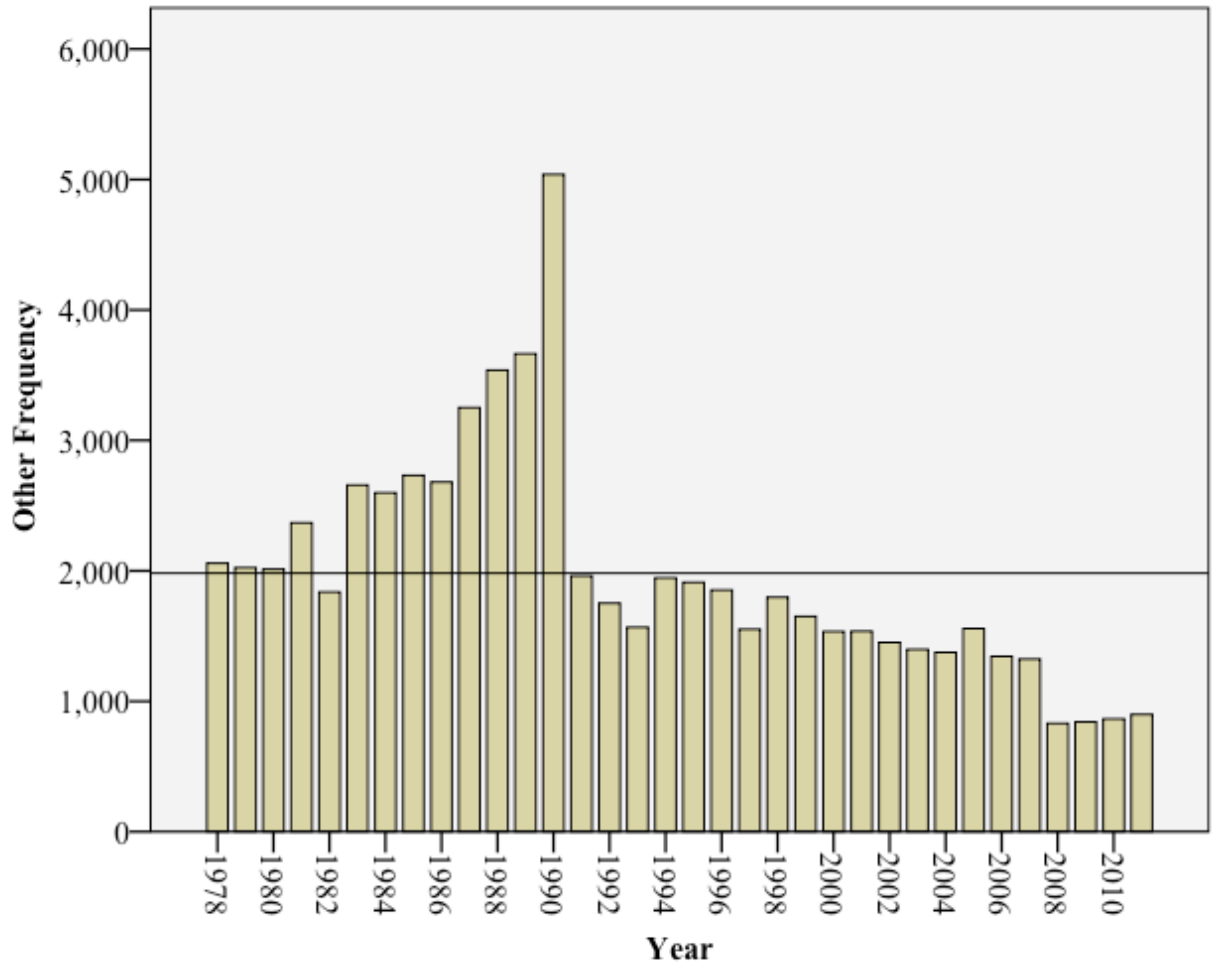


Figure 4.154 Simple Bar Chart for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency with Other Category Mean Line (1,982.32) of archival data (1978-2011)

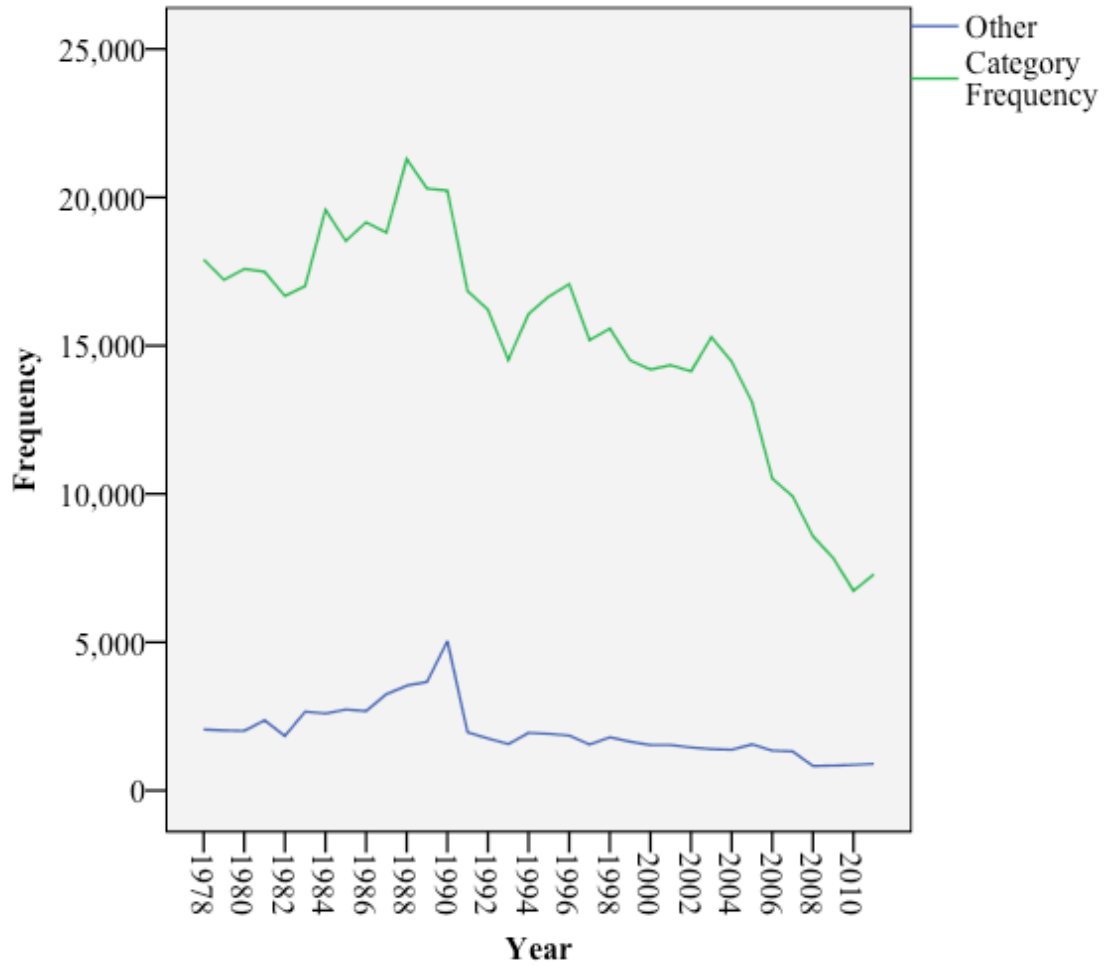


Figure 4.155 Multiple Line Chart for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

*Descriptive Statistics for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The other category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). A descriptive statistical analysis was conducted to evaluate the other category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). The results of the descriptive statistical analysis reported a sum of 428.51% for the other category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 12.60% and a standard deviation of 3.06%. Descriptive statistical analysis reported a minimum frequency of 9.14% and a maximum frequency of 24.90% for the other category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the other category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011) are reported in Table 4.83. Figure 4.156 provides a visual representation for the other category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011). Figure 4.157 provides a visual representation for the other category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple



bar chart encompassing thirty-four (34) complete years of the archival data (1978-2011) with a percentage (%) other category mean line (12.60%). Black bars represent the years reported as having the highest (1990) and the lowest (2003) frequency.

Table 4.83

Descriptive Statistics for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

Descriptive Statistics		
		Other Frequency as Ratio (%) of Category Frequency
N	Valid	34
	Missing	0
Minimum		9.14%
Maximum		24.90%
Sum		428.51%
Mean		12.60%
Standard Deviation		3.06%

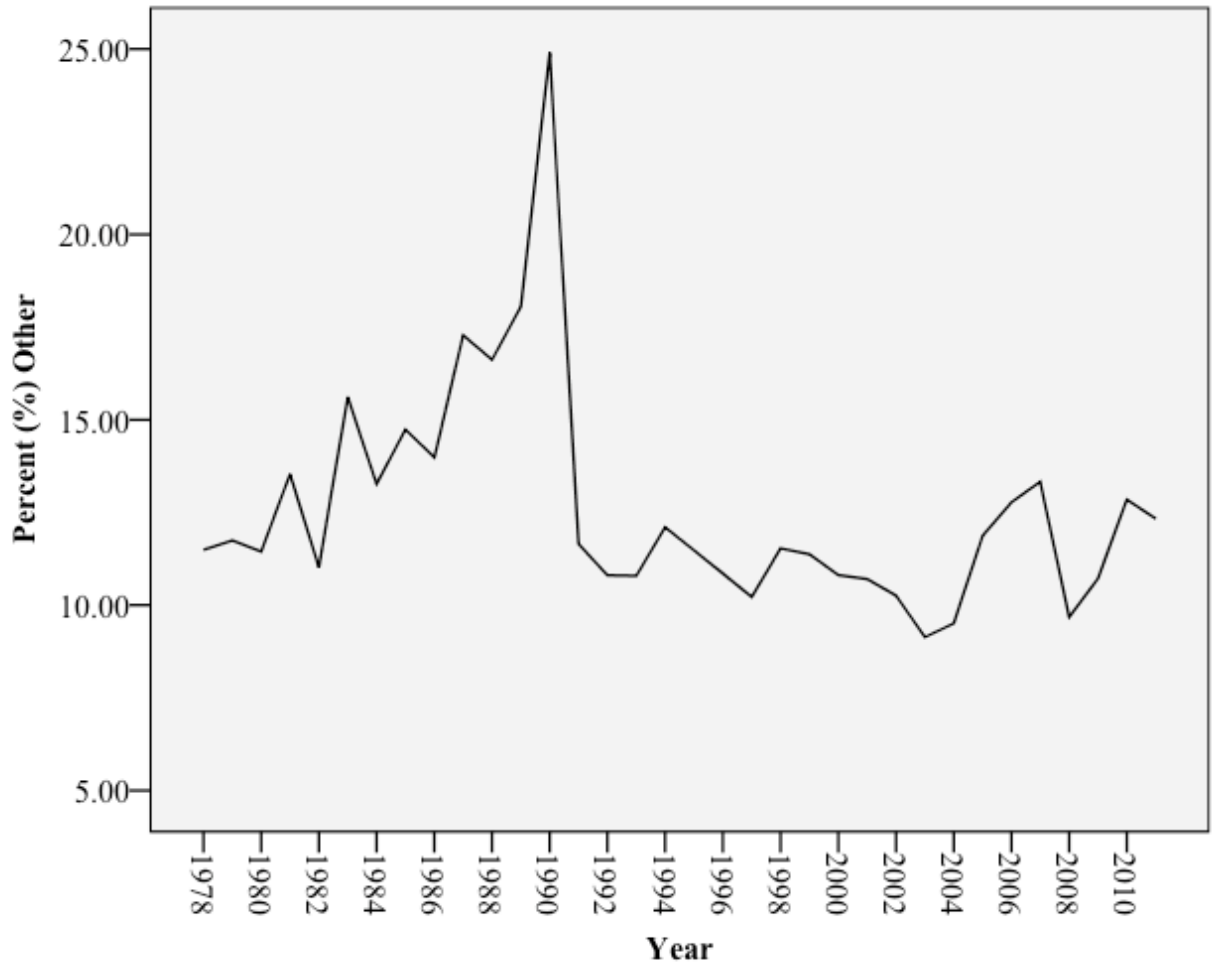


Figure 4.156 Simple Line Chart for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

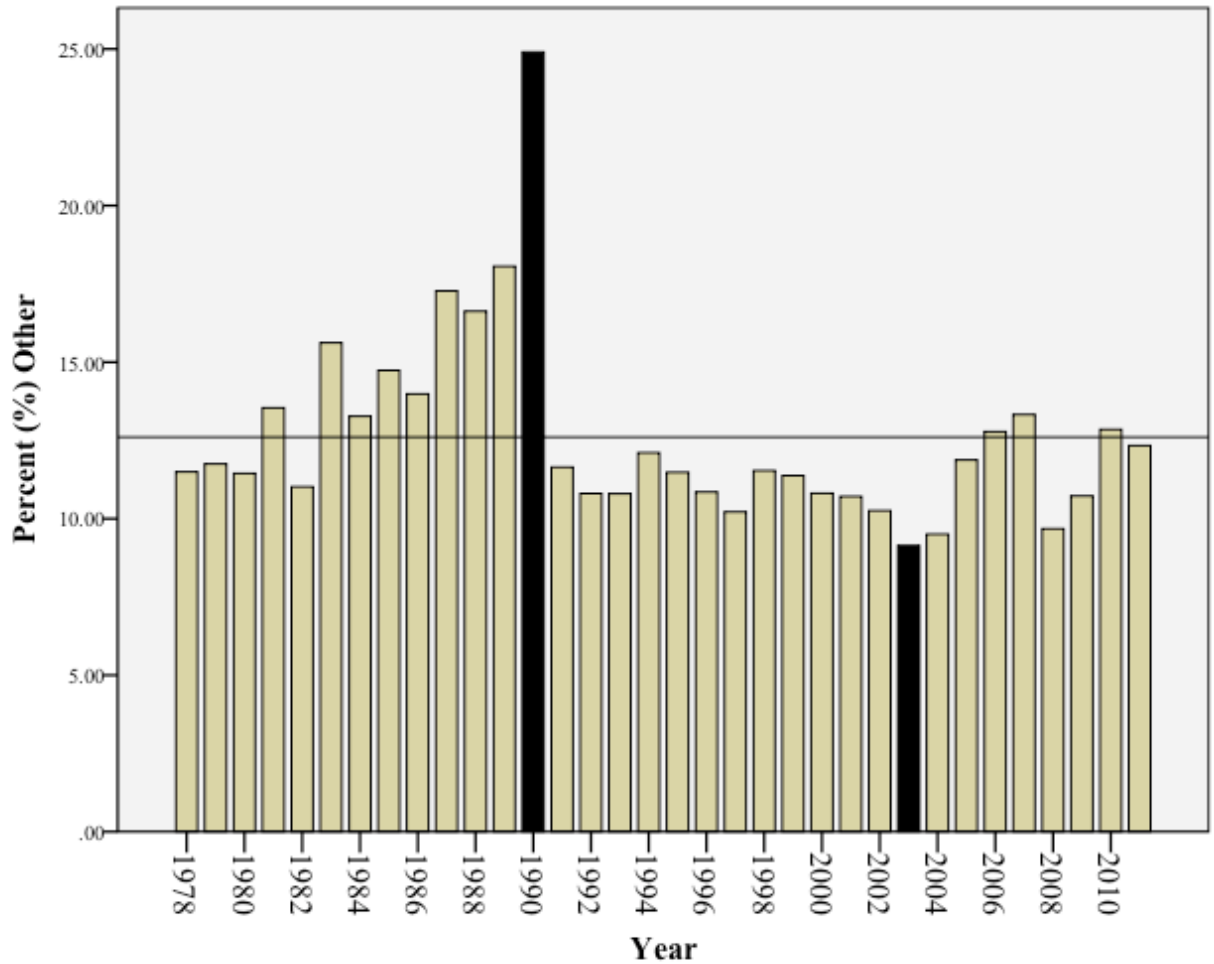


Figure 4.157 Simple Bar Chart for Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Other Category Mean Line (12.60%) of archival data (1978-2011)

Examination of the descriptive statistical results for the other category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the other category frequency has remained relatively consistent since 1991 and has remained a relatively moderate proportion of the annual total of crisis center call category frequency (between 10% and 12.50%) with the exception of a marked

increase in 1990. Anecdotal evidence gathered from conversation with administrative personnel suggests the 1997 increase in proportion of other category frequency was reflective of an individual in a crisis rather than an increase in frequency due to multiple individuals experiencing an acute crisis episode.

## Annual Total of Crisis Center Call Category Frequency and Other Family

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Other Family Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (25) Other Family was coded on VCLs throughout thirty-four (34) years of the archival data (1978-2011). Although the archival data for other family frequency of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as an individual call category. When zero (0) is reported in the other family frequency of the annual total of crisis center call category frequency for years 1969-1977, the number reflects the absence of data for the other family category. When zero (0) is reported in other family frequency of the annual total of crisis center call category frequency for years 1978-2011, the number reflects the absence of call frequency related to the other family category rather than the absence of data for the other family category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Thirty-four (34) complete years were identified and used for statistical analysis (1978-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No

assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the other family frequency of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). Results of the descriptive statistical analysis reported a sum of 29,792 for the other family category of the annual total of crisis center call category frequency with a mean of 876.24 and a standard deviation of 225.97. Descriptive statistical analysis reported a minimum frequency of 9.14% and a maximum frequency of 24.90% for the other category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of archival data (1978-2011). Results of the descriptive statistical analysis reported a sum of 520,859 for the annual total of crisis center call category frequency with a mean of 15,319.38 and a standard deviation of 3,796.76. Descriptive statistical analysis reported a minimum frequency of 9.14% and a maximum frequency of 24.90% for the other category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the other family frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category

frequency encompassing thirty-four (34) complete years of the archival data (1978-2011) are reported in Table 4.84. Figure 4.158 provides a visual representation for the other family frequency of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011). Figure 4.159 provides a visual representation for the other family frequency of the annual total of crisis center call frequency as a simple bar chart encompassing thirty-four (34) complete years of the archival data (1978-2011) with an other family category mean line (876.24). Figure 4.160 provides a visual representation for the other family frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011).



Table 4.84

Descriptive Statistics for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

Descriptive Statistics			
		Other Family Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Sum		29,792	520,859.38
Mean		876.24	15,319.38
Standard Deviation		225.97	3,796.76

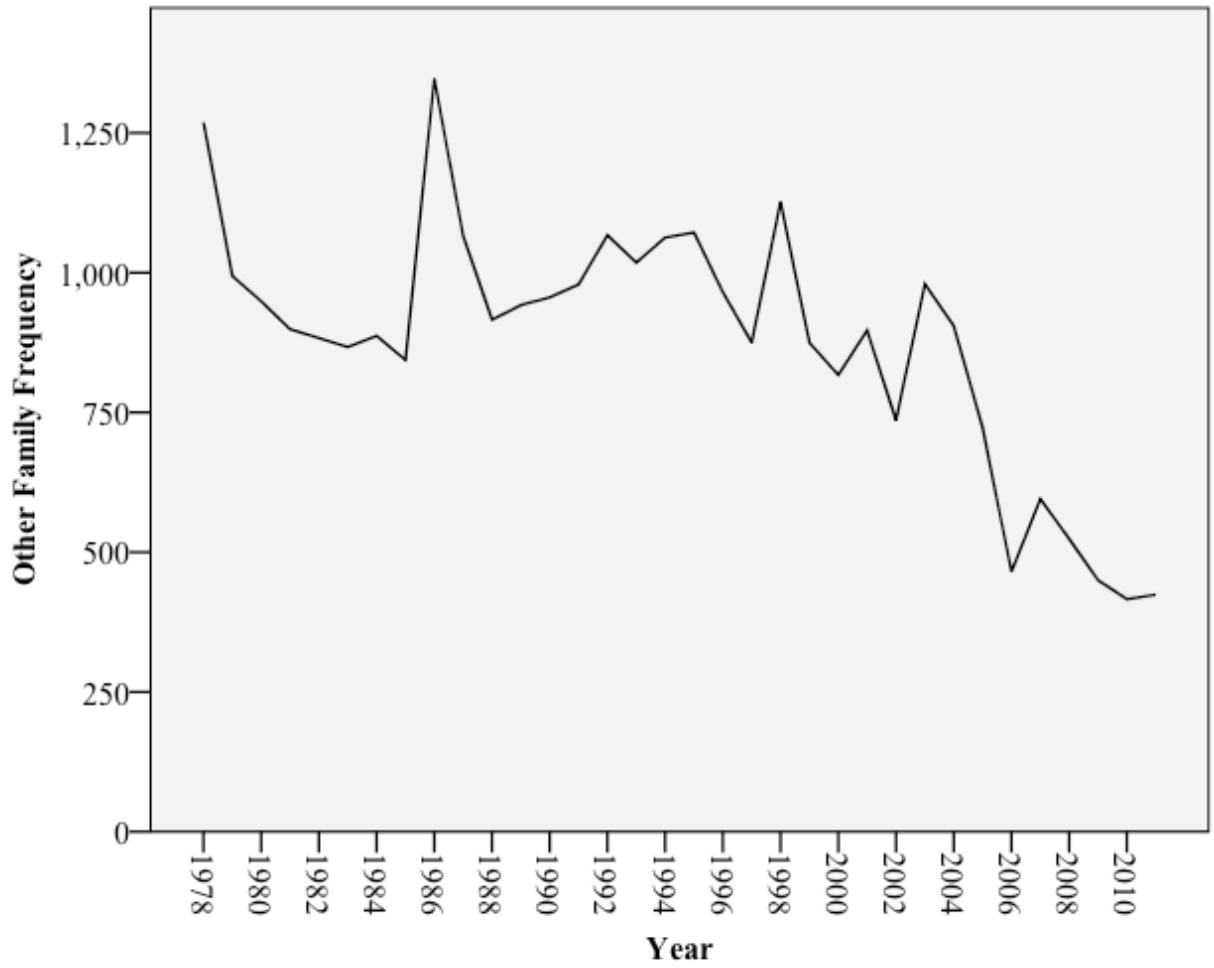


Figure 4.158 Simple Line Chart for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

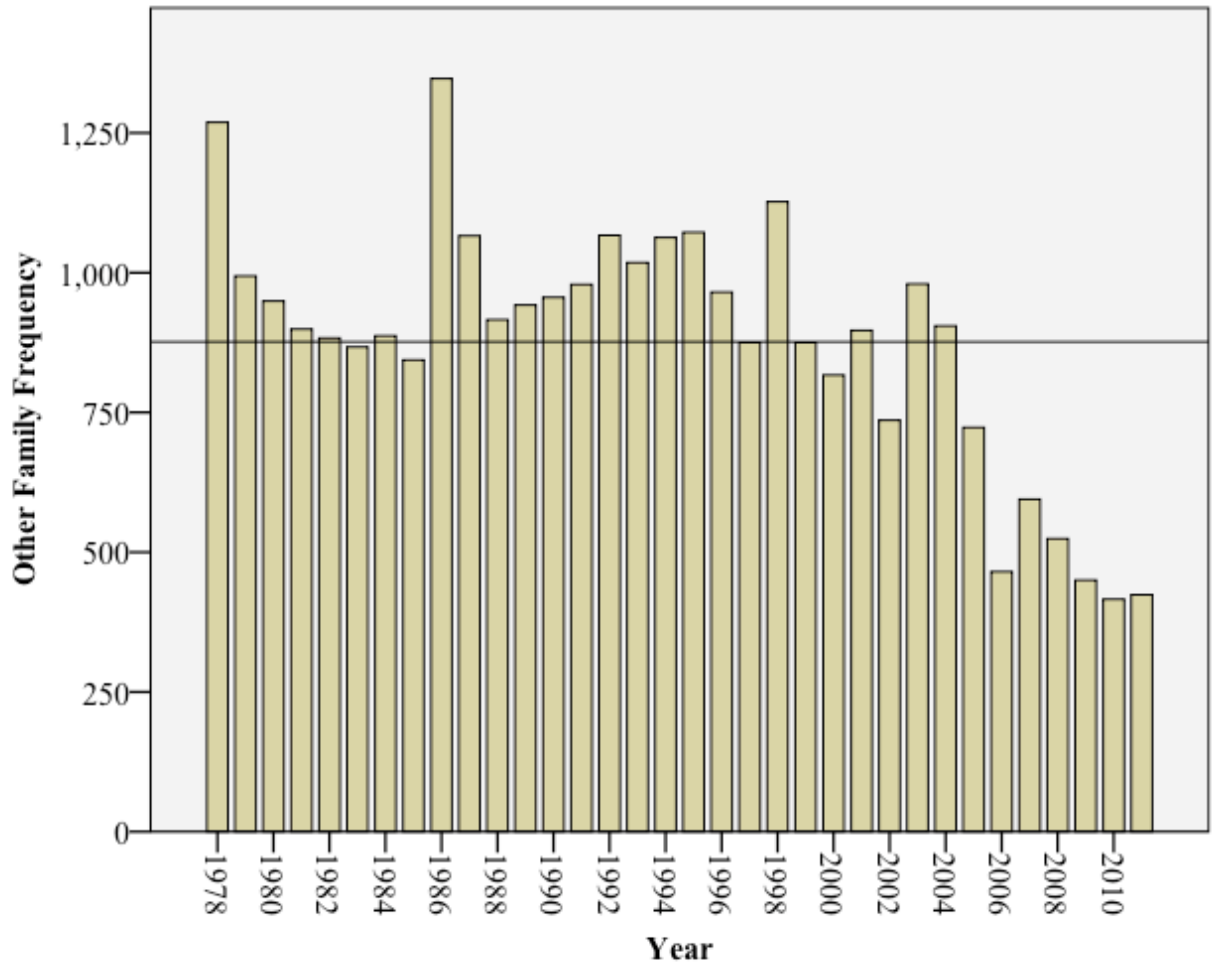


Figure 4.159 Simple Bar Chart for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency with Other Family Category Mean Line (876.24) of archival data (1978-2011)

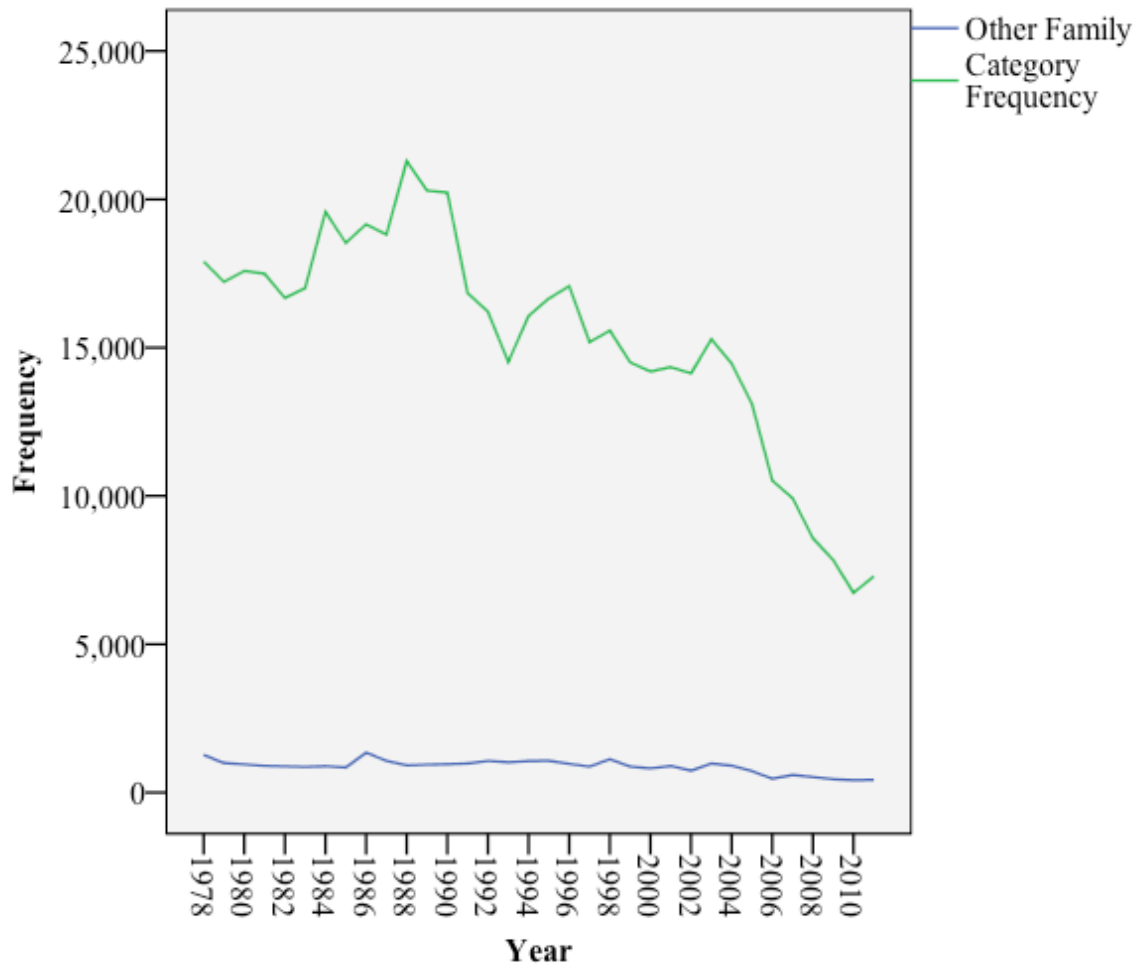


Figure 4.160 Multiple Line Chart for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

*Descriptive Statistics for Other Family Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The other family category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). A descriptive statistical analysis was conducted to evaluate the other family frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). The results of the descriptive statistical analysis reported a sum of 196.03% for the other family category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 5.77% and a standard deviation of 0.80%. Descriptive statistical analysis reported a minimum frequency of 4.30% and a maximum frequency of 7.23% for the other category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the other family category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011) are reported in Table 4.85. Figure 4.161 provides a visual representation for the other family category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011). Figure 4.162 provides a visual representation for the other family category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call

category frequency as a simple bar chart encompassing thirty-four (34) complete years of the archival data (1978-2011) with a percentage (%) other family category mean line (5.77%). Black bars represent years reported as having the highest (1998) and lowest (1988) frequency.

Table 4.85

Descriptive Statistics for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

Descriptive Statistics		
		Other Family Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		4.30%
Maximum		7.23%
Sum		196.03%
Mean		5.77%
Standard Deviation		0.80%

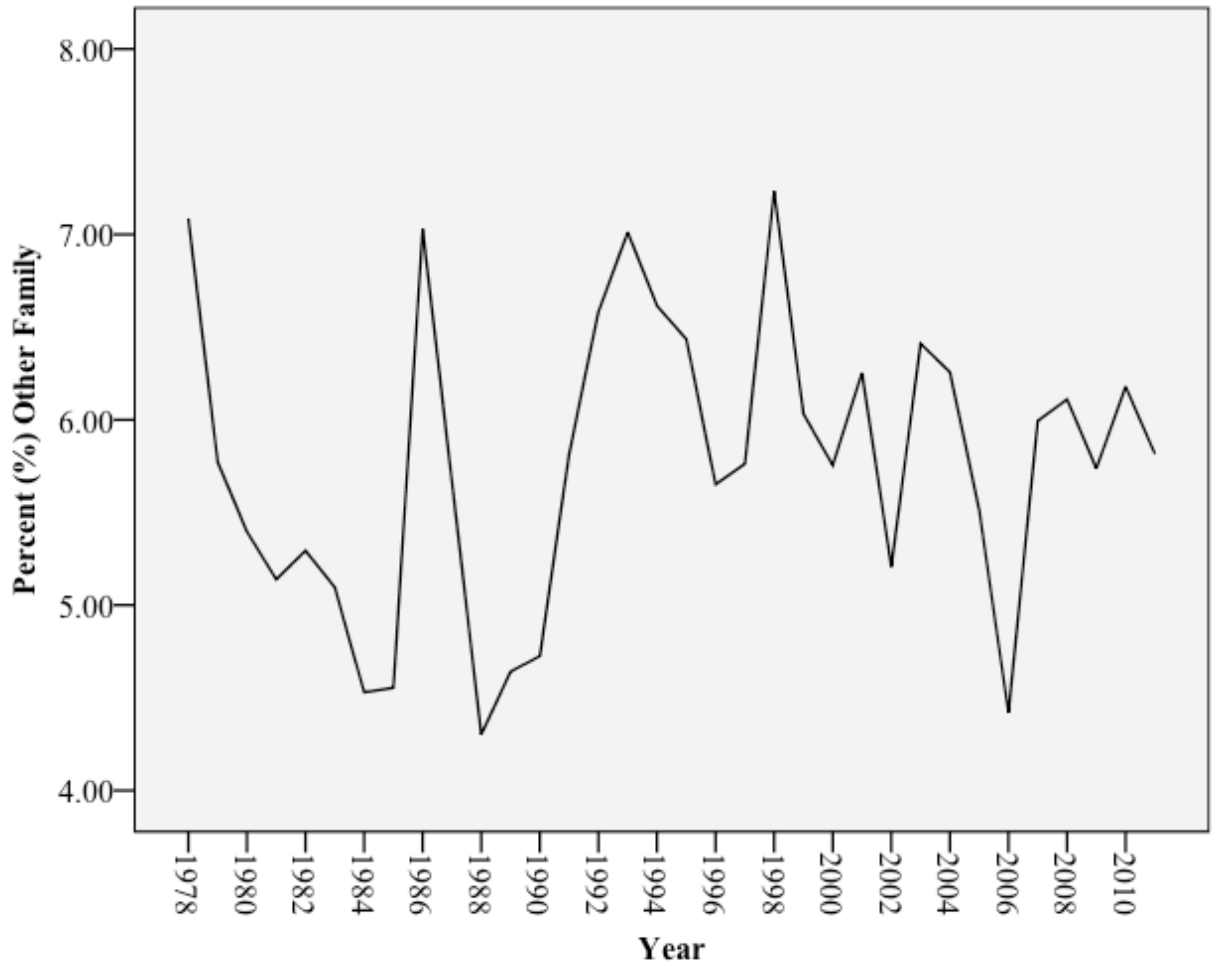


Figure 4.161 Simple Line Chart for Other Family Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)



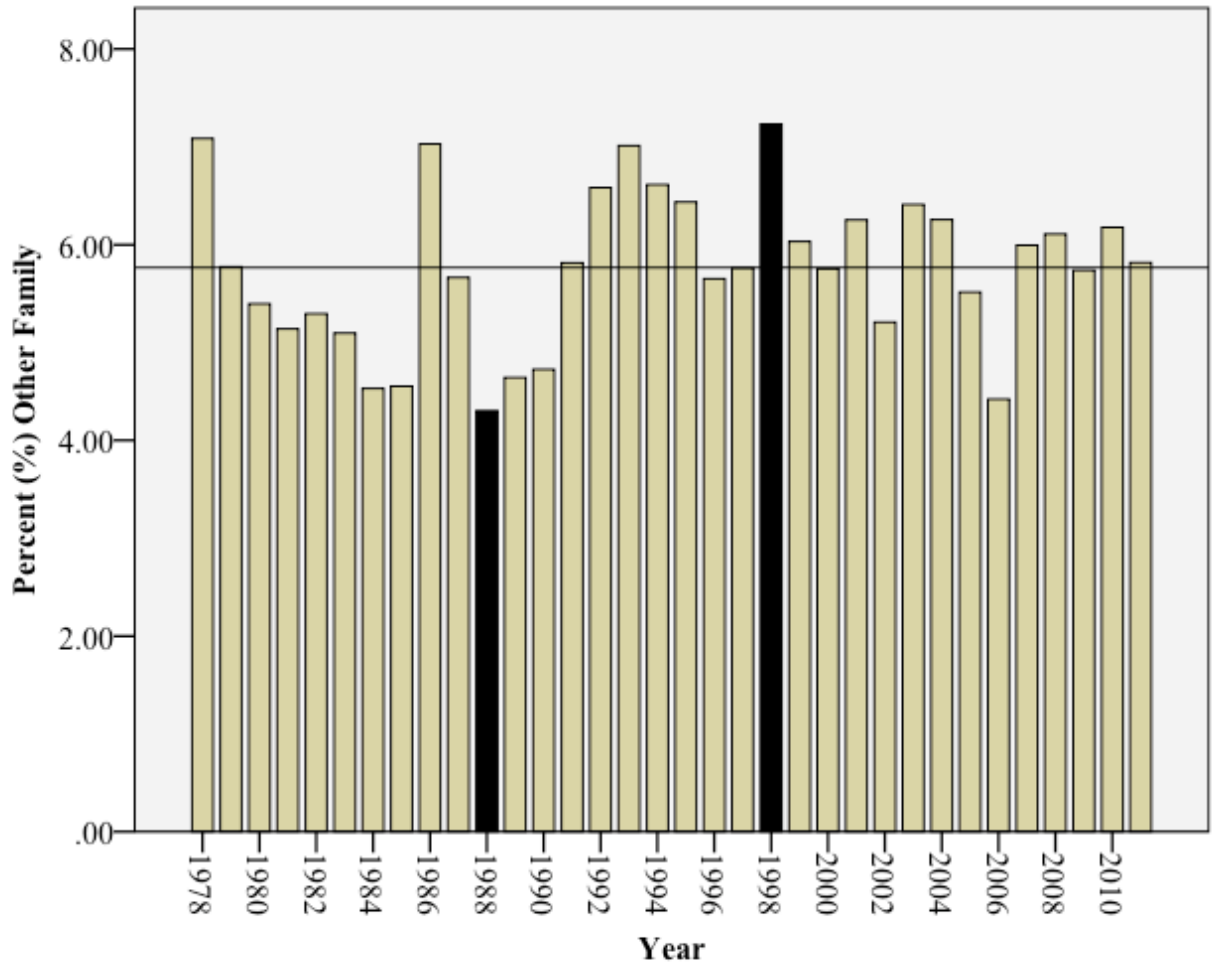


Figure 4.162 Simple Bar Chart for Other Family Category of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Other Family Category Mean Line (5.77%) of archival data (1978-2011)

Examination of the descriptive statistical results for the other family category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the other family category frequency has remained relatively consistent throughout the forty-two years of coding ( $SD = 0.80\%$ ) and has

remained a relatively modest proportion of the annual total of crisis center call category frequency ( $m = 5.77\%$ ).

## Annual Total of Crisis Center Call Category Frequency and Physical Abuse

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Physical Abuse Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (26) Physical Abuse was coded on VCLs throughout thirty-four (34) years of the archival data (1978-2011). Although the archival data for physical abuse frequency of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as an individual call category. When zero (0) is reported in the physical abuse frequency of the annual total of crisis center call category frequency for years 1969-1977, the number reflects the absence of data for the physical abuse category. When zero (0) is reported in physical abuse frequency of the annual total of crisis center call category frequency for years 1978-2011, the number reflects the absence of call frequency related to the physical abuse category rather than the absence of data for the physical abuse category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Thirty-four (34) complete years were identified and used for statistical analysis (1977-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category

frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the physical abuse category frequency of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). Results of the descriptive statistical analysis reported a sum of 8,448 for the physical abuse category of the annual total of crisis center call category frequency with a mean of 248.47 and a standard deviation of 119.39. Descriptive statistical analysis reported a minimum frequency of 54 and a maximum frequency of 490 for the physical abuse category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of archival data (1978-2011). Results of the descriptive statistical analysis reported a sum of 520,859 for the annual total of crisis center call category frequency with a mean of 15,319.38 and a standard deviation of 3,796.76. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the physical abuse category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call

category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011) are reported in Table 4.86. Figure 4.163 provides a visual representation for the physical abuse category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011). Figure 4.164 provides a visual representation for the physical abuse category frequency of the annual total of crisis center call frequency as a simple bar chart encompassing thirty-four (34) complete years of the archival data (1978-2011) with a physical abuse category mean line (248.47). Figure 4.165 provides a visual representation for the physical abuse category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011).

Table 4.86

Descriptive Statistics for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

Descriptive Statistics			
		Physical Abuse Frequency	Category Frequency
N	Valid	34	34
	Missing	0	0
Minimum		54	6,733
Maximum		490	21,292
Sum		8,448	520,859
Mean		248.47	15,319.38
Standard Deviation		1.63	3,796.76



Figure 4.163 Simple Line Chart for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency (1978-2011)

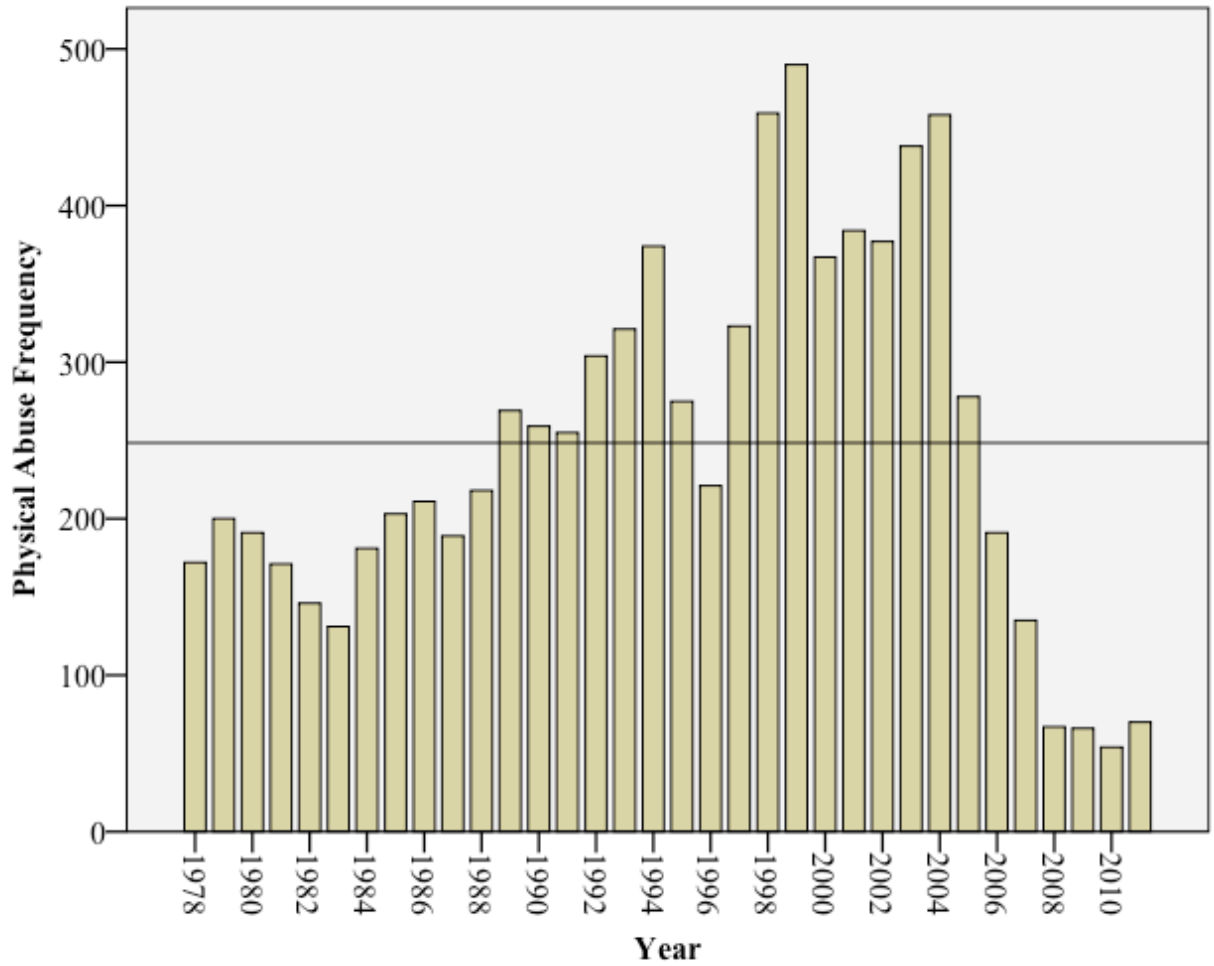


Figure 4.164 Simple Bar Chart for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency with Physical Abuse Category Mean Line (248.47) of archival data (1978-2011)



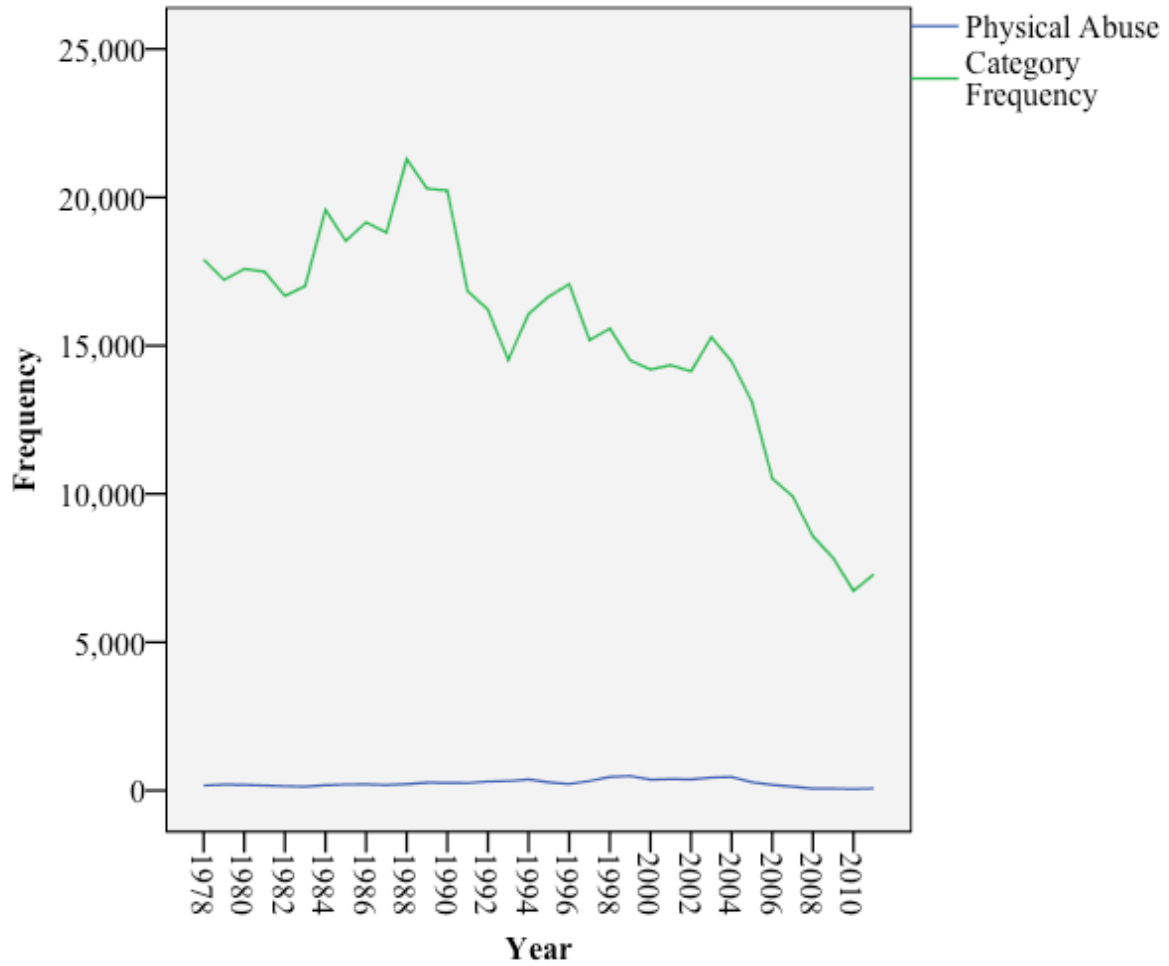


Figure 4.165 Multiple Line Chart for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

*Descriptive Statistics for Physical Abuse Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The physical abuse category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). A descriptive statistical analysis was conducted to evaluate the physical abuse frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011). The results of the descriptive statistical analysis reported a sum of 55.55% for the physical abuse category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 1.63% and a standard deviation of 0.79%. Descriptive statistical analysis reported a minimum frequency of 4.30% and a maximum frequency of 7.23% for the physical abuse category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the physical abuse frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-four (34) complete years of the archival data (1978-2011) are reported in Table .4.87. Figure 4.166 provides a visual representation for the physical abuse frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-four (34) complete years of the archival data (1978-2011). Figure 4.167 provides a visual representation for the physical abuse frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple

bar chart encompassing thirty-four (34) complete years of the archival data (1978-2011) with a percentage (%) physical abuse category mean line (1.63%). Black bars represent years reported as having the highest (1999) and lowest (1983) frequency.

Table 4.87

Descriptive Statistics for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

Descriptive Statistics		
		Physical Abuse Frequency as Ratio (%) of Category Frequency
N	Valid	34
	Missing	0
Minimum		0.77%
Maximum		3.38%
Sum		55.55%
Mean		1.63%
Standard Deviation		0.79%

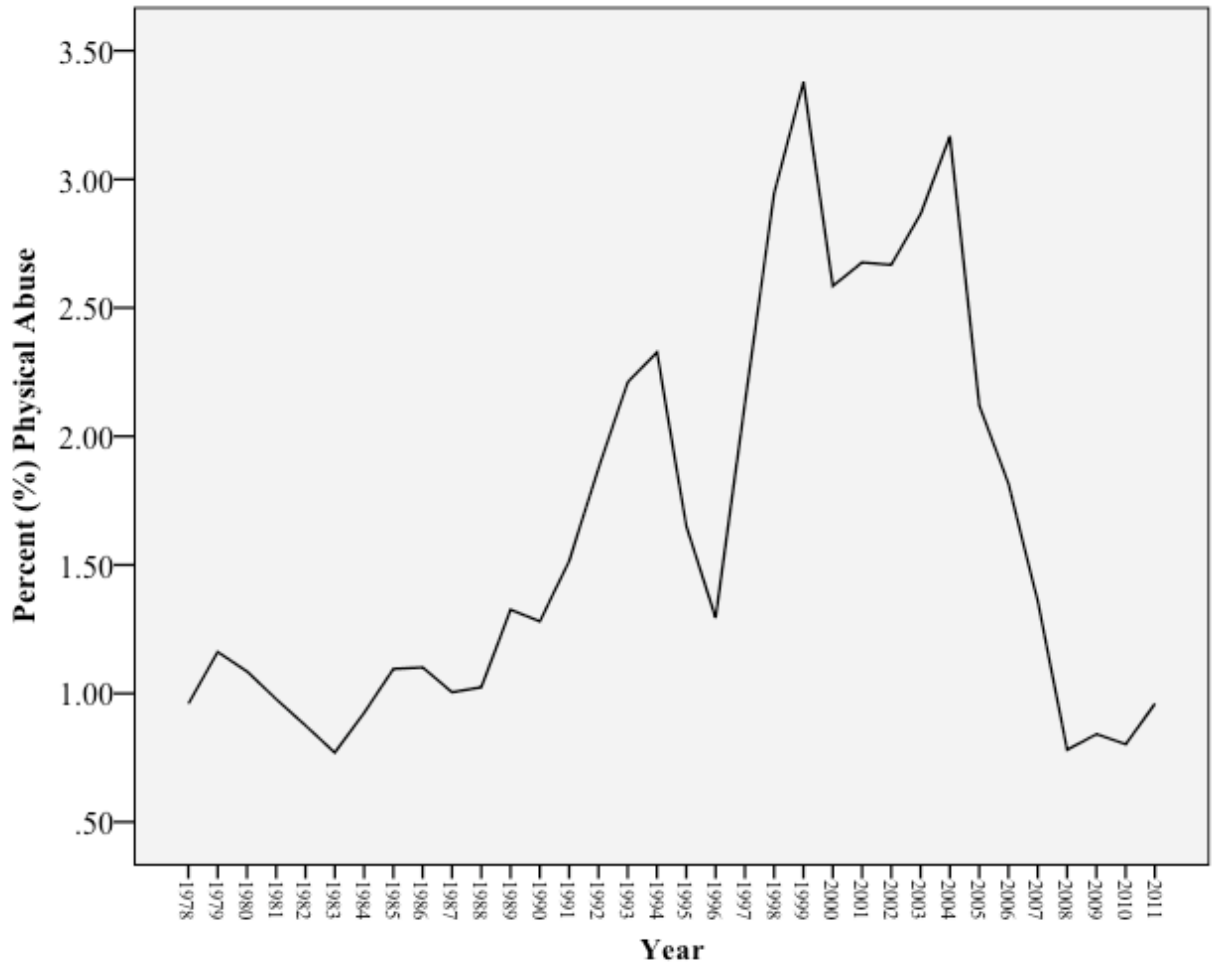


Figure 4.166 Simple Line Chart for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1978-2011)

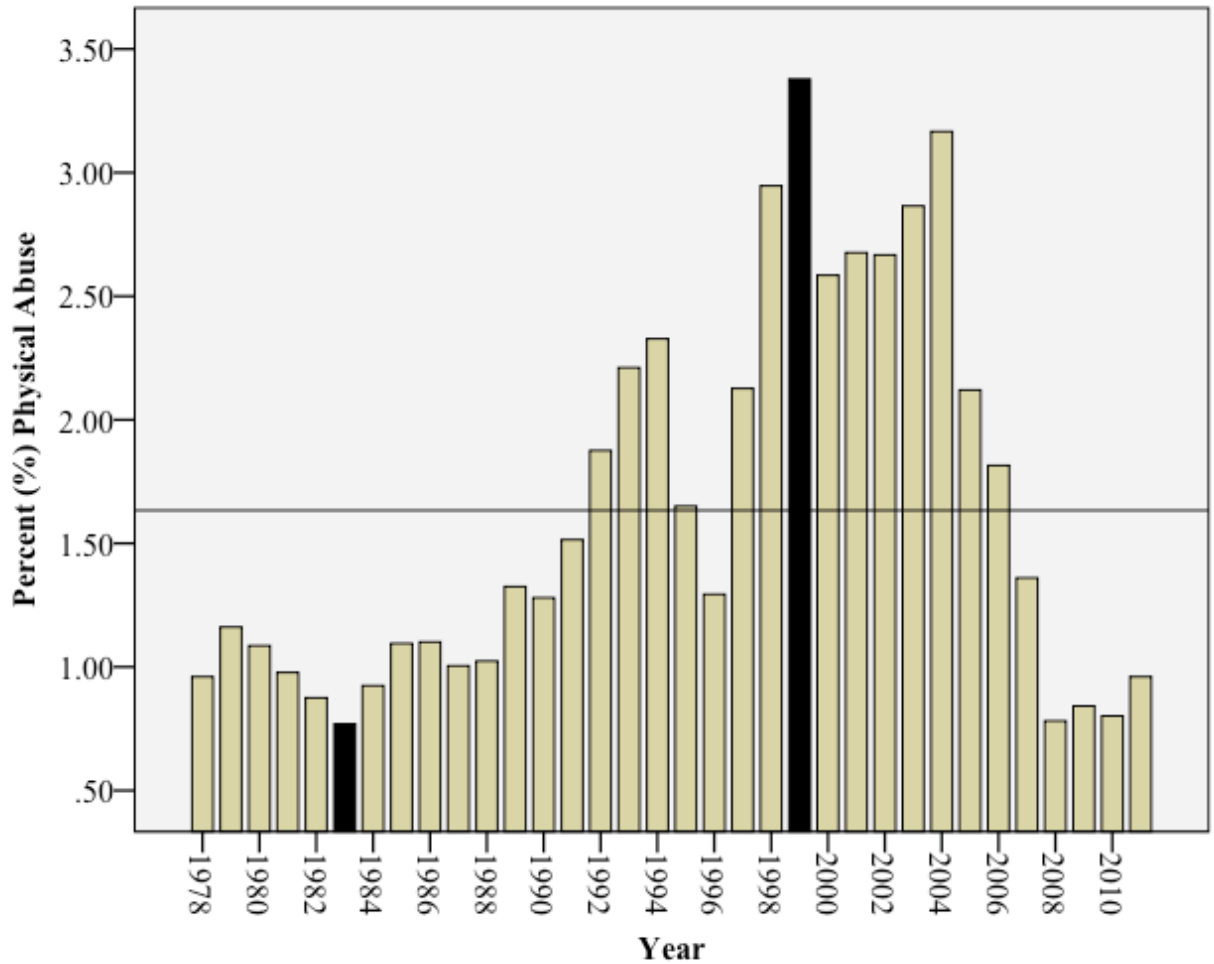


Figure 4.167 Simple Bar Chart for Physical Abuse Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Physical Abuse Category Mean Line (1.63%) of archival data (1978-2011)

Examination of the descriptive statistical results for the physical abuse category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the physical abuse category frequency has decreased significantly since 2008 and has remained a relatively small proportion of the annual total of crisis center call category frequency (< 1%) since it's peak in 1999 (3.38%).

## Annual Total of Crisis Center Call Category Frequency and Reassurance

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency and Reassurance Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (27) Reassurance was coded on VCLs for six (6) years of the archival data (2006-2011). Call category (26) Reassurance represents calls made by CONTACT of Chattanooga volunteers to check-in on an individual at the request of a family member or friend. Beginning in 2006, reassurance calls are a secondary service provided by CONTACT of Chattanooga and frequency totals for this call category are omitted from the annual total of crisis center call category frequency. While the category is acknowledged as a component of the archival data, its frequency is not included in statistical evaluations for the annual total of crisis center call category frequency, therefore statistical analysis is limited to a statistical description of the reassurance category frequency.

The archival data for the reassurance category encompasses six (6) years of the archival data (2003-2011). Results of the descriptive statistical analysis reported a sum of 16,235 for the reassurance category of the annual total of crisis center call category frequency with a mean of 2,705.83 and a standard deviation of 464.63. Descriptive statistical analysis reported a minimum frequency of 2,190 and a maximum frequency of 3,260 for the reassurance category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the reassurance category frequency of the annual total of crisis center call frequency encompassing six (6) complete years of the archival data (2003-2011) are reported in Table 4.88. Figure 4.168 provides a visual representation for

the reassurance category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing six (6) complete years of the archival data (2003-2011). Figure 4.169 provides a visual representation for the reassurance category frequency of the annual total of crisis center call frequency as a simple bar chart encompassing six (6) complete years of the archival data (2003-2011) with a reassurance category mean line (2,705.83).



Table 4.88  
 Descriptive Statistics for Reassurance Category Frequency of the archival data (2003-2011)

Descriptive Statistics		
		Reassurance Frequency
N	Valid	6
	Missing	0
Minimum		2,190
Maximum		3,260
Sum		16,235
Mean		2,705.83
Standard Deviation		464.63

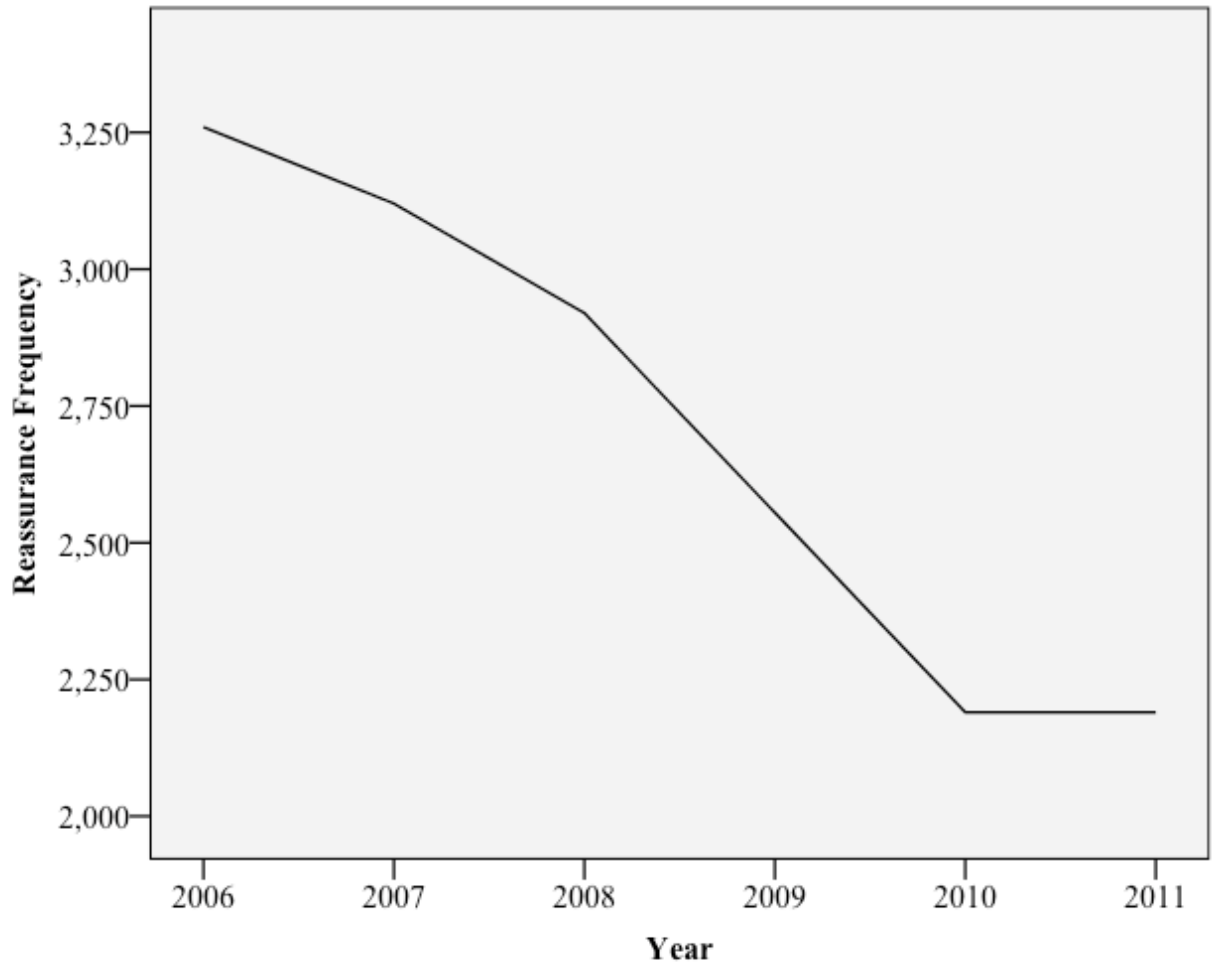


Figure 4.168 Simple Line Chart for Reassurance Category Frequency of archival data (2006-2011)

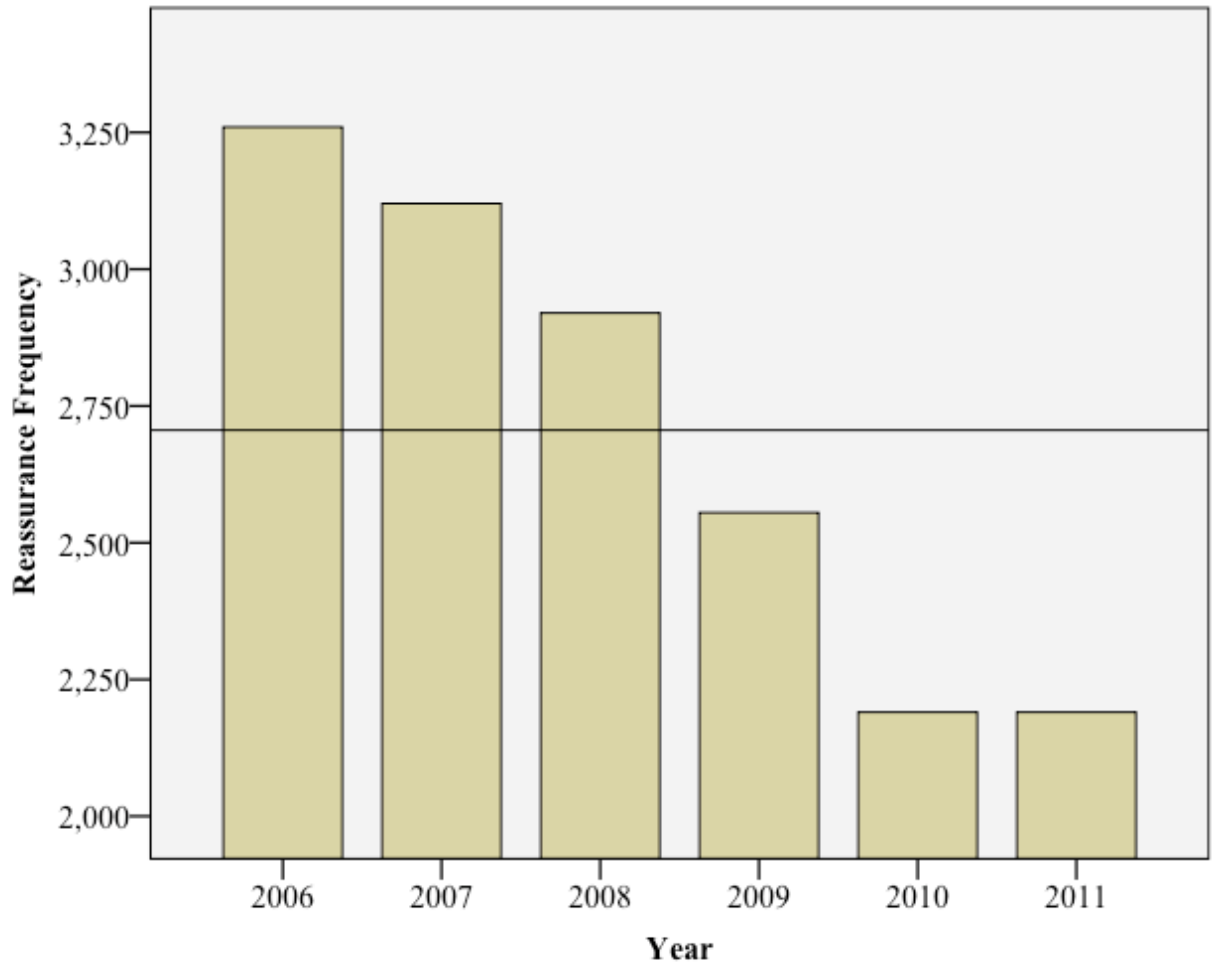


Figure 4.169 Simple Bar Chart for Reassurance Category Frequency of Annual Total of Crisis Center Call Category Frequency with Reassurance Category Mean Line (2,705.83) of archival data (2006-2011)

## Annual Total of Crisis Center Call Category Frequency and Relationship

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Relationship Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (28) Relationship was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in relationship frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the relationship category rather than the absence of data for the relationship category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the relationship frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 39,749 for the relationship category of the annual total of crisis center call category frequency with a mean of 946.40 and a standard deviation of 369.70. Descriptive statistical analysis reported a minimum frequency of 0 and a maximum frequency of 1,393 for the relationship category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the relationship category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.89. Figure 4.170 provides a visual representation for the relationship category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.171 provides a visual representation for the relationship category frequency of the annual total

of crisis center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a relationship category mean line (946.40). Figure 4.172 provides a visual representation for the relationship category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.89

Descriptive Statistics for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Relationship Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		0	6,733
Maximum		1,393	21,292
Sum		39,749	639,102
Mean		946.40	15,216.71
Standard Deviation		369.70	3,470.44

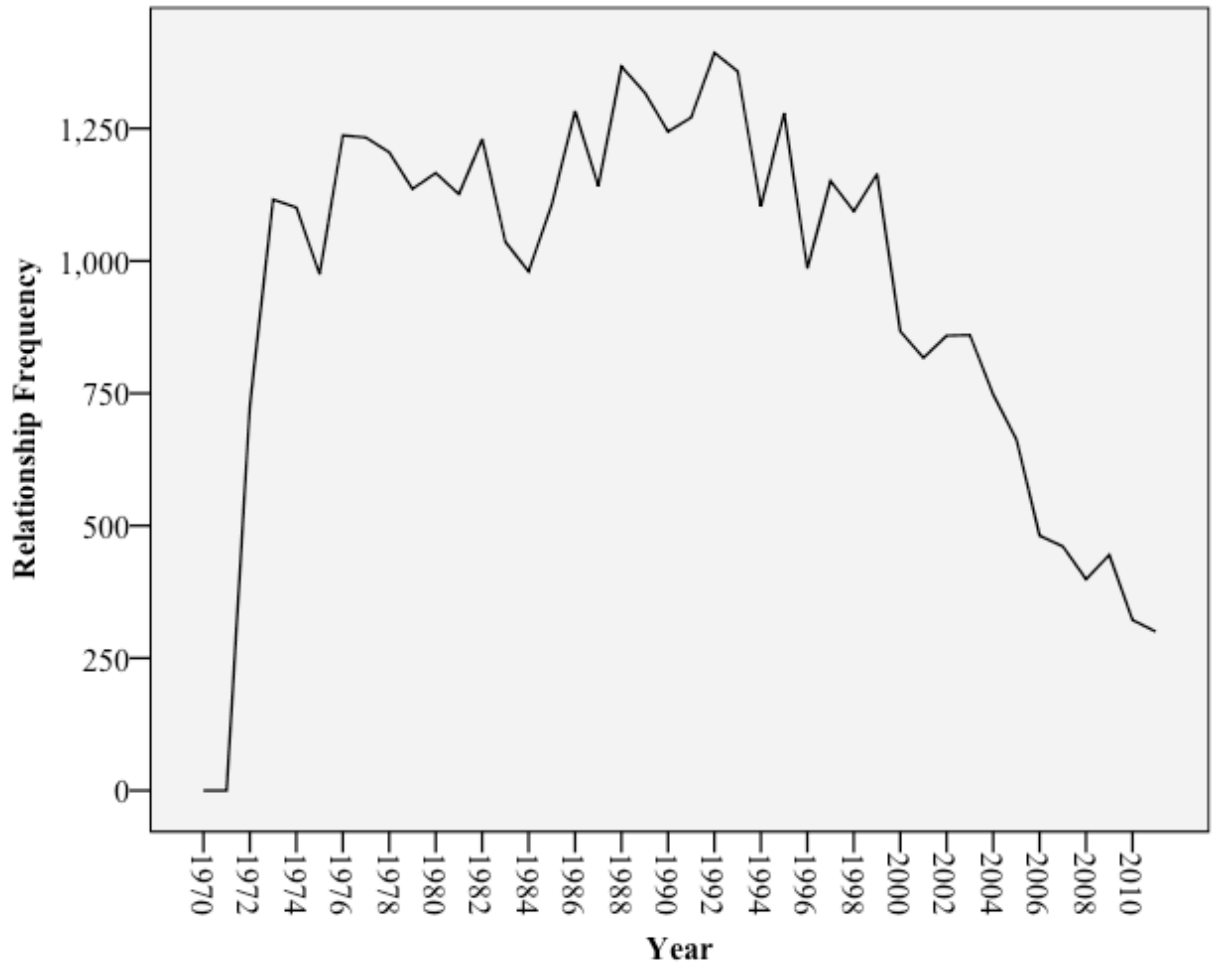


Figure 4.170 Simple Line Chart for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)



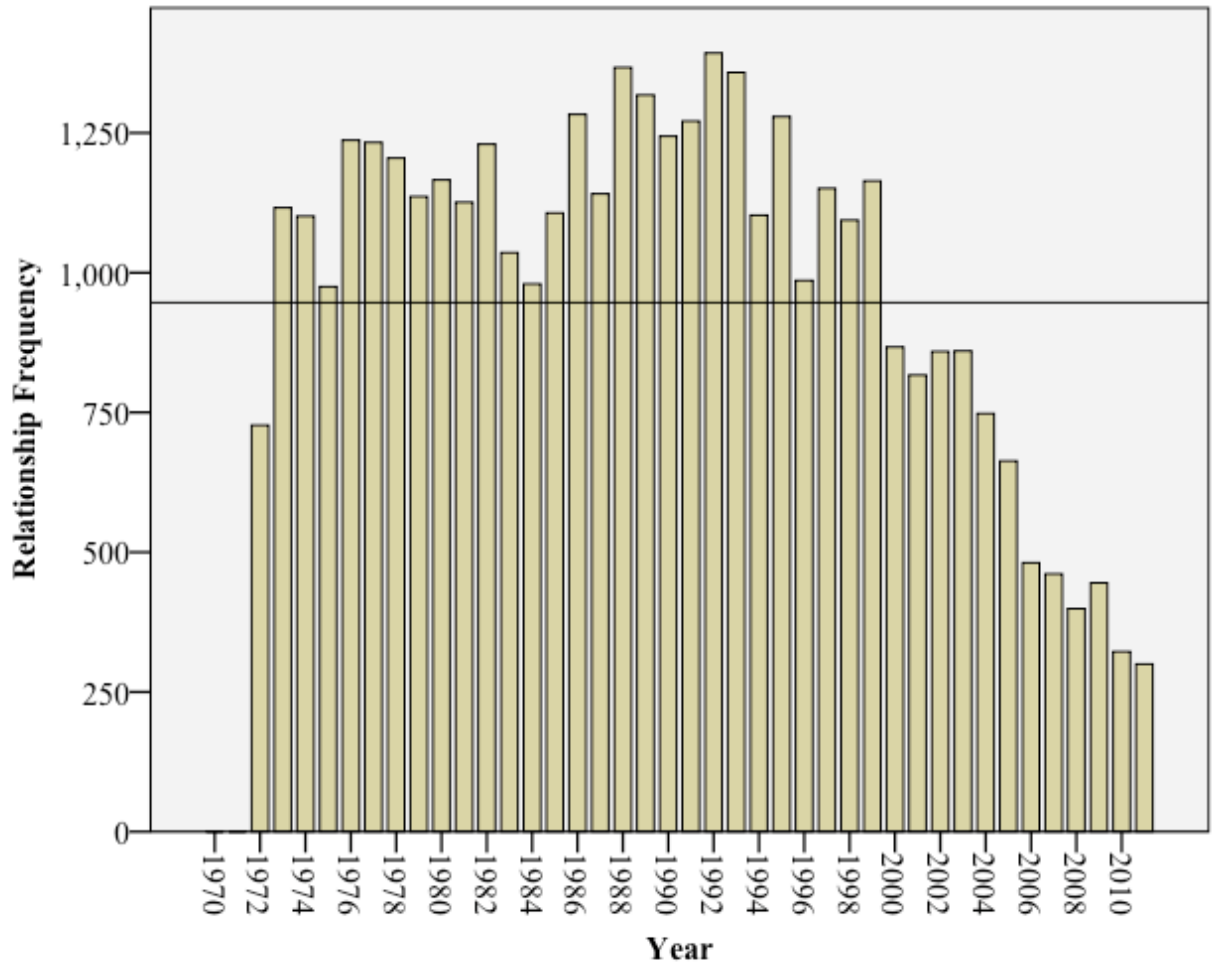


Figure 4.171 Simple Bar Chart for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency with Relationship Category Mean Line (946.40) of archival data (1970-2011)

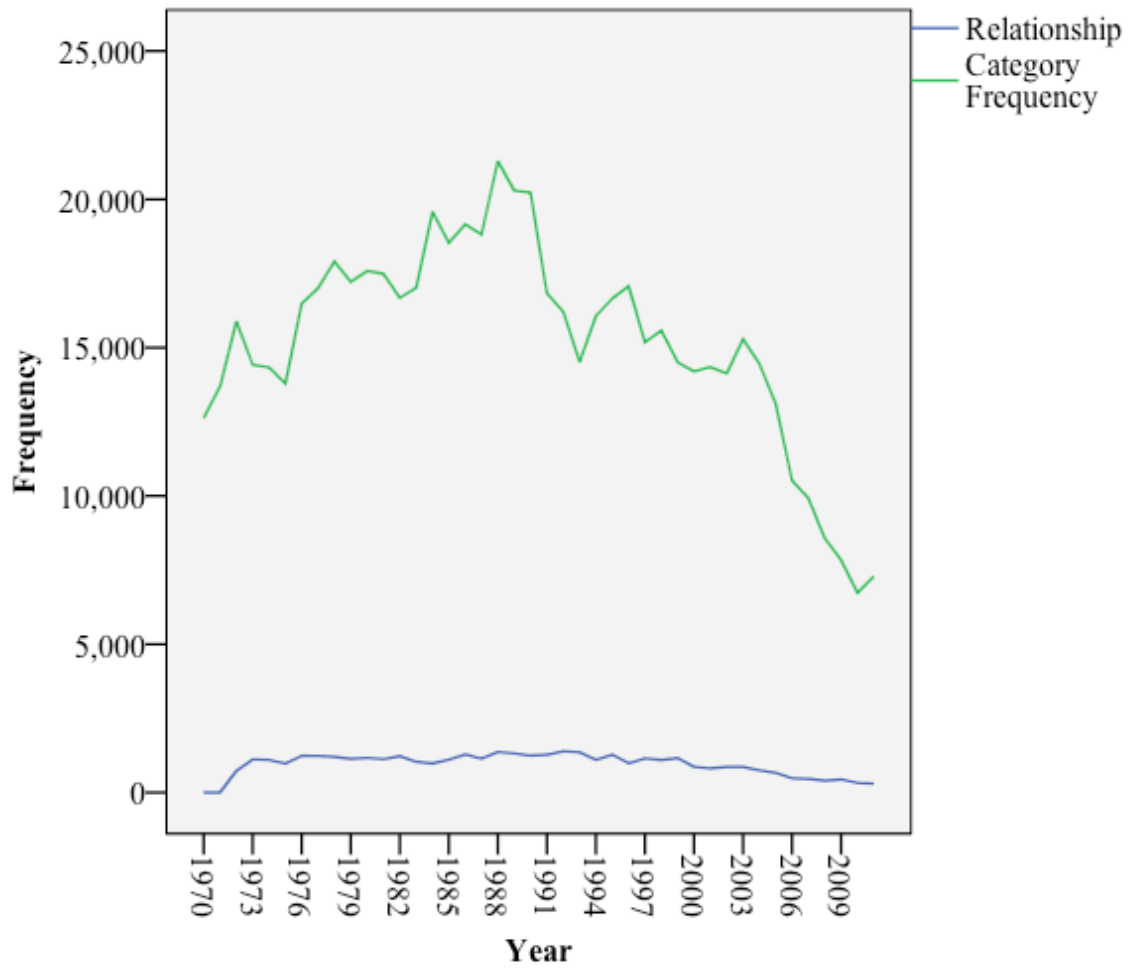


Figure 4.172 Multiple Line Chart for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The relationship category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the relationship category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 255.09% for the relationship category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 6.07% and a standard deviation of 1.81%. Descriptive statistical analysis reported a minimum frequency of 0.00% and a maximum frequency of 9.35% for the relationship category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the relationship category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.90. Figure 4.173 provides a visual representation for the relationship category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.174 provides a visual representation for the relationship category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call

category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) relationship category mean line (6.07%). Black bar represents year reported as having the highest (1993) frequency.

Table 4.90

Descriptive Statistics for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Relationship Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.00%
Maximum		9.35%
Sum		255.09%
Mean		6.07%
Standard Deviation		1.81%

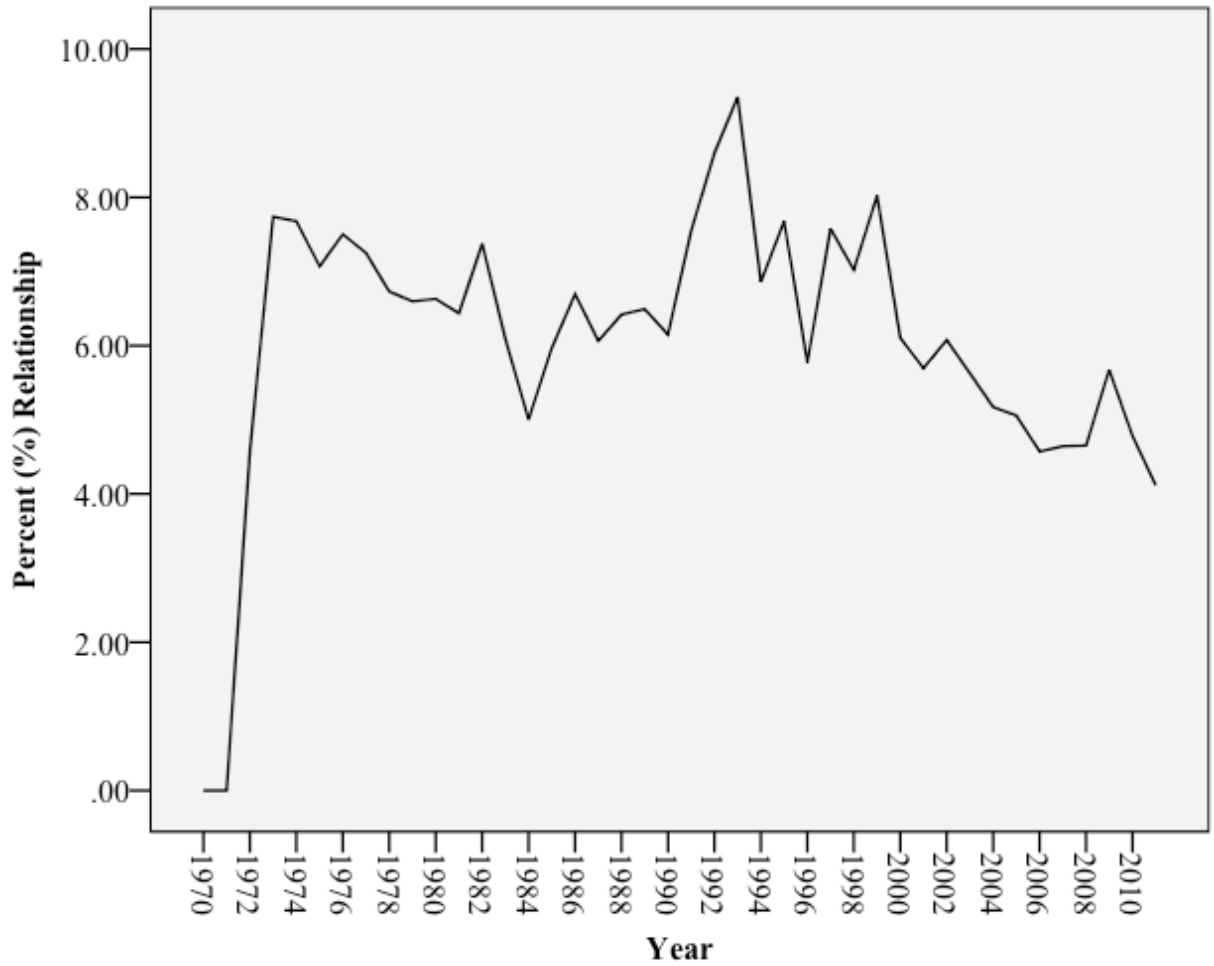


Figure 4.173 Simple Line Chart for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

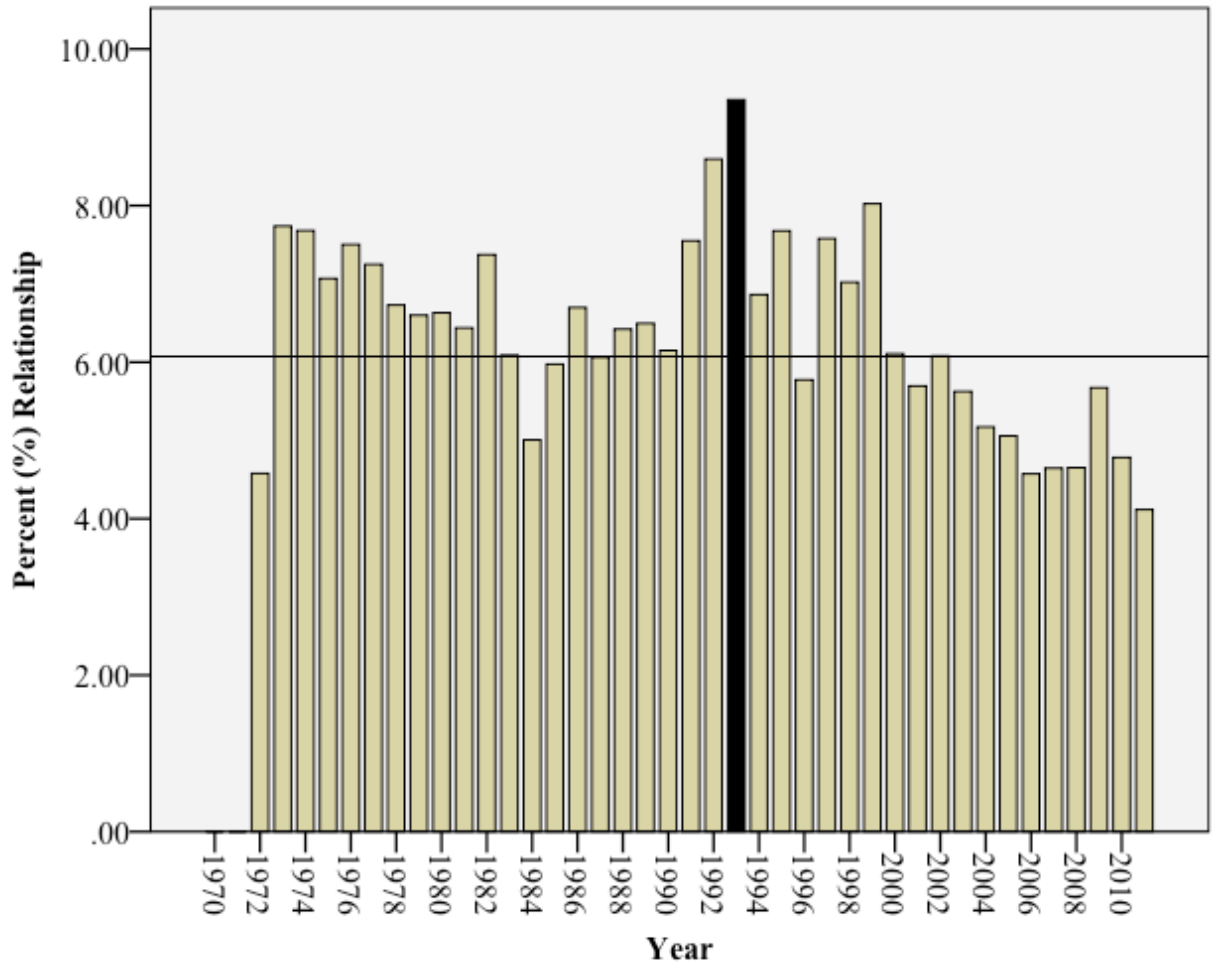


Figure 4.174 Simple Bar Chart for Relationship Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Relationship Category Mean Line (6.07%) of archival data (1970-2011)

Examination of the descriptive statistical results for the relationship category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the relationship category frequency has remained relatively consistent since 2005 and has remained a relatively modest proportion of the annual total of crisis center call category frequency (5%) since it's peak in 1993 (9.35%).

## Annual Total of Crisis Center Call Category Frequency and Religious

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Religious Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (29) Religious was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in religious frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the religious category rather than the absence of data for the religious category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis



center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the religious category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 18,534 for the religious category of the annual total of crisis center call category frequency with a mean of 441.29 and a standard deviation of 183.37. Descriptive statistical analysis reported a minimum frequency of 94 and a maximum frequency of 937 for the religious category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 12,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the religious category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) as are reported in Table 4.91. Figure 4.175 provides a visual representation for the religious category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.176 provides a visual representation for the religious category frequency of the annual total of crisis

center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a religious category mean line (441.29). Figure 4.177 provides a visual representation for the religious category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.91

Descriptive Statistics for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Religious Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		94	6,733
Maximum		937	21,292
Sum		18,534	639,102
Mean		441.29	15,216.71
Standard Deviation		183.37	3,470.44

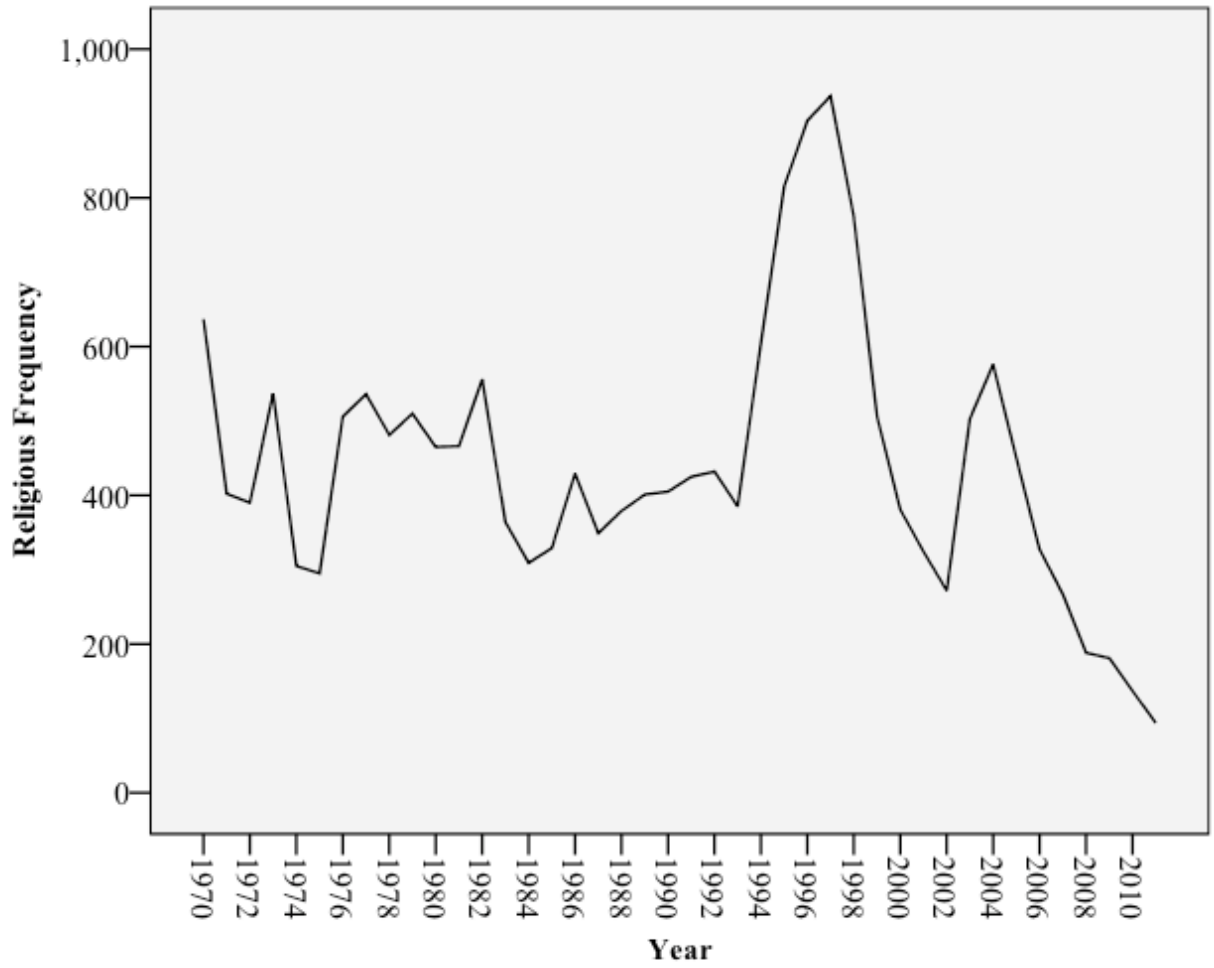


Figure 4.175 Simple Line Chart for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

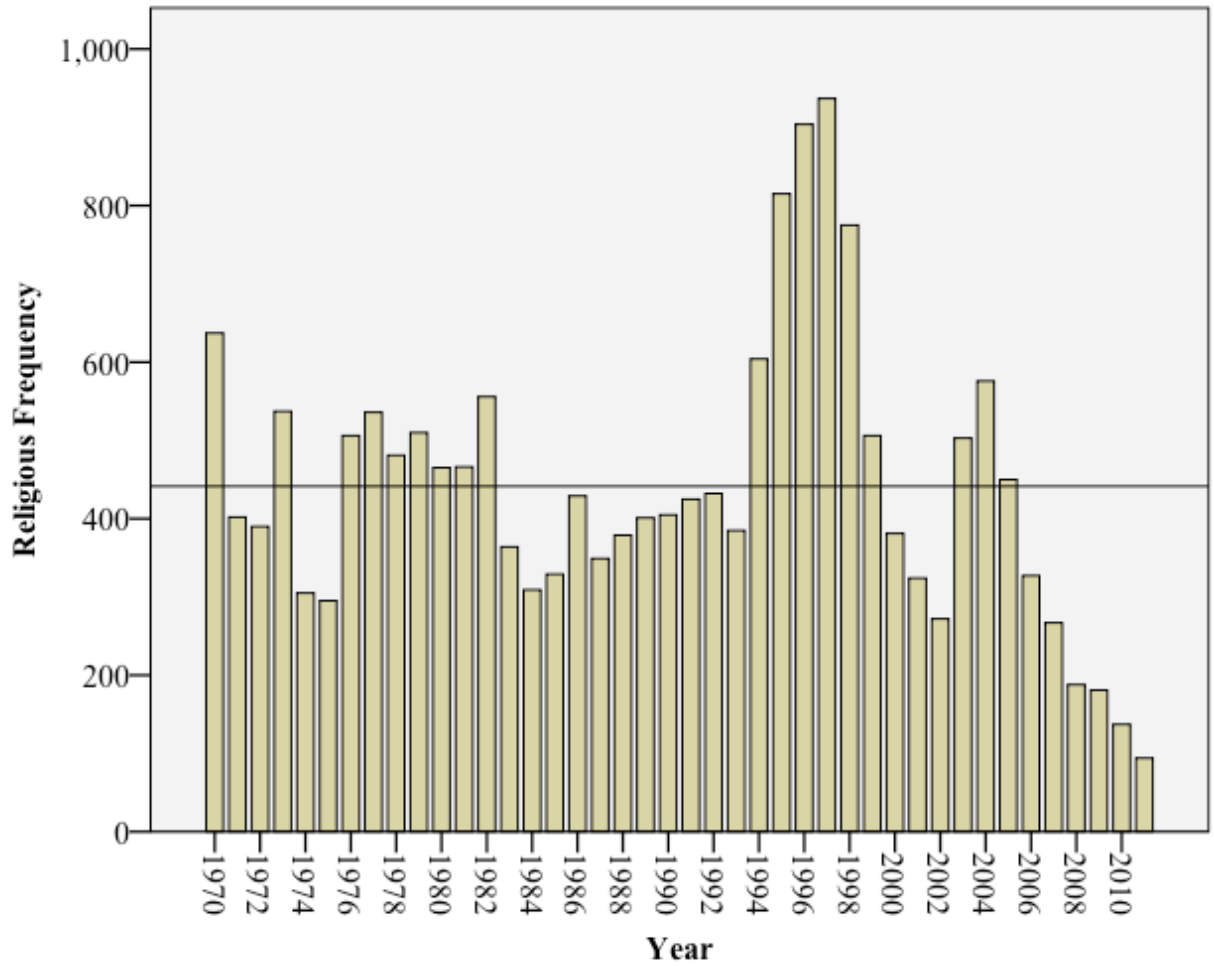


Figure 4.176 Simple Bar Chart for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency with Religious Category Mean Line (441.29) of archival data (1970-2011)

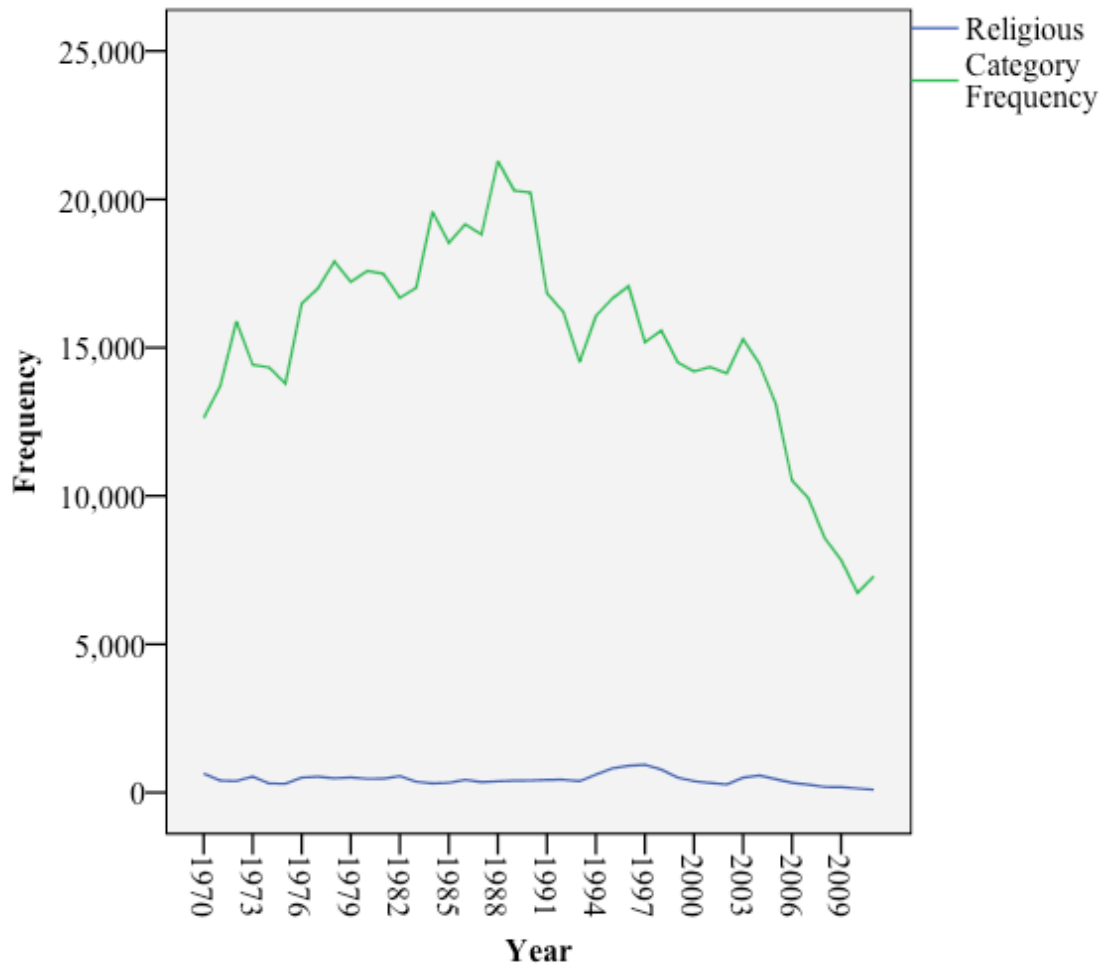


Figure 4.177 Multiple Line Chart for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The religious category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the religious frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 121.90% for the religious category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 2.90% and a standard deviation of 1.09%. Descriptive statistical analysis reported a minimum frequency of 1.29% and a maximum frequency of 6.17% for the religious category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the religious category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.92. Figure 4.178 provides a visual representation for the religious category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.179 provides a visual representation for the religious category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a

simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) religious category mean line (2.90%). Black bar represents year reported as having the highest (1997) the lowest (2011) frequency.



Table 4.92

Descriptive Statistics for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Religious Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		1.29%
Maximum		6.17%
Sum		121.90%
Mean		2.90%
Standard Deviation		1.09%

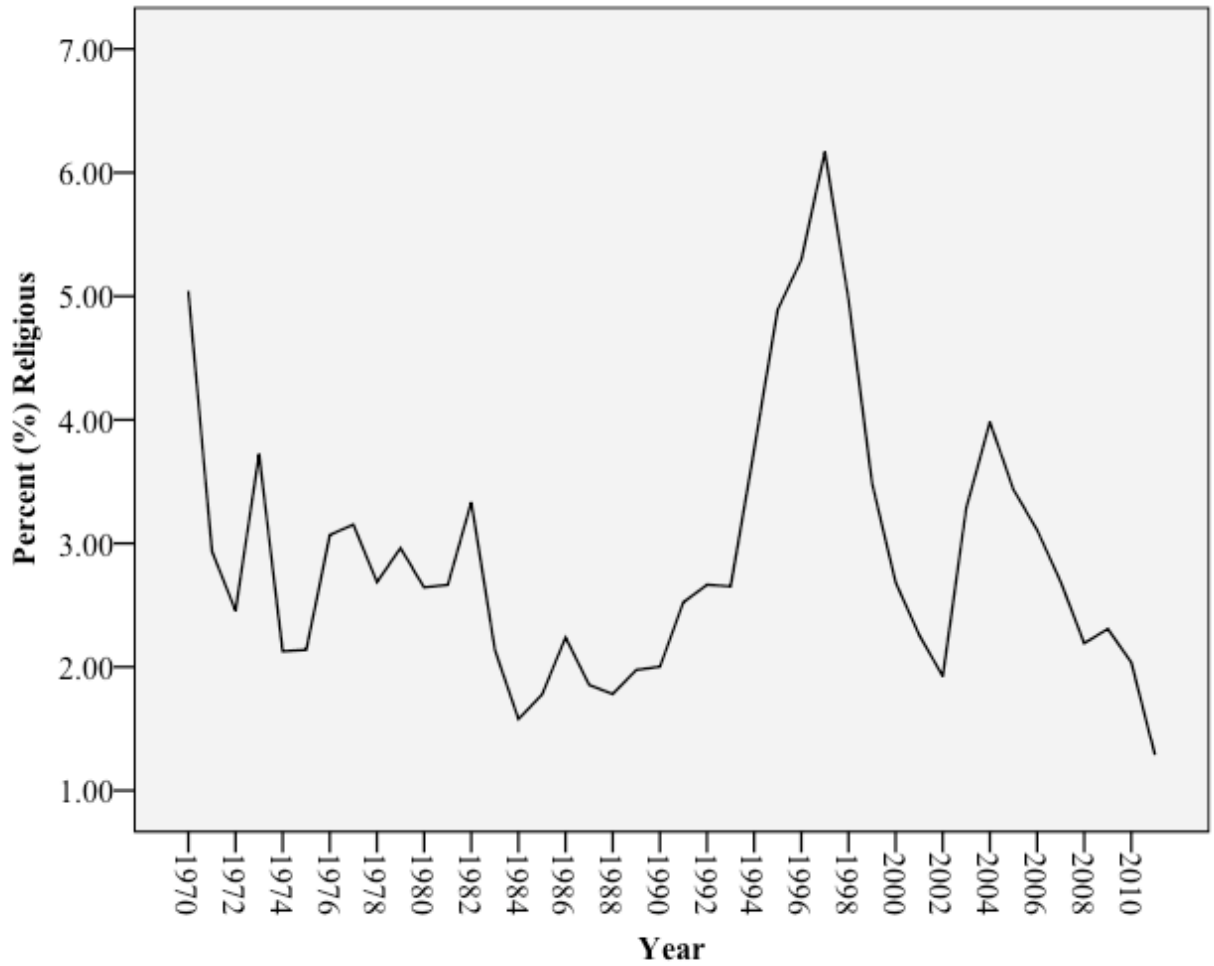


Figure 4.178 Simple Line Chart for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

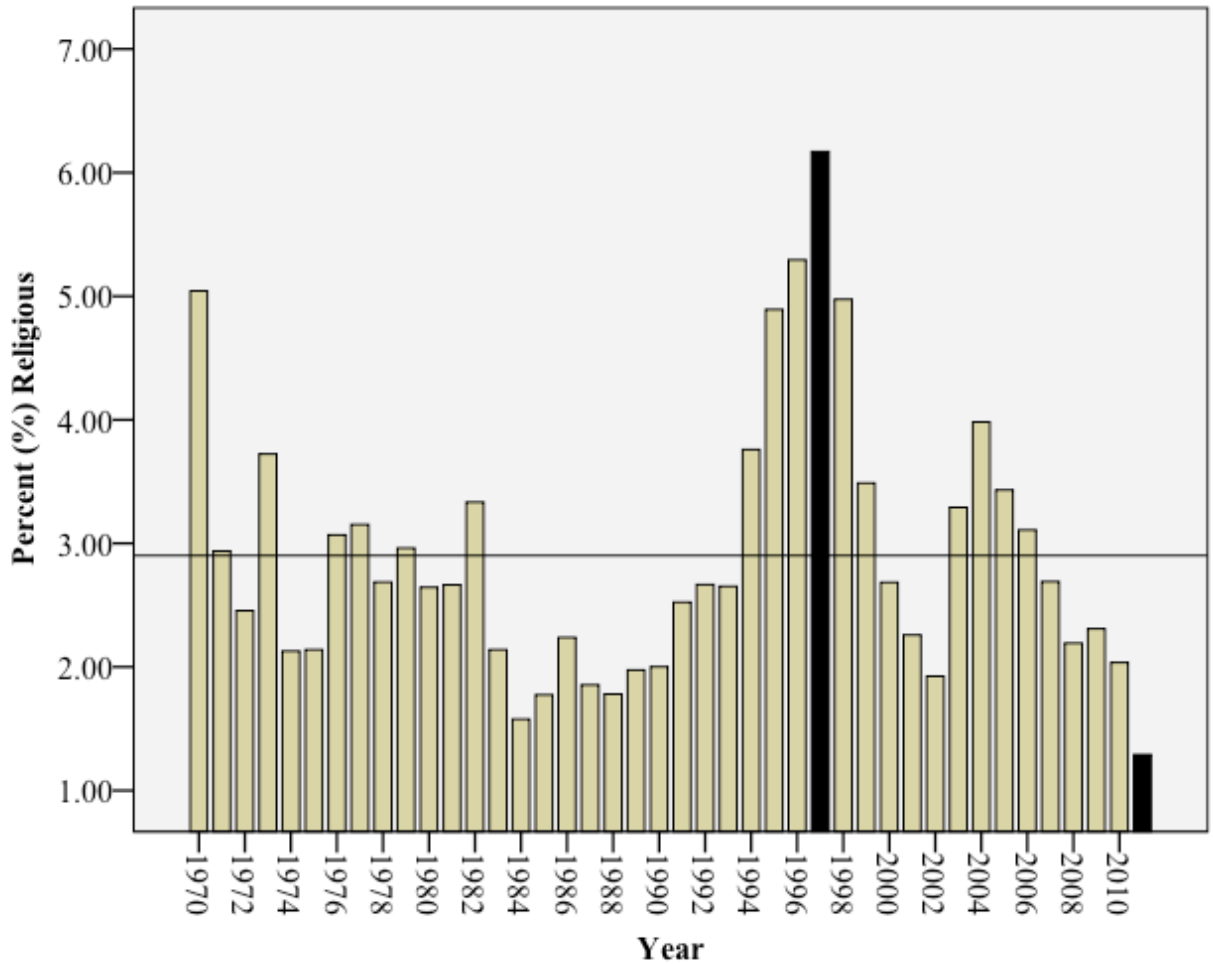


Figure 4.179 Simple Bar Chart for Religious Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Religious Category Mean Line (2.09%) of archival data (1970-2011)

Examination of the descriptive statistical results for the religious category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the religious category frequency has remained relatively consistent and has recently been a relatively small proportion of the annual total of crisis center call category frequency (between 0.5% and 2.25%) with the exception of a marked

increase in 1997. Anecdotal evidence gathered from conversation with administrative personnel suggests the 1997 increase in proportion of religious category frequency was reflective of an individual in a crisis of faith rather than an increase in frequency due to multiple individuals experiencing an acute crisis episode.

## Annual Total of Crisis Center Call Category Frequency and School

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency pre School Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (30) School was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in the school frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the school category rather than the absence of data for the school category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the school frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 2,700 for the school category of the annual total of crisis center call category frequency with a mean of 64.29 and a standard deviation of 61.76. Descriptive statistical analysis reported a minimum frequency of 0 and a maximum frequency of 325 for the school category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the school category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.93. Figure 4.180 provides a visual representation for the school category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.181 provides a visual representation for the school category frequency of the annual total of crisis

center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a school category mean line (61.76). Figure 4.182 provides a visual representation for the school category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.93

Descriptive Statistics for School Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		School Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		0	6,733
Maximum		325	21,292
Sum		2,700	639,102
Mean		64.29	15,216.71
Standard Deviation		61.76	3,470.44



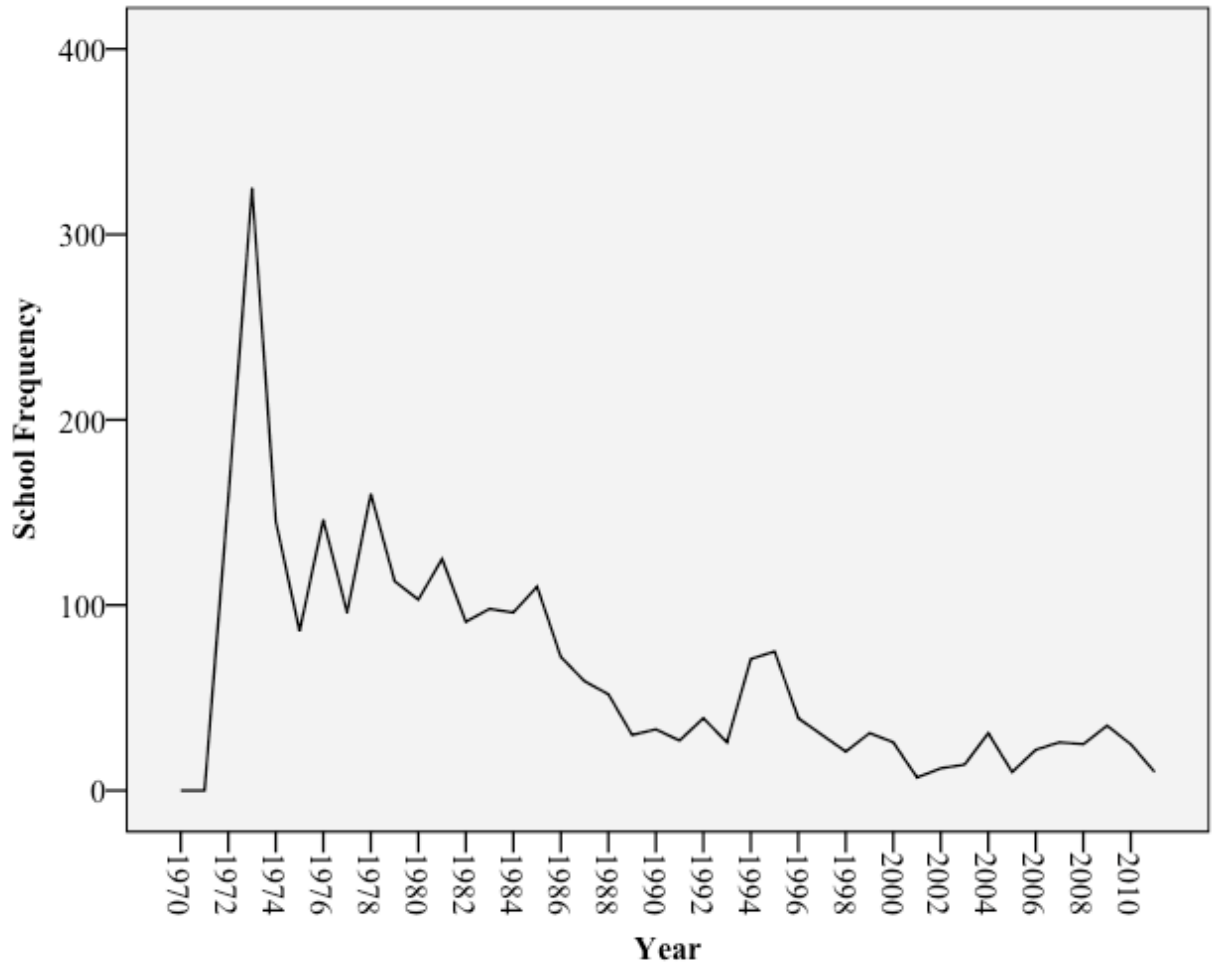


Figure 4.180 Simple Line Chart for School Category of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

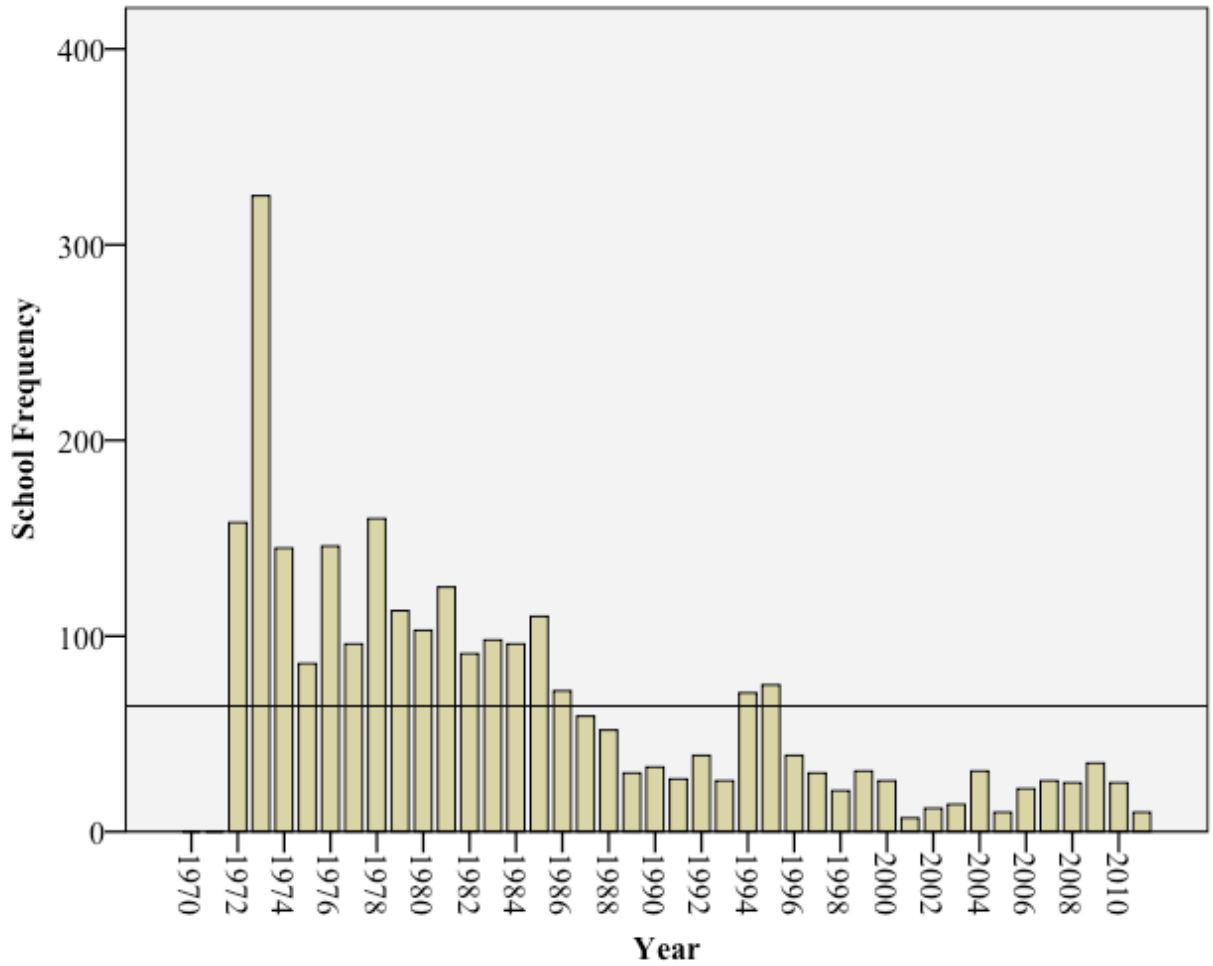


Figure 4.181 Simple Bar Chart for School Category Frequency of Annual Total of Crisis Center Call Category Frequency with School Category Mean Line (64.29) of archival data (1970-2011)

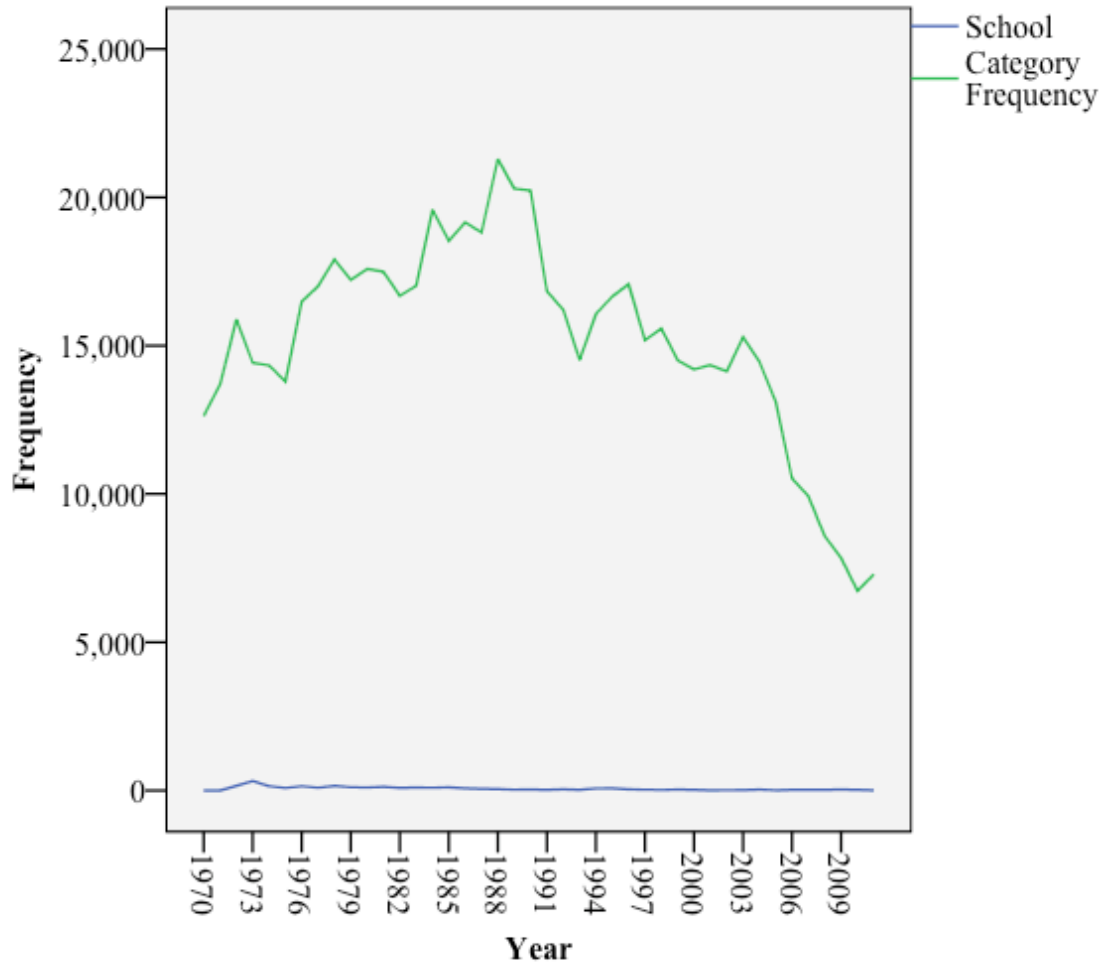


Figure 4.182 Multiple Line Chart for School Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for School Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The school category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the school category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 17.30% for the school category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 0.41% and a standard deviation of 0.40%. Descriptive statistical analysis reported a minimum frequency of 0.00% and a maximum frequency of 2.25% for the school category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the school category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.94. Figure 4.183 provides a visual representation for the school category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.184 provides a visual representation for the school category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart

encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) school category mean line (0.41%). Black bar represents the year reported as having the highest (1973) frequency.

Table 4.94

Descriptive Statistics for School Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		School Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.00%
Maximum		2.25%
Sum		17.30%
Mean		0.41%
Standard Deviation		0.40%

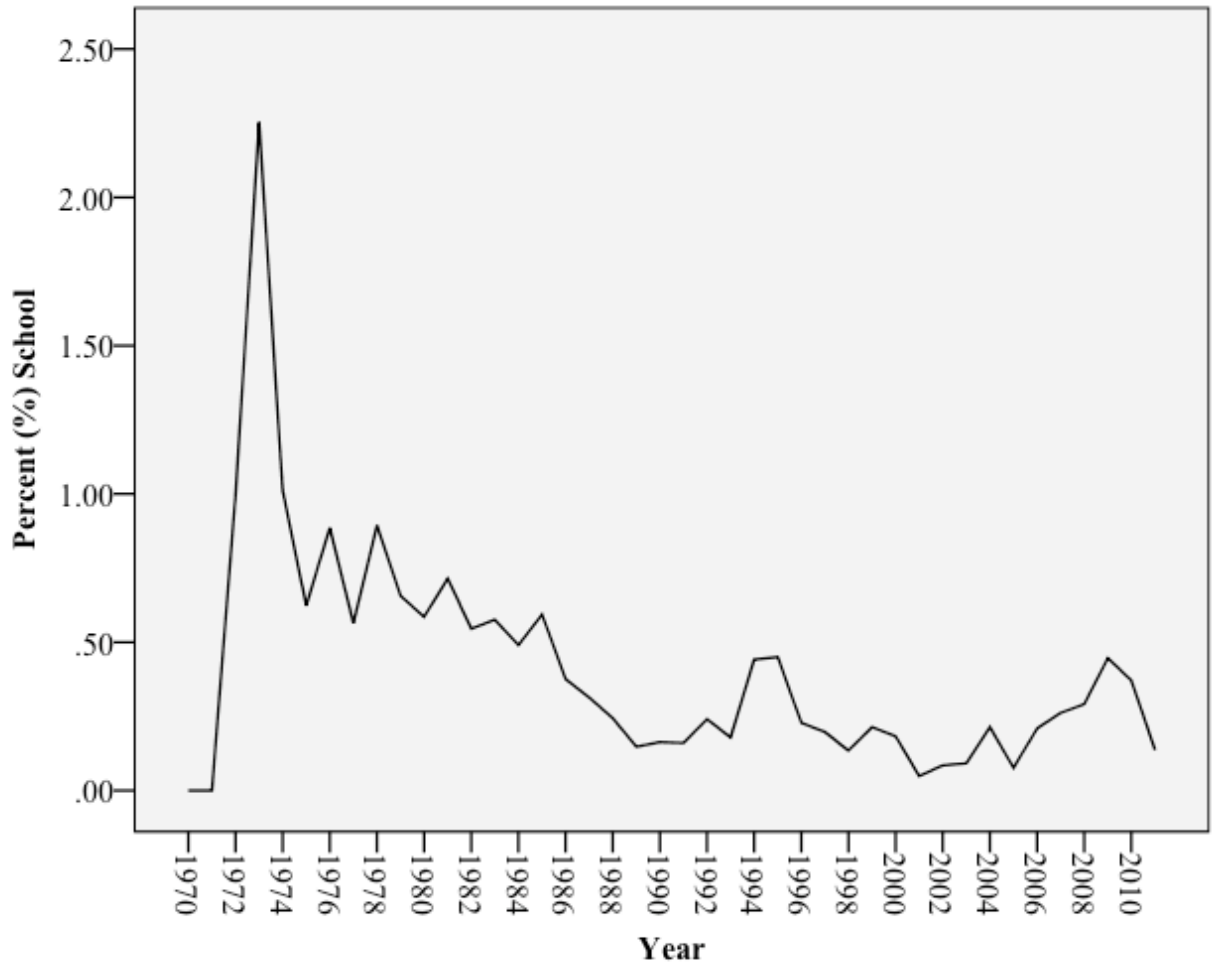


Figure 4.183 Simple Line Chart for School Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

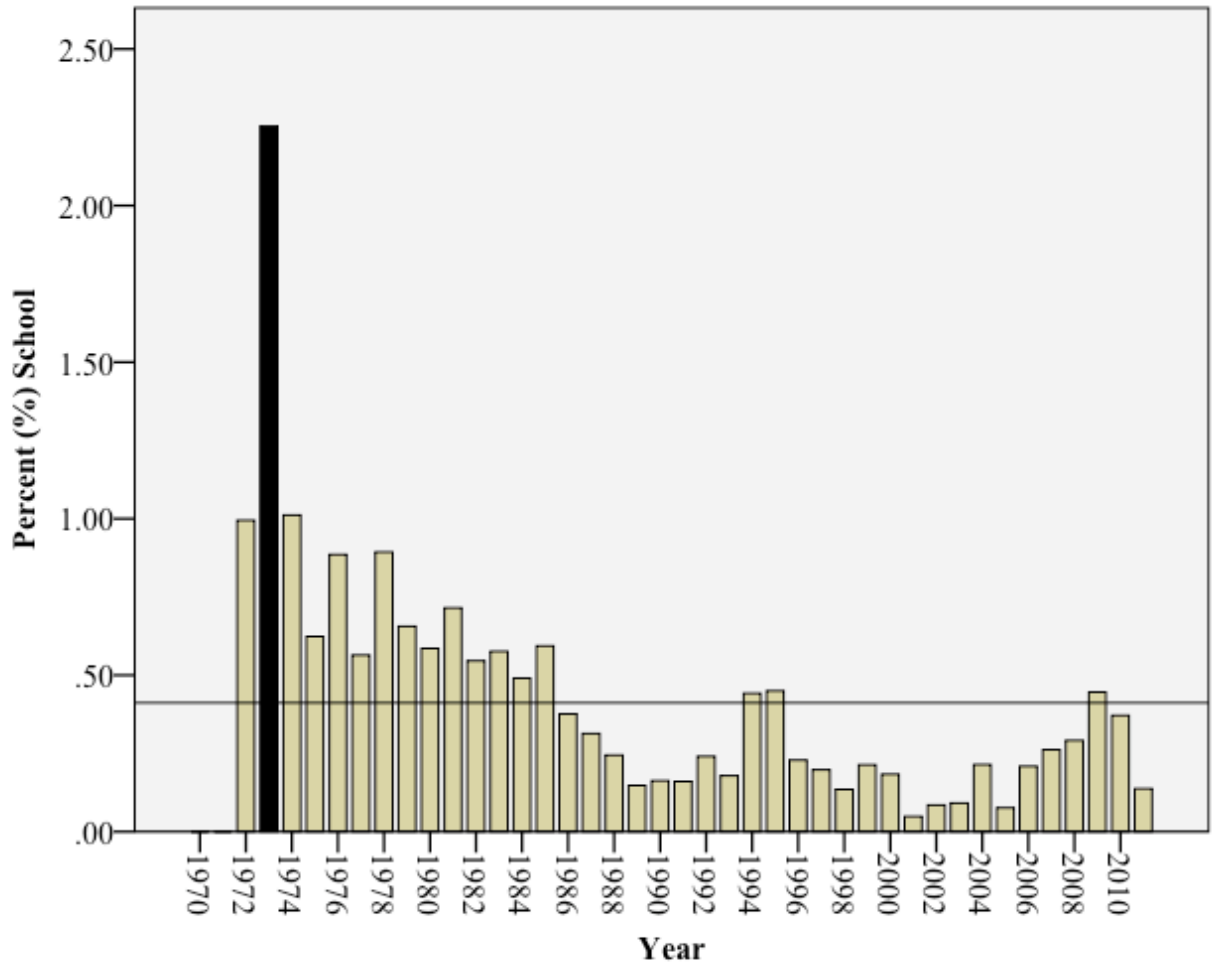


Figure 4.184 Simple Bar Chart for School Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % School Category Mean Line (0.41%) of archival data (1970-2011)

Examination of the descriptive statistical results for the school category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the school category frequency has decreased significantly since 1973 and has remained a relatively small proportion of the annual total of crisis center call category frequency (< 1%) since 1993.



## Annual Total of Crisis Center Call Category Frequency and Sex

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Sex Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (31) Sex was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in the sex frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the sex category rather than the absence of data for the sex category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the sex category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 26,102 for the sex category of the annual total of crisis center call category frequency with a mean of 621.48 and a standard deviation of 322.78. Descriptive statistical analysis reported a minimum frequency of 0 and a maximum frequency of 1,246 for the sex category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the sex category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.95. Figure 4.185 provides a visual representation for the sex category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.186 provides a visual representation for the sex category frequency of the annual total of crisis center

call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a sex category mean line (621.48). Figure 4.187 provides a visual representation for the sex category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.95  
 Descriptive Statistics for Sex Category Frequency of Annual Total of Crisis Center Call Category  
 Frequency and Annual Total of Crisis Center Call Category Frequency of archival data  
 (1970-2011)

Descriptive Statistics			
		Sex Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		0	6,733
Maximum		1,246	21,292
Sum		26,102	639,102
Mean		621.48	15,216.71
Standard Deviation		322.78	3,470.44

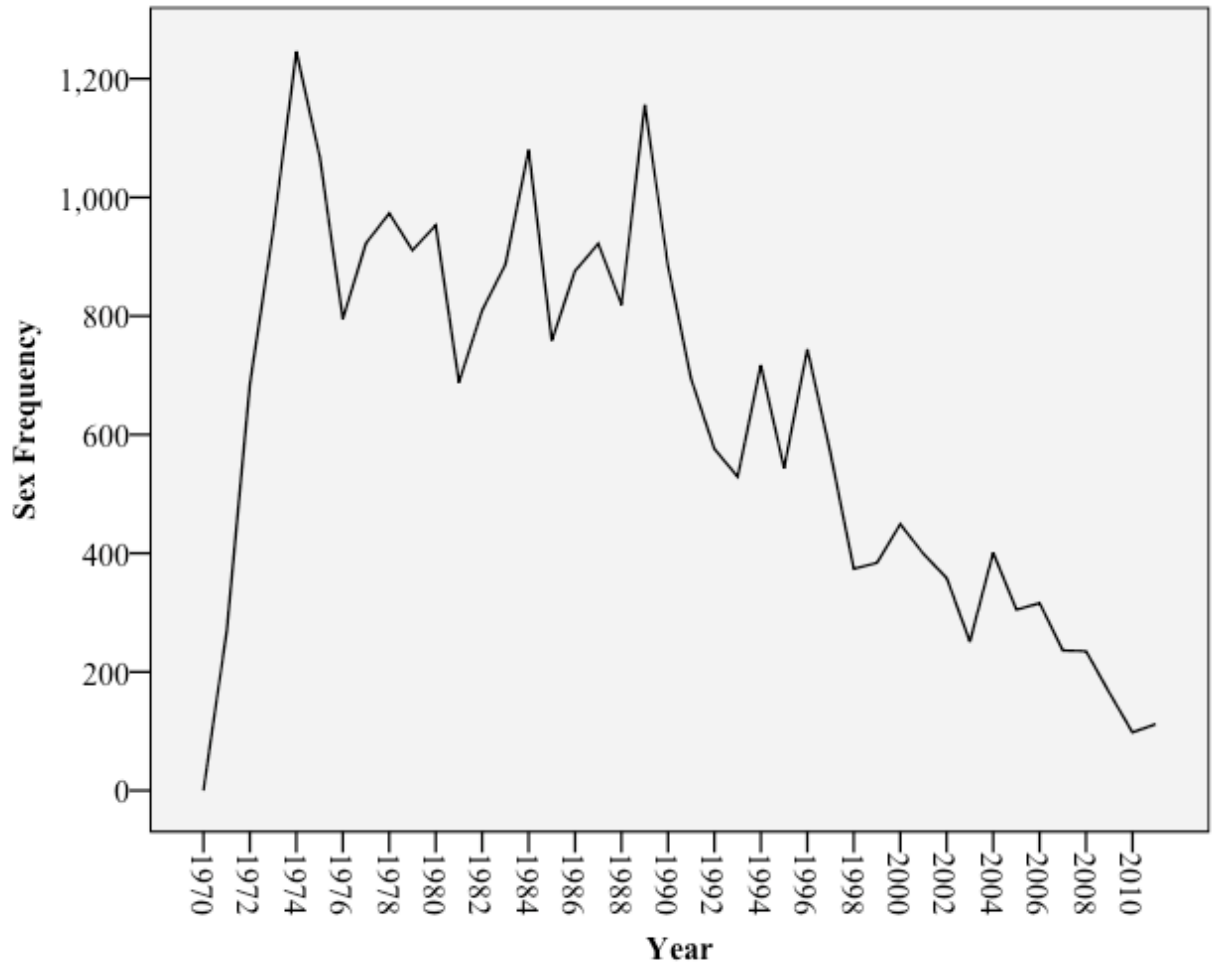


Figure 4.185 Simple Line Chart for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

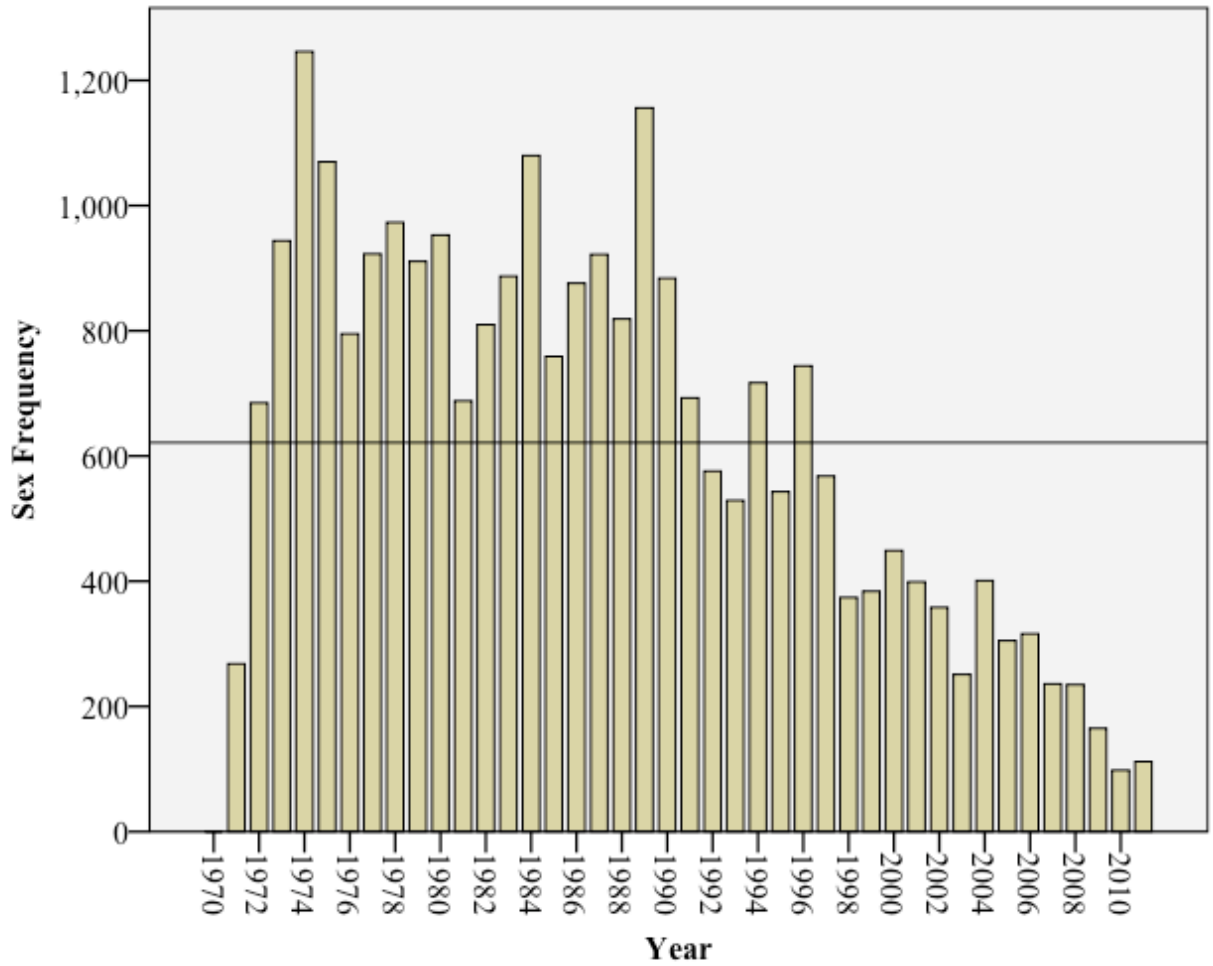


Figure 4.186 Simple Bar Chart for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency with Sex Category Mean Line (621.48) of archival data (1970-2011)

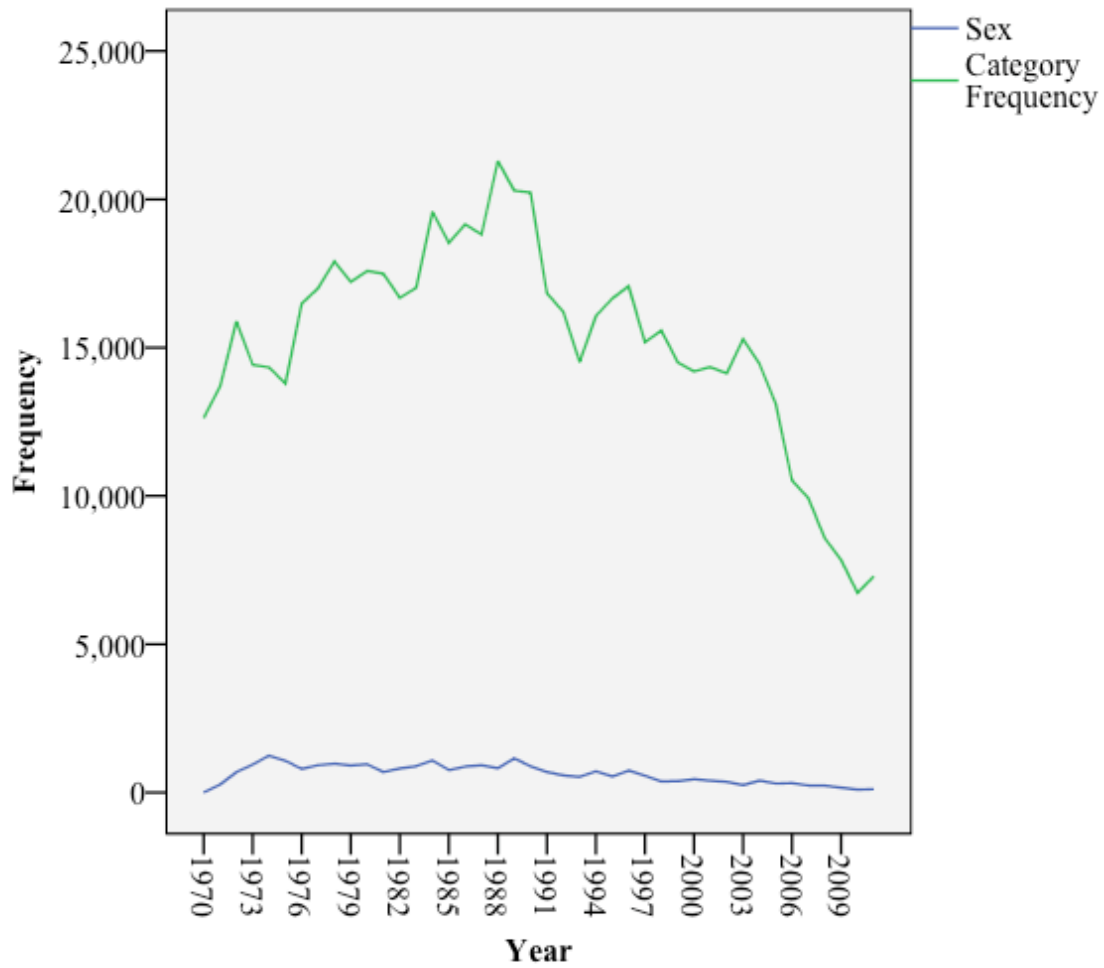


Figure 4.187 Multiple Line Chart for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The sex category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the sex frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 1163.27% for the sex category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 3.89% and a standard deviation of 1.72%. Descriptive statistical analysis reported a minimum frequency of 0.00% and a maximum frequency of 8.69% for the sex category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results or the sex category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.96. Figure 4.188 provides a visual representation for the sex category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.189 provides a visual representation for the sex category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage



(%) sex category mean line (3.89%). Black bar represents the year reported as having the highest (1974) frequency.

Table 4.96  
 Descriptive Statistics for Sex Category Frequency of Annual Total of Crisis Center Call Category  
 Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival  
 data (1970-2011)

Descriptive Statistics		
		Sex Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.00%
Maximum		8.69%
Sum		163.27%
Mean		3.89%
Standard Deviation		1.72%

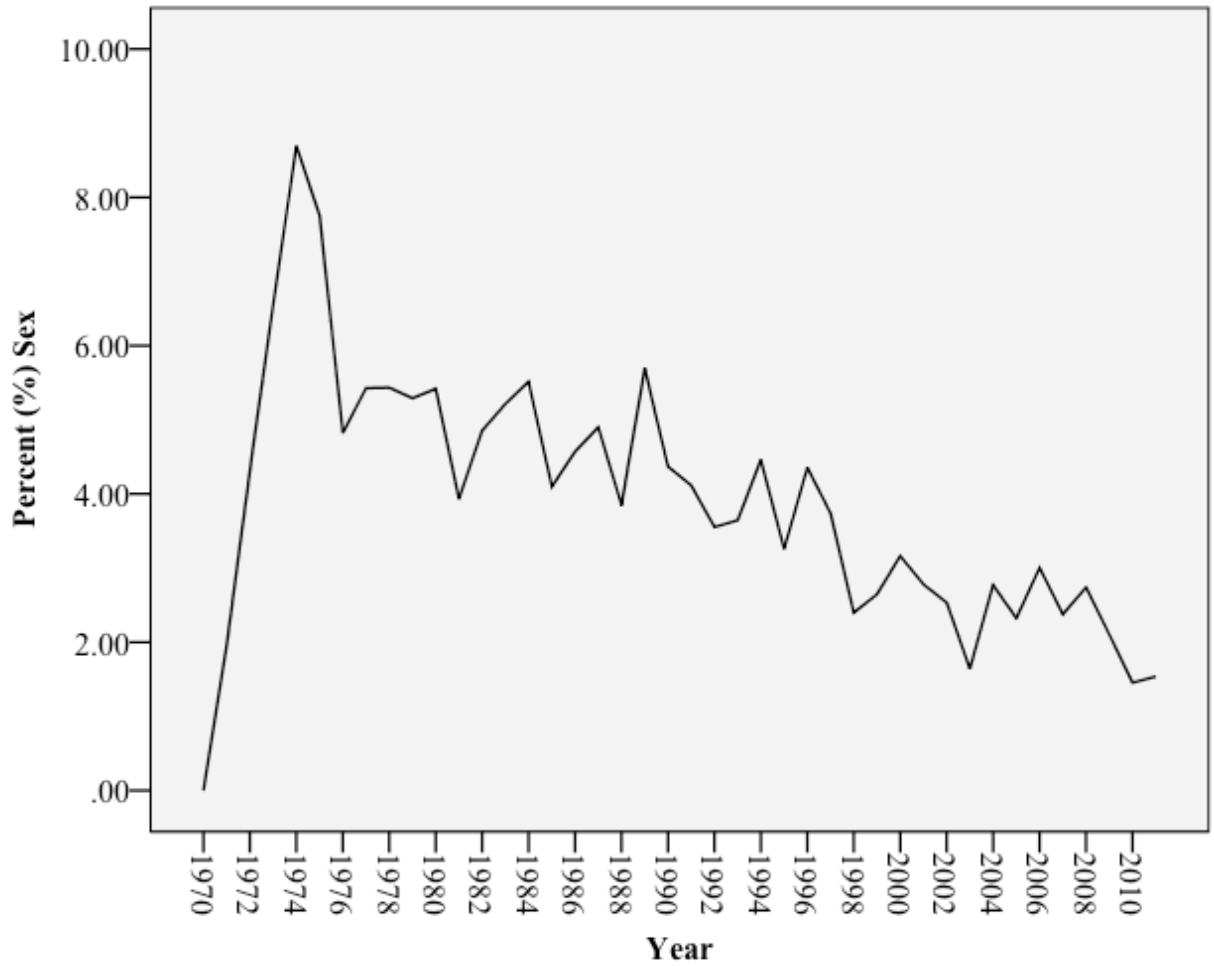


Figure 4.188 Simple Line Chart for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

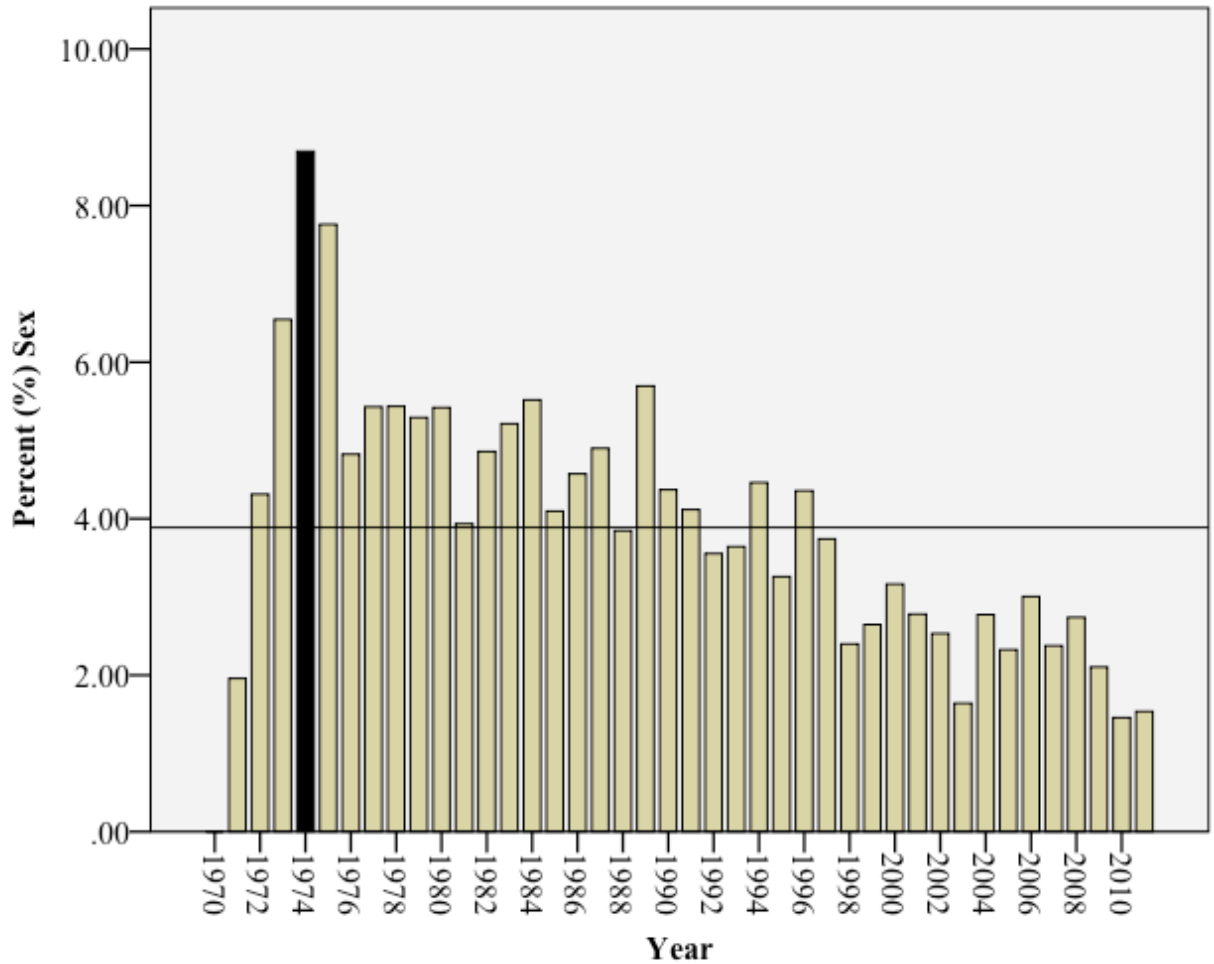


Figure 4.189 Simple Bar Chart for Sex Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Sex Category Mean Line (3.89%) of archival data (1970-2011)

Examination of the descriptive statistical results for the sex category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the sex category frequency has decreased significantly since 1974 and has remained a relatively modest proportion of the annual total of crisis center call category frequency (< 4%) since 1997.

## Annual Total of Crisis Center Call Category Frequency and Silence

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Silent Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (32) Silent was coded on VCLs throughout thirty-five (35) years of the archival data (1977-2011). Although the archival data for the silent frequency of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as an individual call category. When zero (0) is reported in the silent frequency of the annual total of crisis center call category frequency for years 1969-1976, the number reflects the absence of data for the silent category. When zero (0) is reported in silent frequency of the annual total of crisis center call category frequency for years 1977-2011, the number reflects the absence of call frequency related to the silent category rather than the absence of data for the silent category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Thirty-five (35) complete silent category years were identified and used for statistical analysis (1977-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No

assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the silent frequency of the annual total of crisis center call category frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 4,853 for the silent category of the annual total of crisis center call category frequency with a mean of 138.66 and a standard deviation of 185.62. Descriptive statistical analysis reported a minimum frequency of 4 and a maximum frequency of 1,095 for the silent category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing thirty-five (35) complete years of archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 537,865 for the annual total of crisis center call category frequency with a mean of 15,367.57 and a standard deviation of 3,751.35. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the silent category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are

reported in Table 4.97. Figure 4.190 provides a visual representation for the silent category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.191 provides a visual representation for the silent category frequency of the annual total of crisis center call frequency as a simple bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011) with a silent category mean line (138.66). Figure 4.192 provides a visual representation for the silent category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011).

Table 4.97

Descriptive Statistics for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1977-2011)

Descriptive Statistics			
		Silent Frequency	Category Frequency
N	Valid	35	35
	Missing	0	0
Minimum		4	6,733
Maximum		1,095	21,292
Sum		4,835	537,865
Mean		138.66	15,367.57
Standard Deviation		185.62	3,751.35



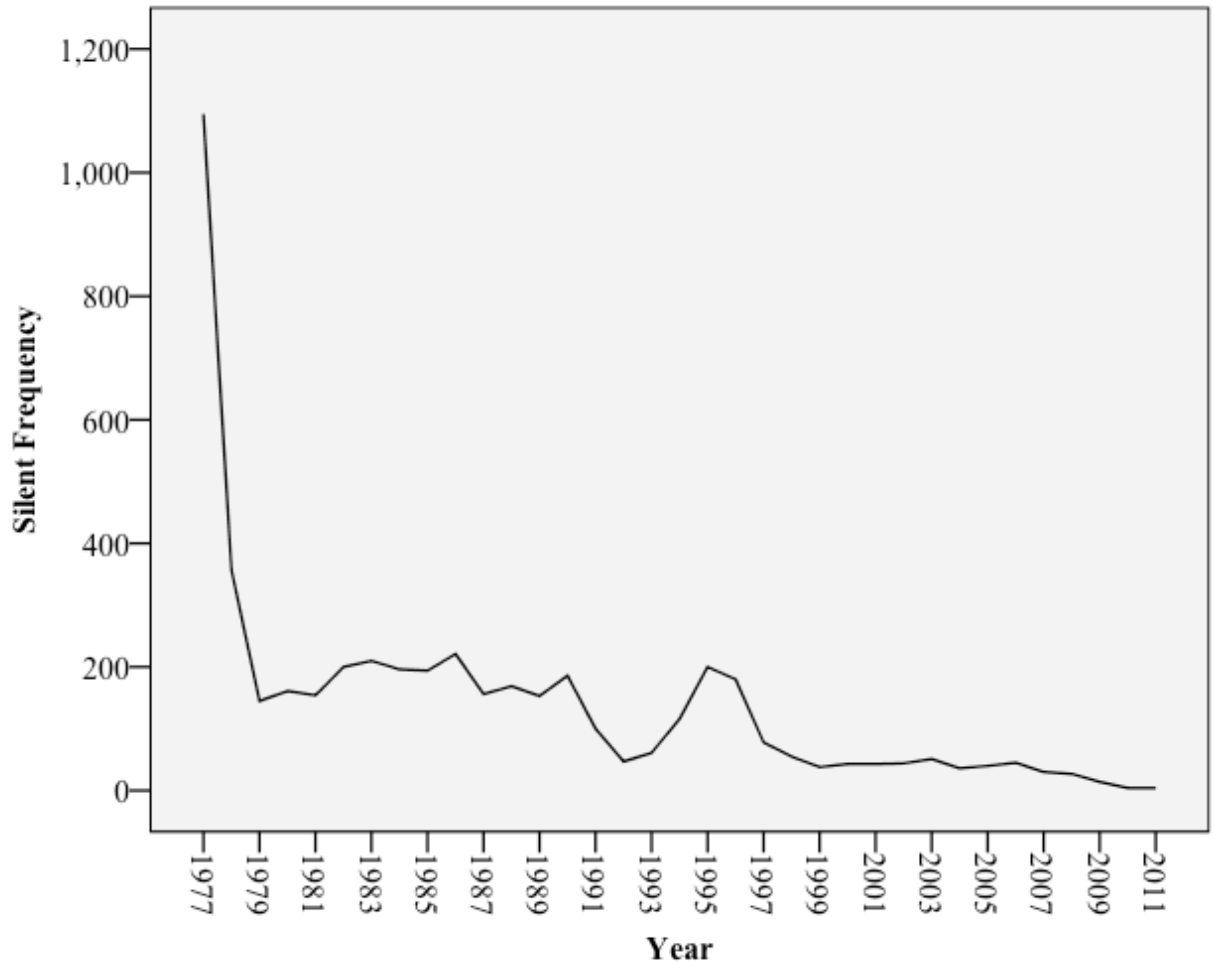


Figure 4.190 Simple Line Chart for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1977-2011)

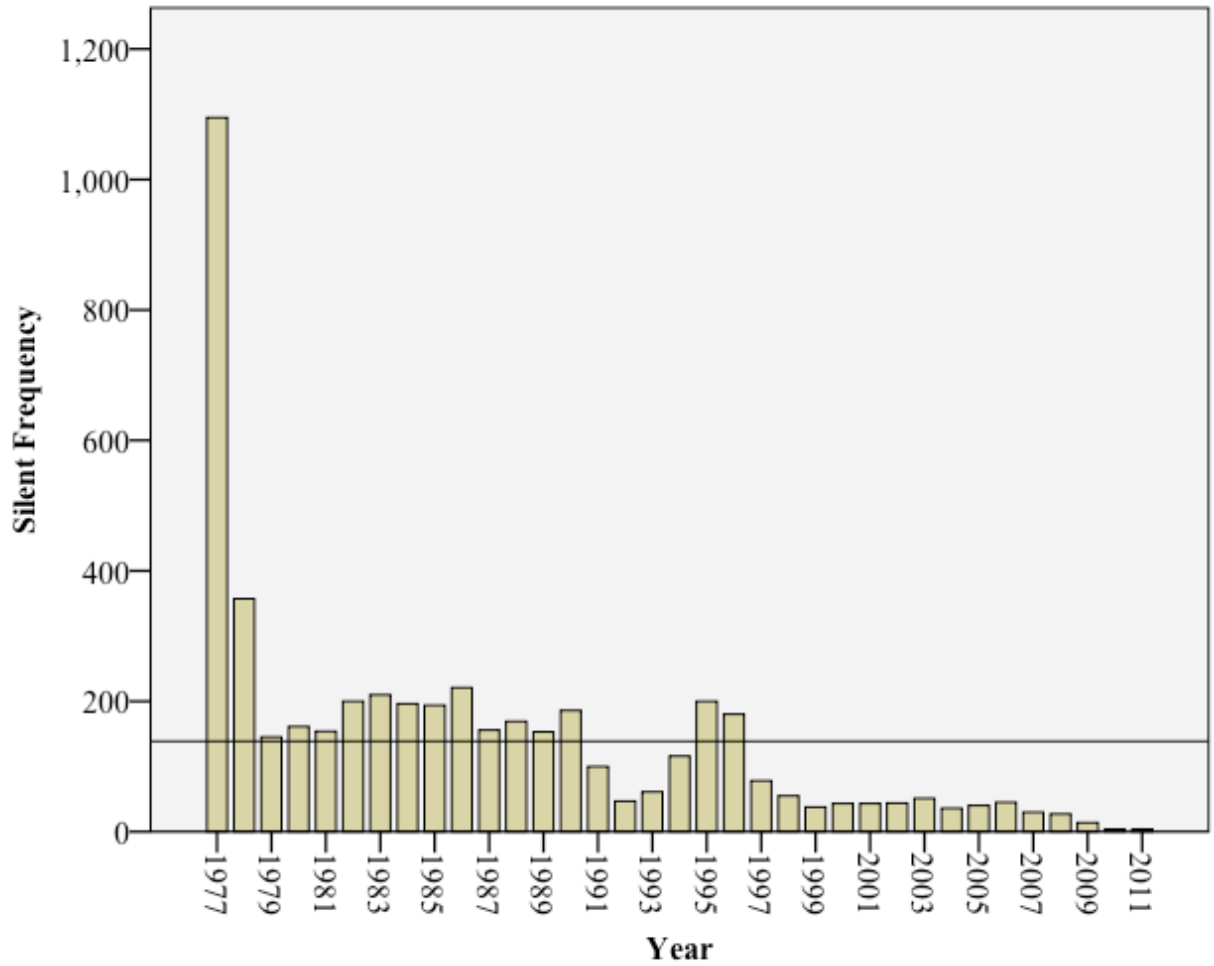


Figure 4.191 Simple Bar Chart for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency with Silent Category Mean Line (138.66) of archival data (1977-2011)

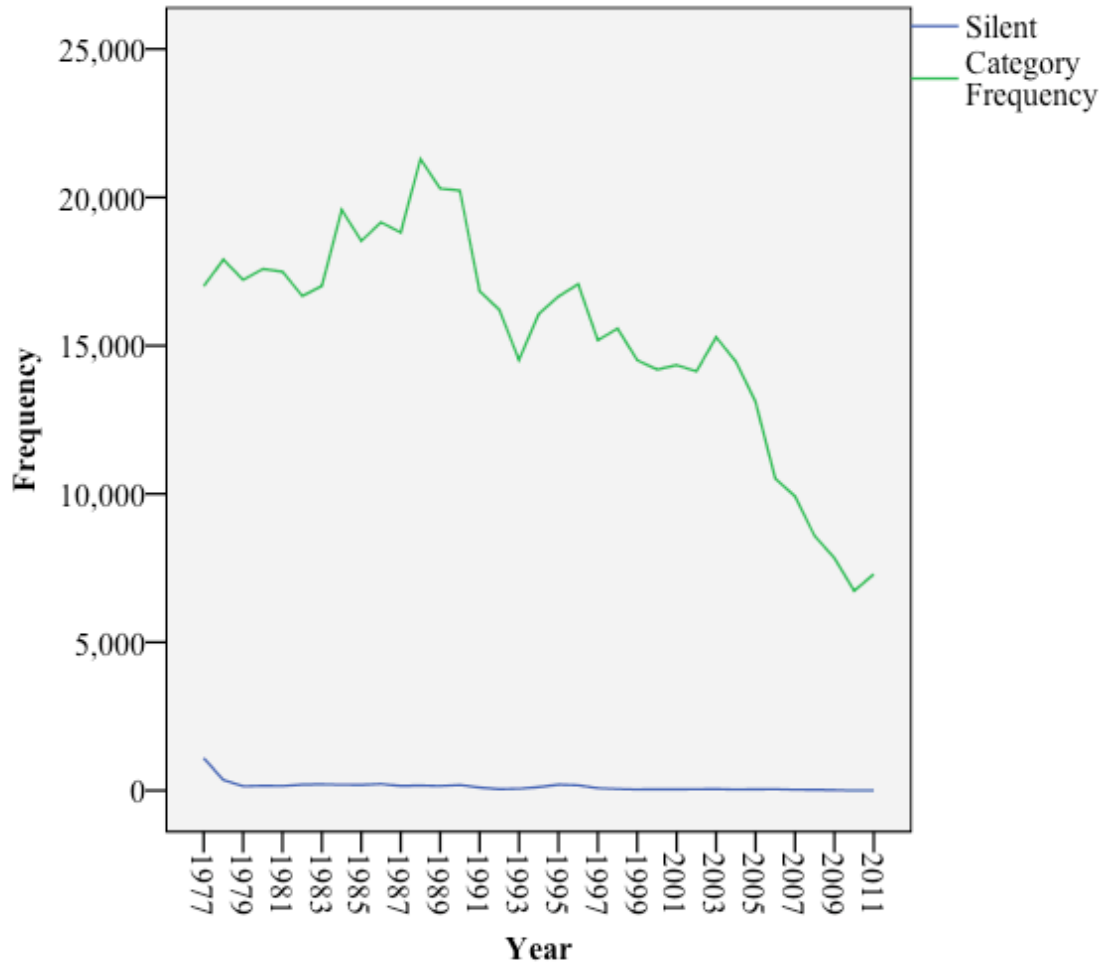


Figure 4.192 Multiple Line Chart for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1977-2011)

*Descriptive Statistics for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The silent category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). A descriptive statistical analysis was conducted to evaluate the silent frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 28.55% for the silent category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 0.82% and a standard deviation of 1.07%. Descriptive statistical analysis reported a minimum frequency of 0.05% and a maximum frequency of 6.44% for the silent category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the silent category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are reported in Table 4.98. Figure 4.193 provides a visual representation for the silent category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.194 provides a visual representation for the silent category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011) with a

percentage (%) silent category mean line (0.82%). Black bars represent the years reported as having the highest (1977) and the lowest (2011) frequency.

Table 4.98

Descriptive Statistics for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1977-2011)

Descriptive Statistics		
		Silent Frequency as Ratio (%) of Category Frequency
N	Valid	35
	Missing	0
Minimum		0.05%
Maximum		6.44%
Sum		28.55%
Mean		0.82%
Standard Deviation		1.07%

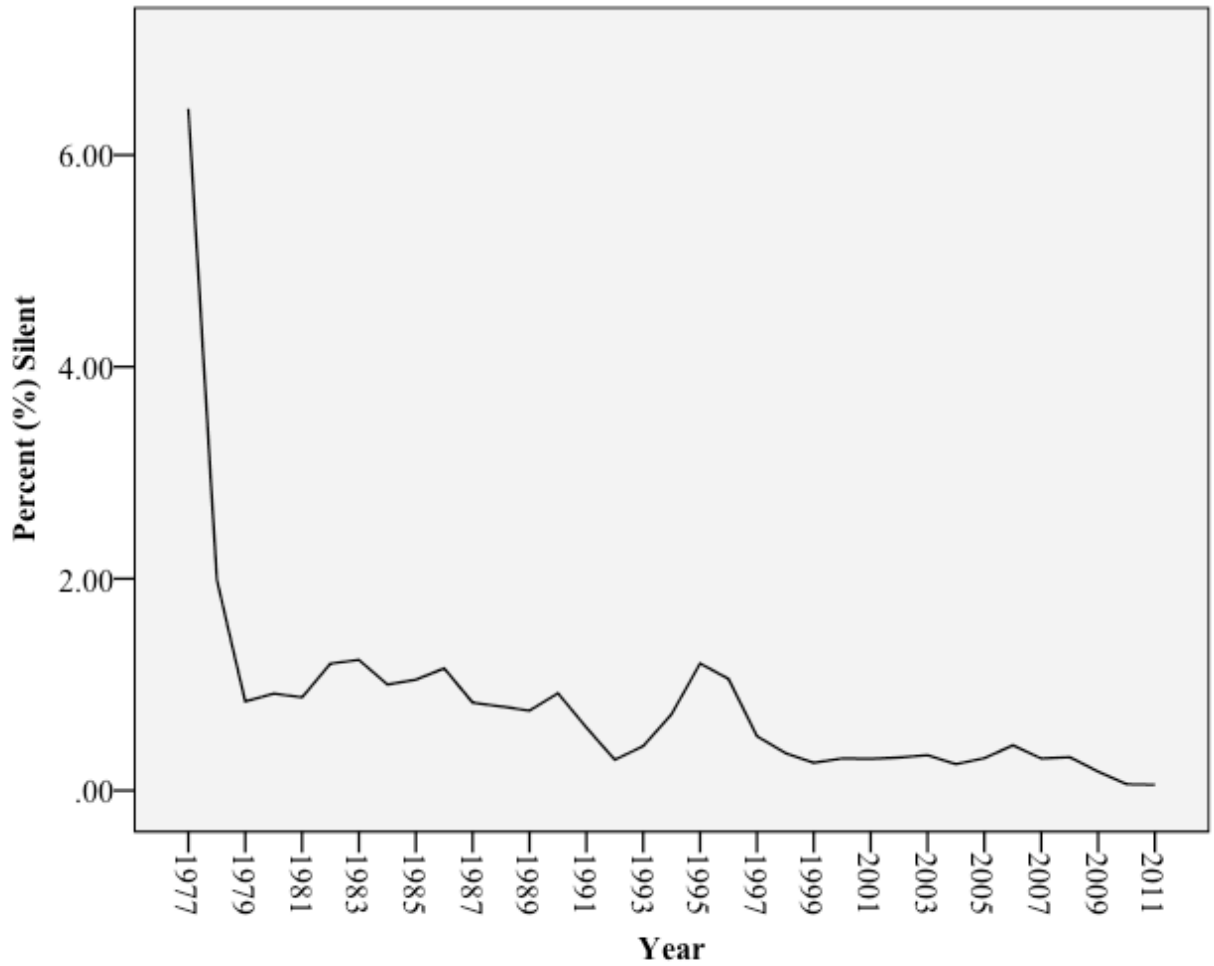


Figure 4.193 Simple Line Chart for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1977-2011)

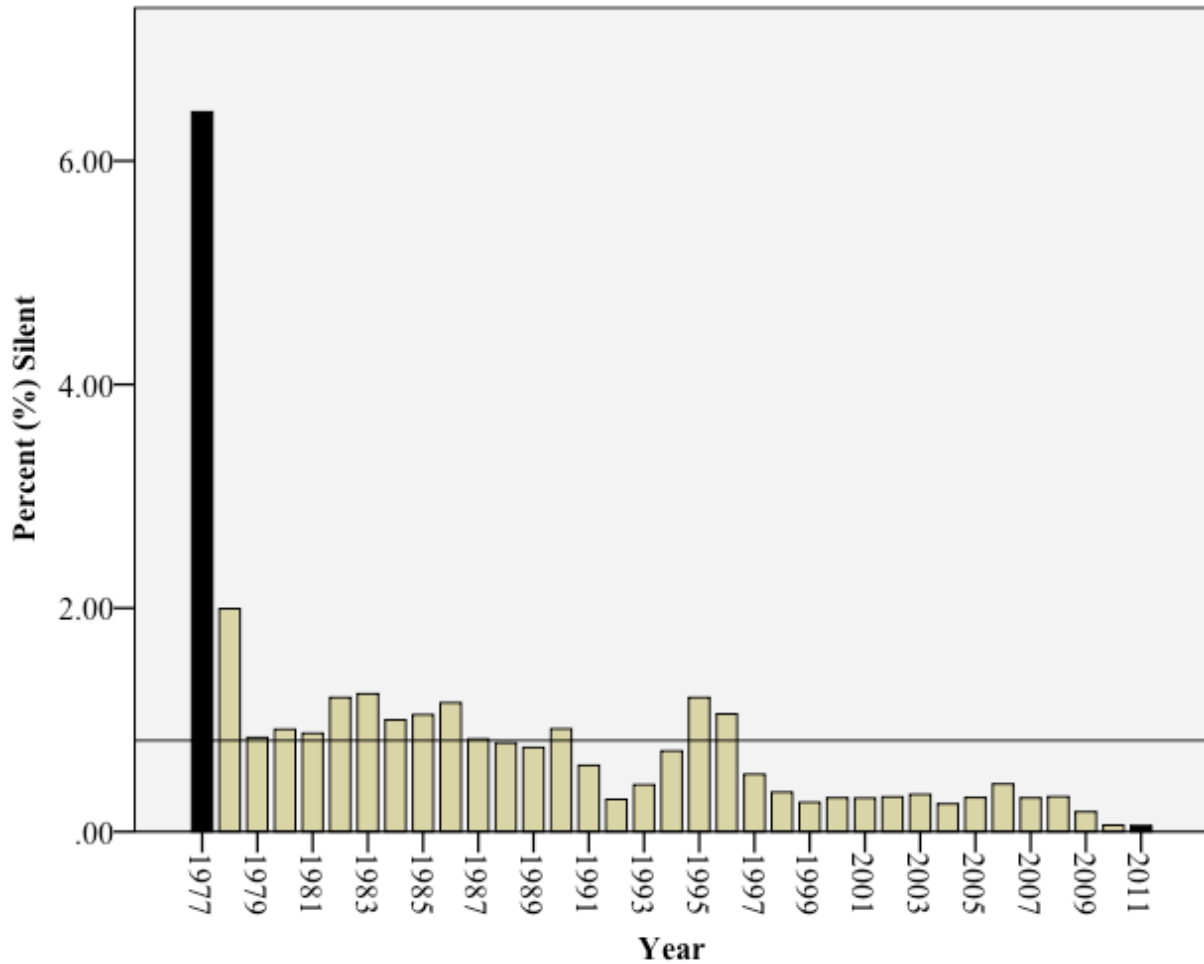


Figure 4.194 Simple Bar Chart for Silent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Silent Category Mean Line (0.82%) of archival data (1977-2011)

Examination of the descriptive statistical results for the silent category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the silent category frequency has decreased significantly since 1977 and has remained a relatively small proportion of the annual total of crisis center call category frequency (< 0.5%) since it's peak in 1997.



## Annual Total of Crisis Center Call Category Frequency and Suicide

### *Descriptive Statistics Annual Total of Crisis Center Call Category Frequency per Suicide Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (33) Suicide was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in the suicide frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the suicide category rather than the absence of data for the suicide category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the suicide frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 5,511 for the suicide category of the annual total of crisis center call category frequency with a mean of 131.21 and a standard deviation of 49.15. Descriptive statistical analysis reported a minimum frequency of 58 and a maximum frequency of 242 for the suicide category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the suicide category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.99. Figure 4.195 provides a visual representation for the suicide category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.196 provides a visual representation for the suicide category frequency of the annual total of crisis

center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a suicide category mean line (131.21). Figure 4.197 provides a visual representation for the suicide category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.99

Descriptive Statistics for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Suicide Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		58	6,733
Maximum		242	21,292
Sum		5,511	639,102
Mean		131.21	15,216.71
Standard Deviation		49.15	3,470.44

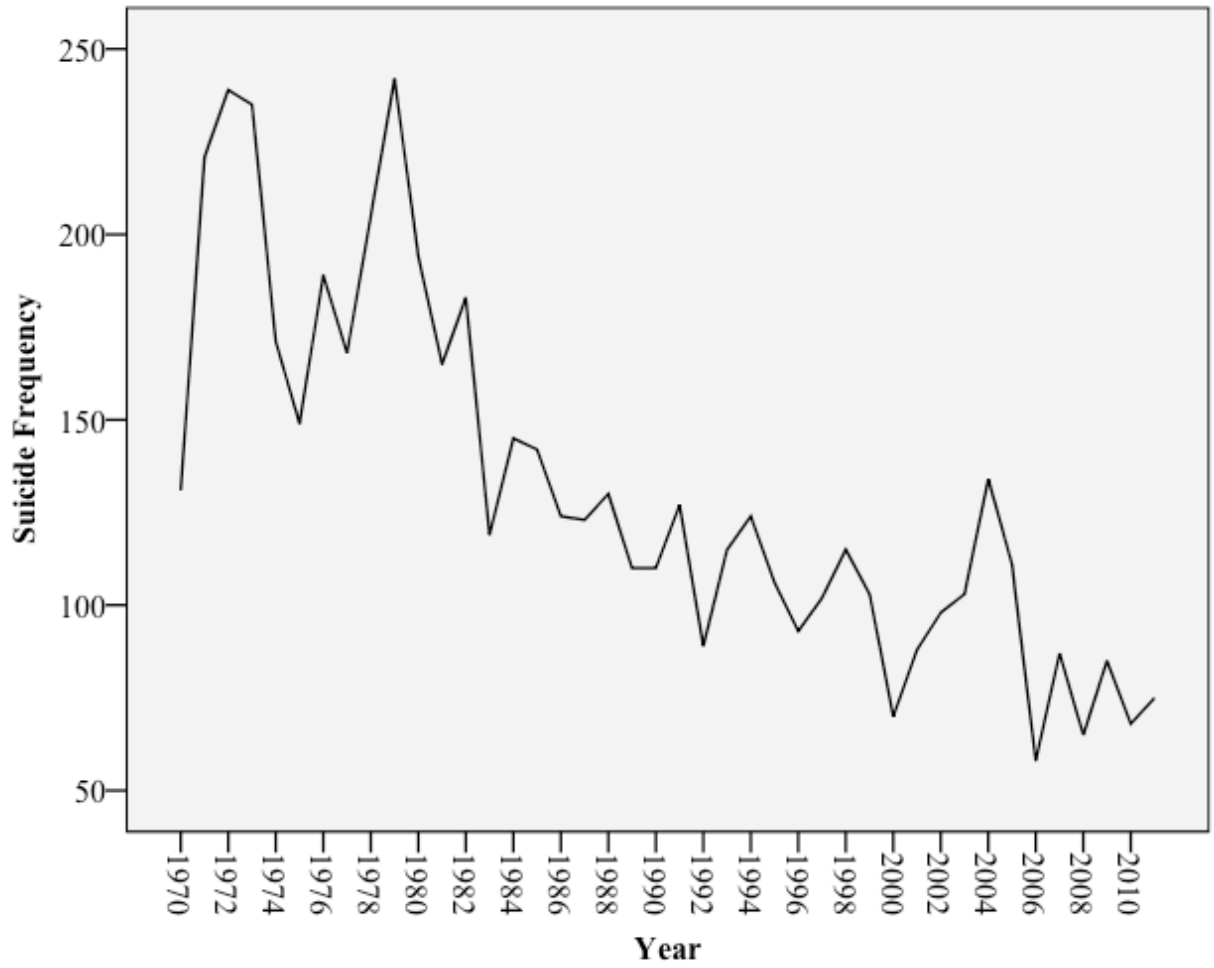


Figure 4.195 Simple Line Chart for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

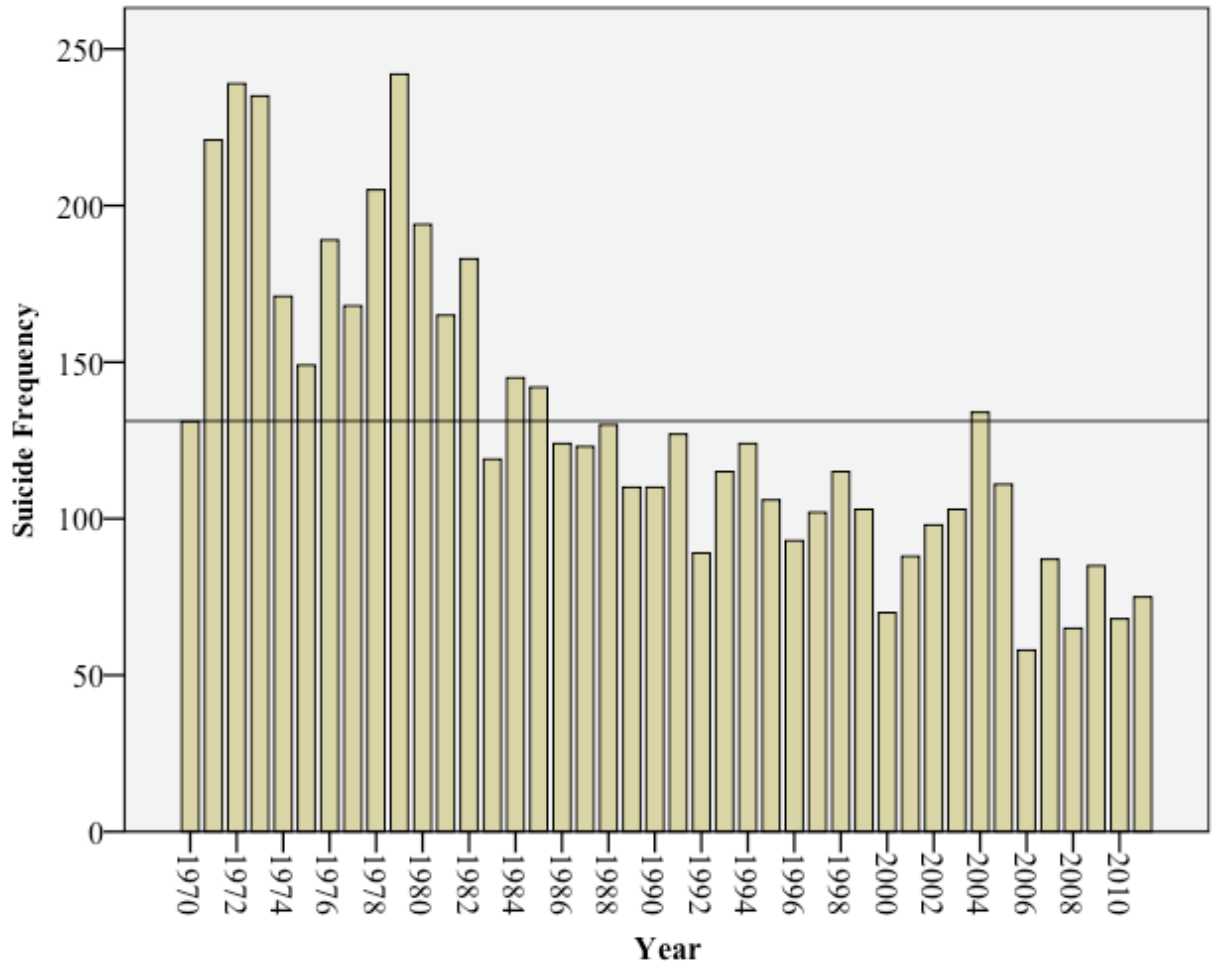


Figure 4.196 Simple Bar Chart for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency with Suicide Category Mean Line (131.21) of archival data (1970-2011)

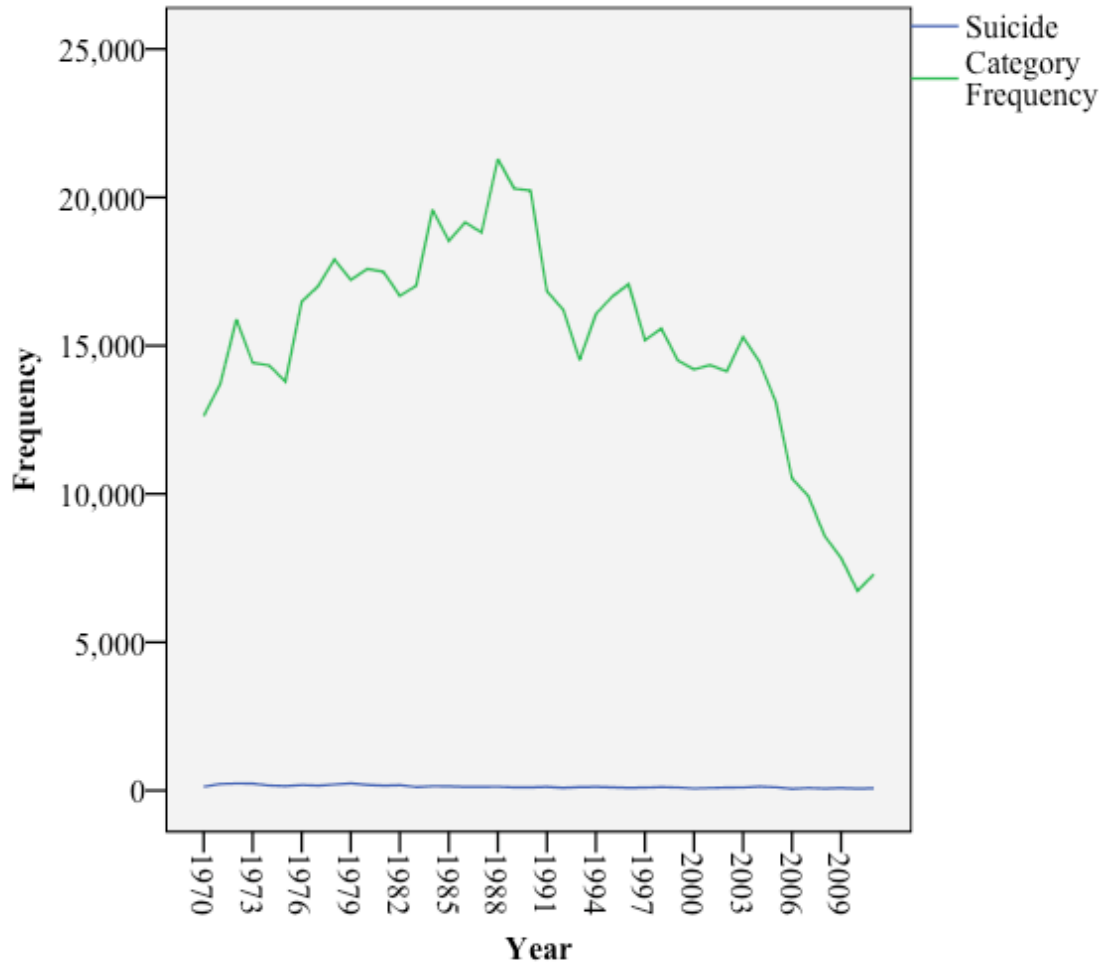


Figure 4.197 Multiple Line Chart for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The suicide category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the suicide category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 36.81% for the suicide category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 0.88% and a standard deviation of 0.29%. Descriptive statistical analysis reported a minimum frequency of 0.49% and a maximum frequency of 1.63% for the silent category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the suicide category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.100. Figure 4.198 provides a visual representation for the suicide category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.199 provides a visual representation for the suicide category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple



bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) suicide category mean line (0.88%). Black bars represent the years reported as having the highest (1973) and the lowest (2000) frequency.

Table 4.100

Descriptive Statistics for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency (1970-2011)

Descriptive Statistics		
		Suicide Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.49%
Maximum		1.63%
Sum		36.81%
Mean		0.88%
Standard Deviation		0.29%

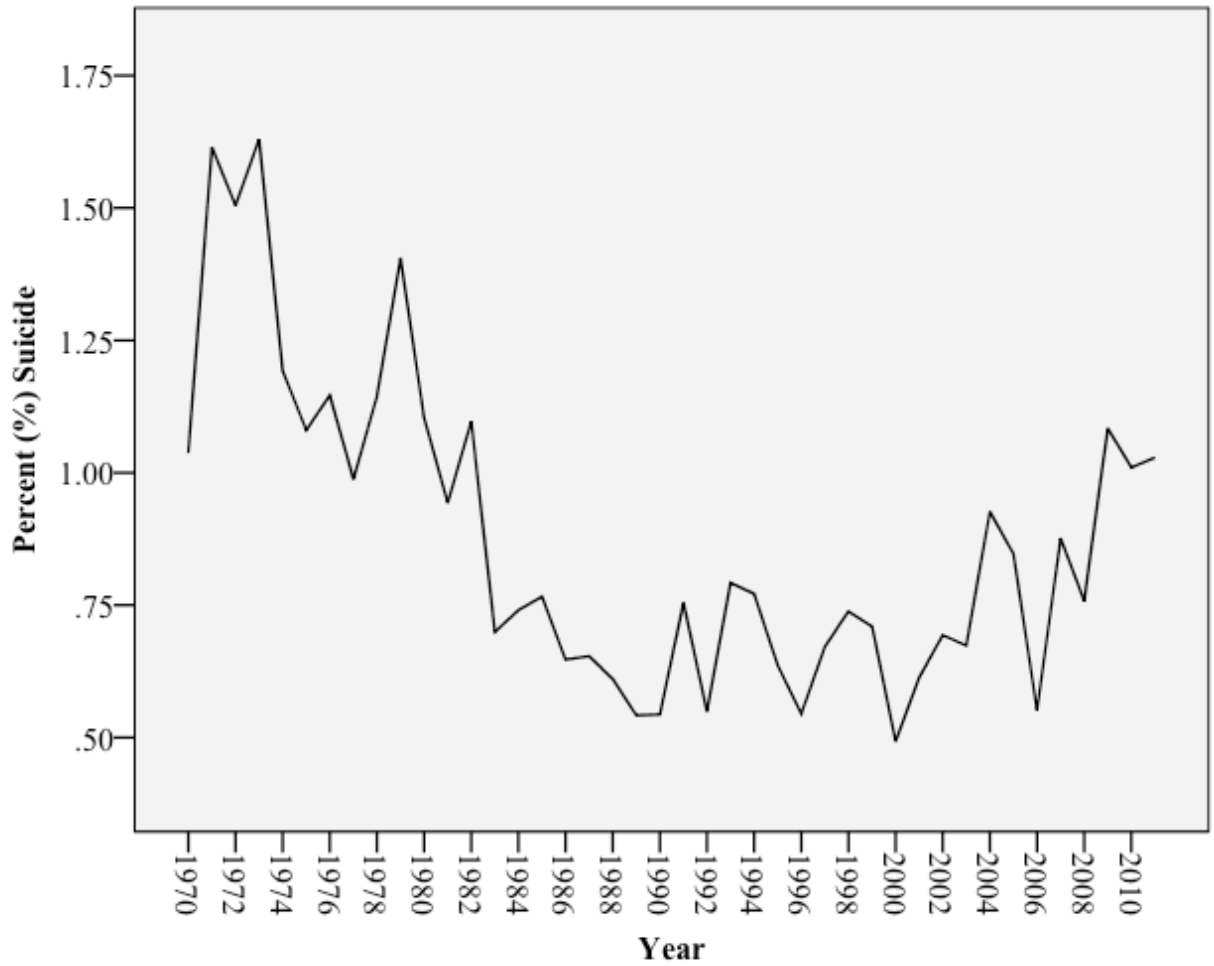


Figure 4.198 Simple Line Chart for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

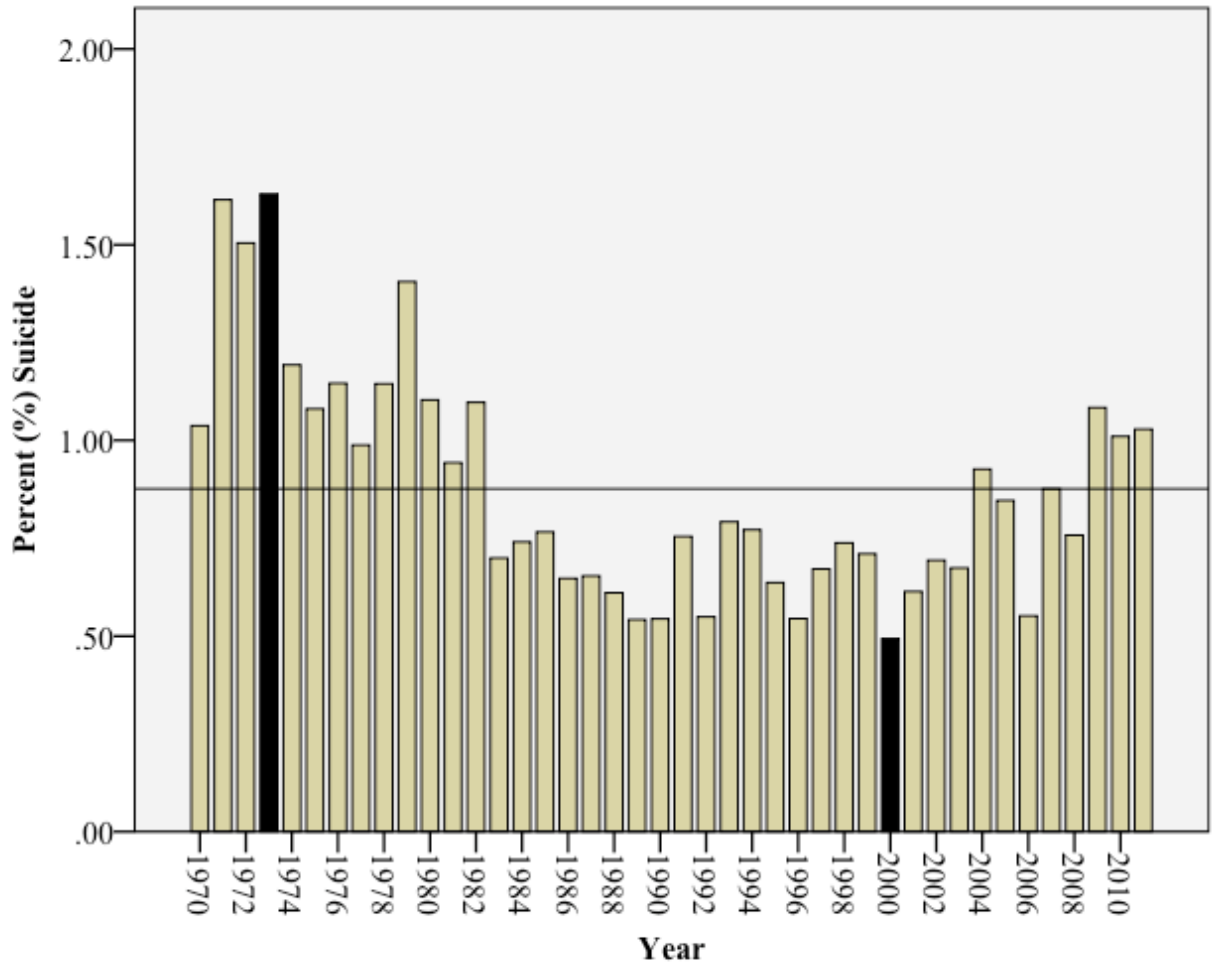


Figure 4.199 Simple Bar Chart for Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Suicide Category Mean Line (0.88%) of archival data (1970-2011)

Examination of the descriptive statistical results for the suicide category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the suicide category frequency has remained a relatively small proportion of the annual total of crisis center call category frequency throughout the forty-two (42) years of coding (between 0.49% and 1.63%).

## Annual Total of Crisis Center Call Category Frequency and Unwed Parent

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Unwed Parent Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. The call category (34) Unwed Parent was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in the unwed parent frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the unwed parent category rather than the absence of data for the unwed parent category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis

center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the unwed parent category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 5,894 for the unwed parent category of the annual total of crisis center call category frequency with a mean of 140.33 and a standard deviation of 161.13. Descriptive statistical analysis reported a minimum frequency of 13 and a maximum frequency of 575 for the unwed parent category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the unwed parent category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.101. Figure 4.200 provides a visual representation for the unwed parent category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.201 provides a visual representation for the unwed parent category frequency of the annual

total of crisis center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with an unwed parent category mean line (161.13). Figure 4.202 provides a visual representation for the unwed parent category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.101  
 Descriptive Statistics for Unwed Parent Category Frequency of Annual Total of Crisis Center  
 Call Category Frequency and Annual Total of Crisis Center Call Category Frequency  
 (1970-2011)

Descriptive Statistics			
		Unwed Parent Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		13	6,733
Maximum		575	21,292
Sum		5,894	639,102
Mean		140.33	15,216.71
Standard Deviation		161.13	3,470.44



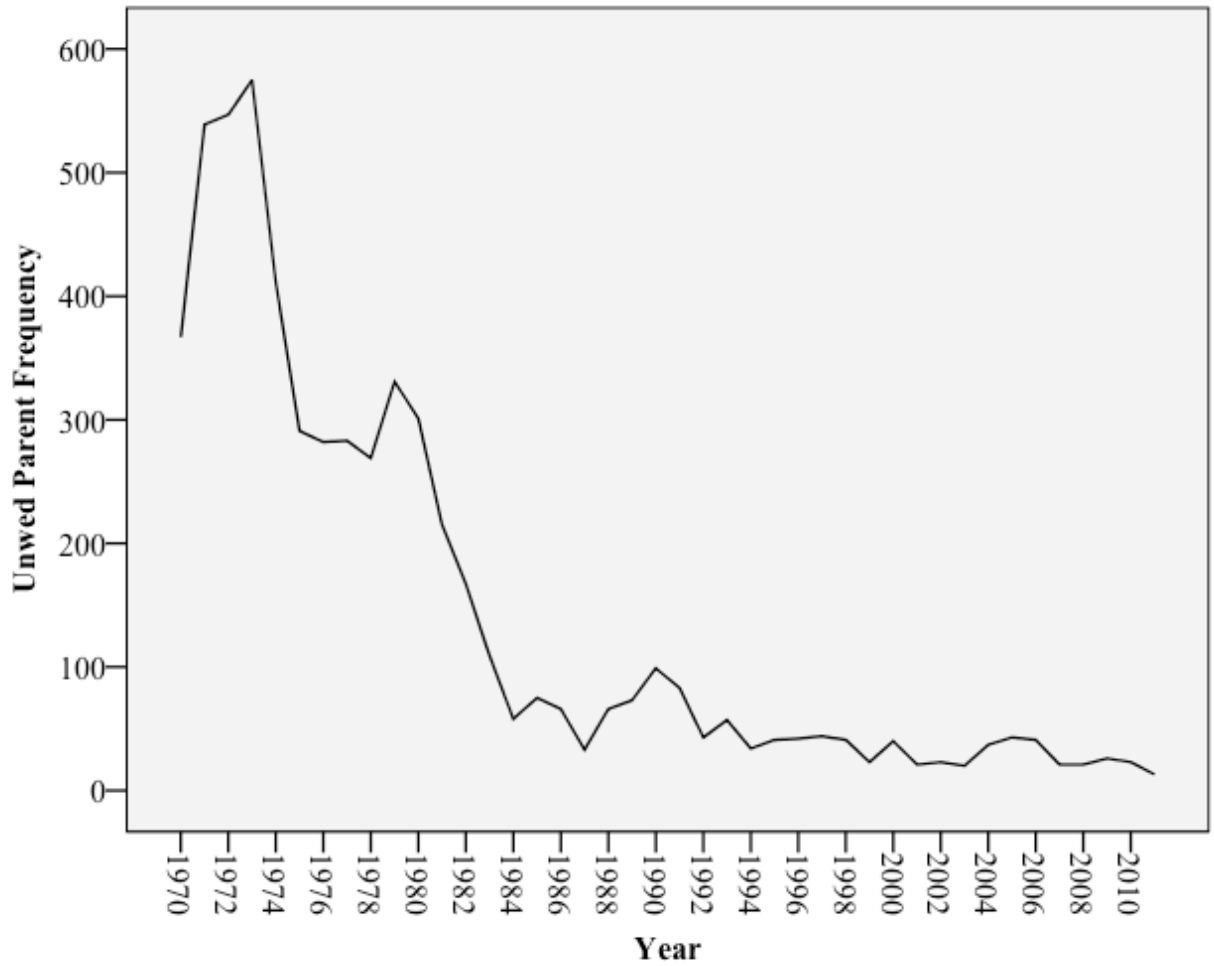


Figure 4.200 Simple Line Chart for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

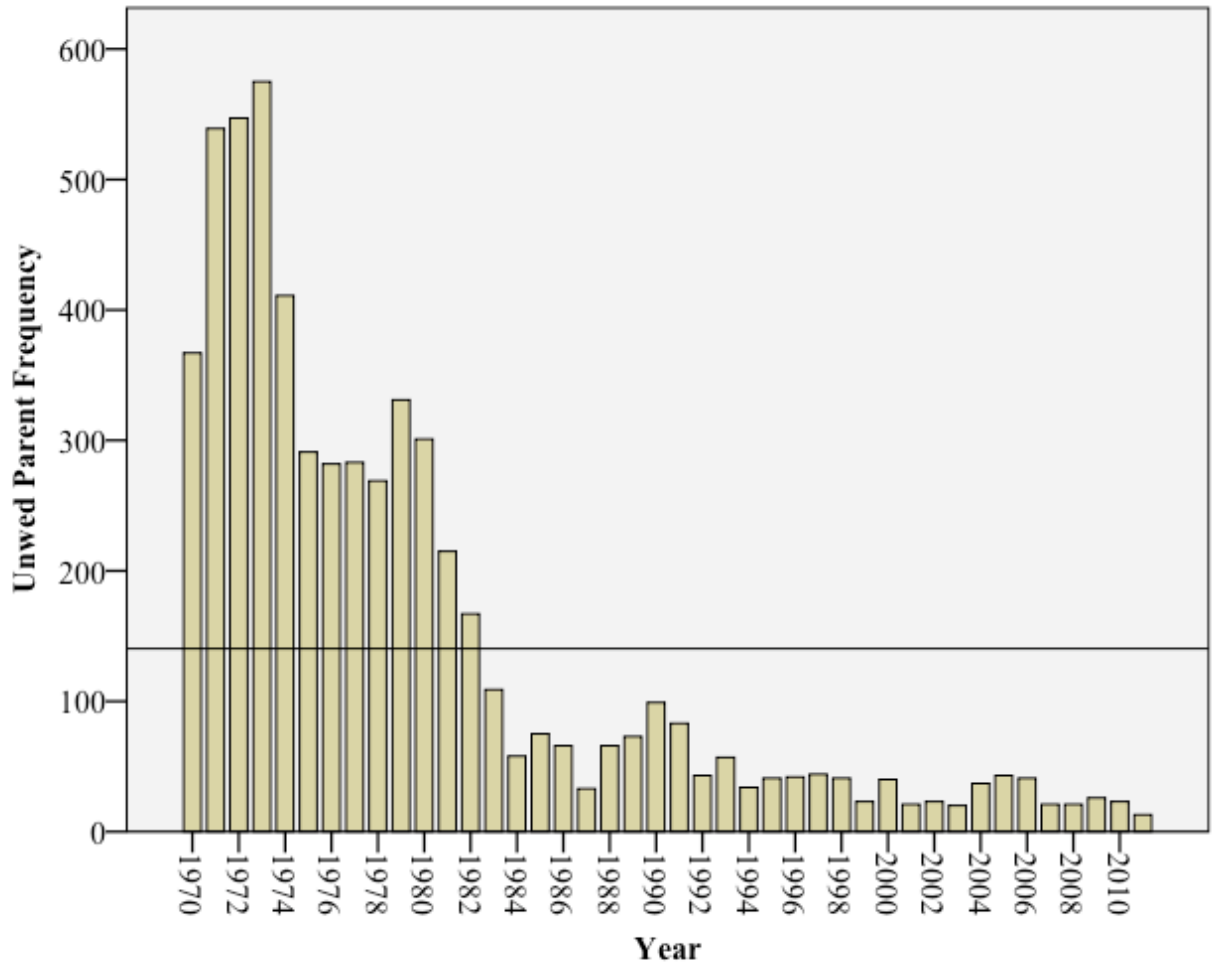


Figure 4.201 Simple Bar Chart for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency with Unwed Parent Category Mean Line (140.33) of archival data (1970-2011)

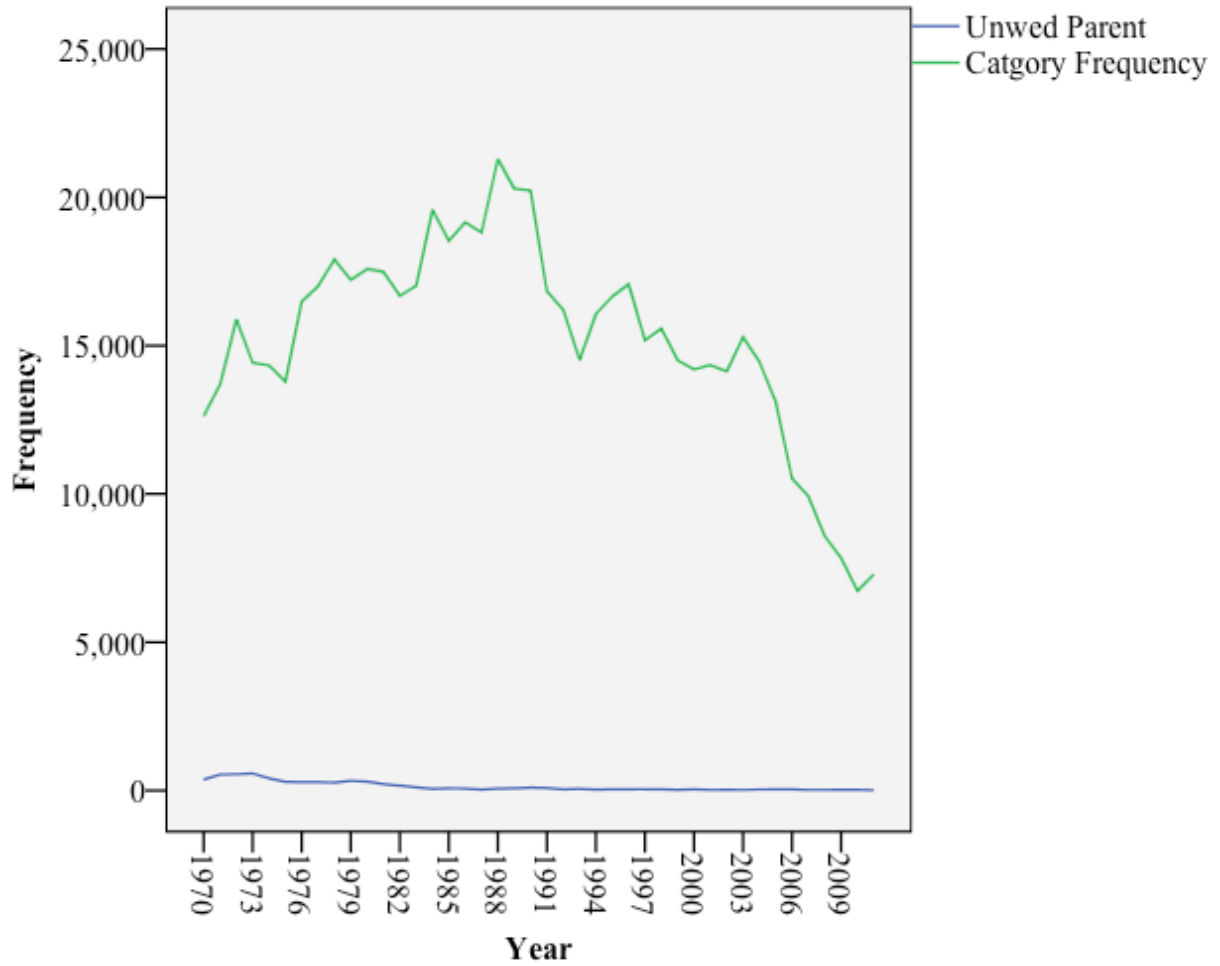


Figure 4.202 Multiple Line Chart for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The unwed parent category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the unwed parent frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 38.58% for the unwed parent category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 0.92% and a standard deviation of 1.09%. Descriptive statistical analysis reported a minimum frequency of 0.13% and a maximum frequency of 3.99% for the unwed parent category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the unwed parent category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.102. Figure 4.203 provides a visual representation for the unwed parent category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.204 provides a visual representation for the unwed parent category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call

category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) unwed parent category mean line (0.92%). Black bars represent the years reported as having the highest (1973) and the lowest (2003) frequency.

Table 4.102

Descriptive Statistics for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Unwed Parent Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.13%
Maximum		3.99%
Sum		38.58%
Mean		0.92%
Standard Deviation		1.09%

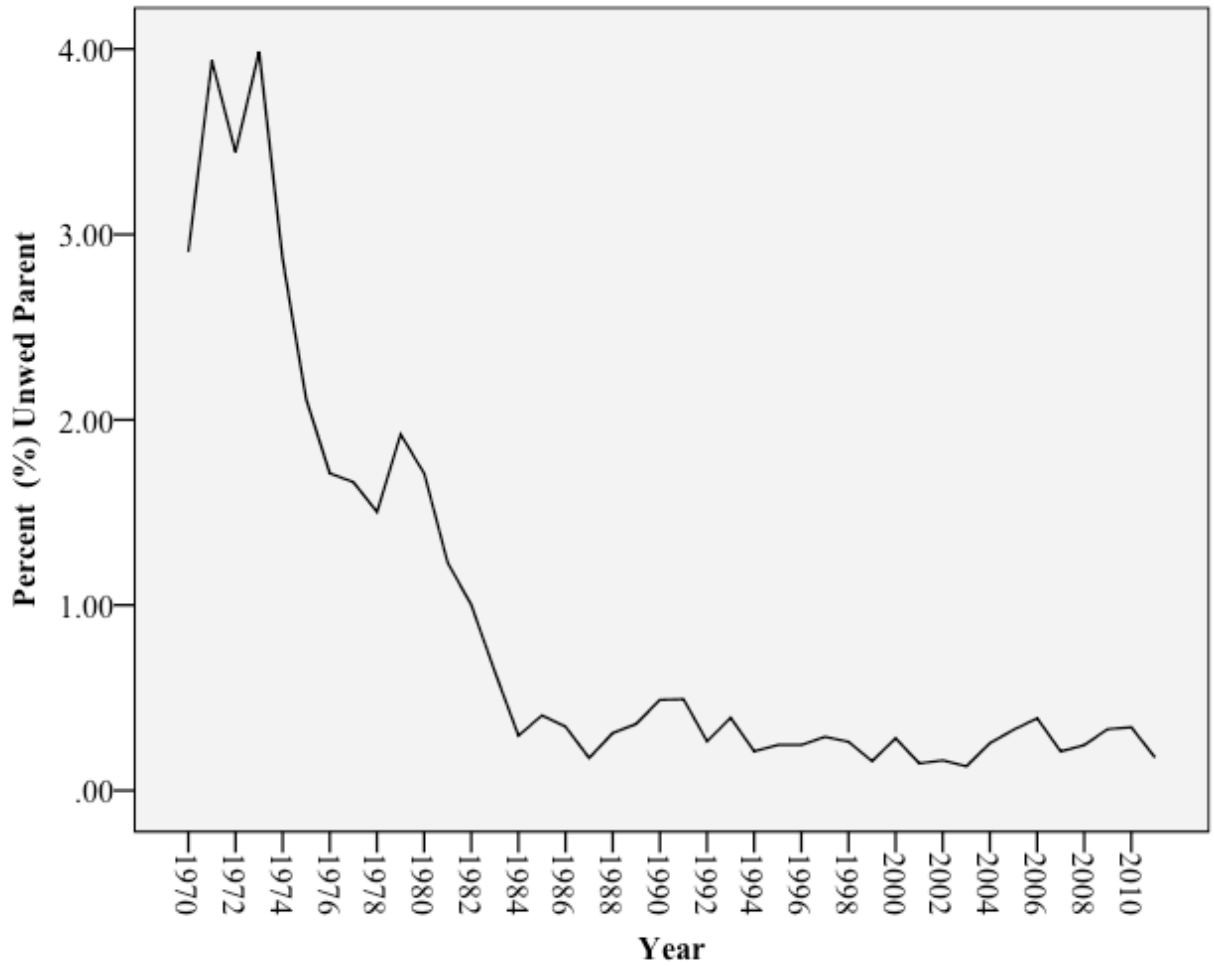


Figure 4.203 Simple Line Chart for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

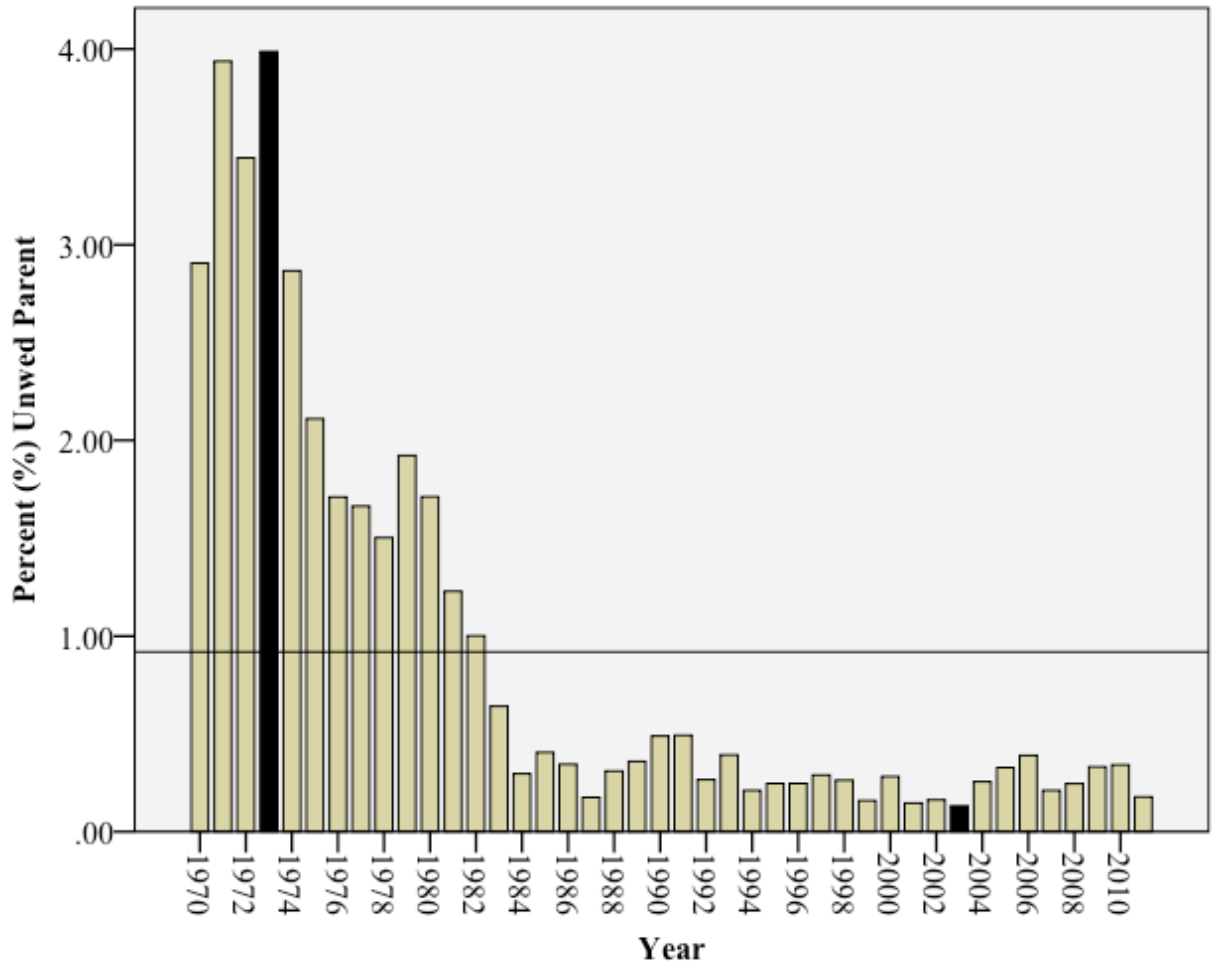


Figure 4.204 Simple Bar Chart for Unwed Parent Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Unwed Parent Category Mean Line (0.92%) of archival data (1970-2011)

Examination of the descriptive statistical results for the unwed parent category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the unwed parent category frequency has decreased significantly since 1982 and has remained a relatively small proportion of the annual total of crisis center call category frequency (< 0.5%) since 1984.



## Annual Total of Crisis Center Call Category Frequency and Major Groups

### *Annual Total of Crisis Center Call Category Frequency per Major Group Categories*

CONTACT USA, Incorporated is the national umbrella organization through which CONTACT of Chattanooga is affiliated. CONTACT USA, Inc. suggests eight (8) major groupings of crisis center call categories. Some definitional ambiguities were noted in the assignment of call categories to major group. No assumptions were made as to the source of those ambiguities. No corrections or alterations were made to the group assignment to reconcile any call category ambiguities.

The major groups are: (1) Mental Health, (2) Interpersonal, (3) Suicide, (4) Physical Health, (5) Abuse and Violence, (6) Basic Necessities, (7) Sexual and (8) Other. Table 4.103 summarizes the eight (8) major groups of crisis center call categories by detailing the group; name of group, group assignment for each of the thirty-three (33) call categories, duration of coding for individual category, number of years coded for individual category, and tabulation of the number of call categories assigned to each major group.

Table 4.103  
Major Grouping Designation for Annual Total of Crisis Center Call Categories of archival data  
(1970-2011)

GROUP	CALL CATEGORY	DURATION	YEARS
1: Mental Health (5)	(6) Depression	(2003-2011)	9
	(9) Emotional/Mental	(1969-2011)	43
	(14) Grief	(2003-2011)	9
	(20) Lonely	(1969-2011)	43
	(22) Mental	(1969-1977)	9
2: Interpersonal (11)	(3) Appreciation	(1969-2011)	43
	(4) Dating	(1969-2011)	43
	(7) Desertion	(1969-1977)	9
	(11) Family	(1969-1977)	9
	(18) Juvenile	(1969-1977)	9
	(21) Marital	(1978-2011)	34
	(25) Other Family	(1978-2011)	34
	(28) Relationship	(1969-2011)	43
	(29) Religious	(1969-2011)	43
	(30) School	(1969-2011)	43
	(34) Unwed Parent	(1969-2011)	43
3: Suicide (1)	(33) Suicide	(1969-2011)	43
4: Physical Health (5)	(1) Abortion	(1969-2011)	43
	(2) Alcohol	(1969-2011)	43
	(5) Deaf	(1988-1989)	2
	(8) Drugs	(1969-2011)	43

GROUP	CALL CATEGORY	DURATION	YEARS
	(15) Health	(1969-2011)	43
5: Abuse and Violence (1)	(26) Physical Abuse	(1978-2011)	34
6: Basic Necessities (5)	(10) Employment	(1969-2011)	43
	(12) Finances	(1969-2011)	43
	(13) Food/Shelter	(1978-2011)	34
	(17) Information	(1969-2011)	43
	(19) Legal	(1969-2011)	43
7: Sexual (2)	(16) Homosexual	(1969-2011)	43
	(31) Sex	(1969-2011)	43
8: Other (3)	(23) Miscellaneous	(1969-1977)	9
	(24) Other	(1978-2011)	34
	(32) Silent	(1977-2011)	35

*Descriptive Statistics for Major Group Category Frequencies of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The major group category frequencies of the annual total of crisis center call category frequency were transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the major groups of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). An overview of the data is provided in Tables 4.104 and Table 4.105; descriptive statistics for the major group categories of the annual total of crisis center call category frequency in ascending numerical order are reported in Table 4.104 and descriptive statistics for the major group categories of the annual total of crisis center call category frequency in descending order by mean are reported in Table 4.105. In depth results of the descriptive statistical analysis are reported in the section pertaining to the specific major group category.

Table 4.104

Descriptive Statistics for Major Group Category Frequencies of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency in Descending Numerical Order of archival data (1970-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
% Group 1 Mental Health	42	14.14%	49.55%	1,324.63%	31.54%	10.43%
% Group 2 Interpersonal	42	14.20%	46.15%	1,037.66%	24.71%	8.20%
% Group 3 Suicide	42	0.49%	1.63%	36.81%	0.88%	0.30%
% Group 4 Physical Health	42	4.34%	12.97%	347.48%	8.27%	2.05%
% Group 5 Abuse & Violence	42	0.00%	3.38%	55.55%	1.32%	0.96%
% Group 6 Basic Necessities	42	10.23%	27.26%	677.73%	16.14%	3.65%
% Group 7 Sexual	42	1.03%	9.56%	206.01%	4.90%	1.90%
% Group 8 Other	42	2.82%	25.72%	514.12%	12.24%	4.00%
Valid N (listwise)	42					

Table 4.105

Descriptive Statistics for Major Group Categories of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency in Descending Order by Mean of archival data (1970-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
% Group 1 Mental Health	42	14.14%	49.55%	1,324.63%	31.54%	10.43%
% Group 2 Interpersonal	42	14.20%	46.15%	1,037.66%	24.71%	8.20%
% Group 6 Basic Necessities	42	10.23%	27.26%	677.73%	16.14%	3.65%
% Group 8 Other	42	2.82%	25.72%	514.12%	12.24%	4.00%
% Group 4 Physical Health	42	4.34%	12.97%	347.48%	8.27%	2.05%
% Group 7 Sexual	42	1.03%	9.56%	206.01%	4.90%	1.90%
% Group 5 Abuse & Violence	42	0.00%	3.38%	55.55%	1.32%	0.96%
% Group 3 Suicide	42	0.49%	1.63%	36.81%	0.88%	0.30%
Valid N (listwise)	42					

## Annual Total of Crisis Center Call Category Frequency and Major Group 1: Mental Health

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 1: Mental Health Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. Call categories were coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). However, all call categories were not coded for all years of the archival data. When zero (0) is reported in the major category frequency of the annual total of crisis center call category frequency, the number may reflect the absence of call frequency related to the major group category or the absence of data for the major group category.

CONTACT USA, Incorporated is the national umbrella organization through which CONTACT of Chattanooga is affiliated. CONTACT USA, Inc. suggests eight (8) major grouping of crisis center call categories. Major Group 1: Mental Health incorporates five (5) call categories of (6) Depression, (9) Emotional/Mental, (14) Grief, (20) Lonely, and (22) Mental encompassing forty-three (43) years of the archival data (1969-2011). Some definitional ambiguities were noted in the assignment of call categories to a major group. No assumptions were made as to the source of those ambiguities. No corrections or alterations were made to the group assignment to reconcile any call category ambiguities.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise

indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category frequency were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call shift frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 194,702 for the Major Group 1: Mental Health category of the annual total of crisis center call category frequency with a mean of 4,635.74 and a standard deviation of 1,468.79. Descriptive statistical analysis reported a minimum frequency 1,868 and a maximum frequency of 7,417 for the Major Group 1: Mental Health category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the



annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.106. Figure 4.205 provides a visual representation for the Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.206 provides a visual representation for the Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a Major Group 1: Mental Health category mean line (4,635.76). Figure 4.207 provides a visual representation for the Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.106

Descriptive Statistics for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Group 1: Mental Health Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		1,878	6,733
Maximum		7,417	21,292
Sum		194,702	639,102
Mean		4,635.76	15,216.71
Standard Deviation		1,468.79	3,470.44



Figure 4.205 Simple Line Chart for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

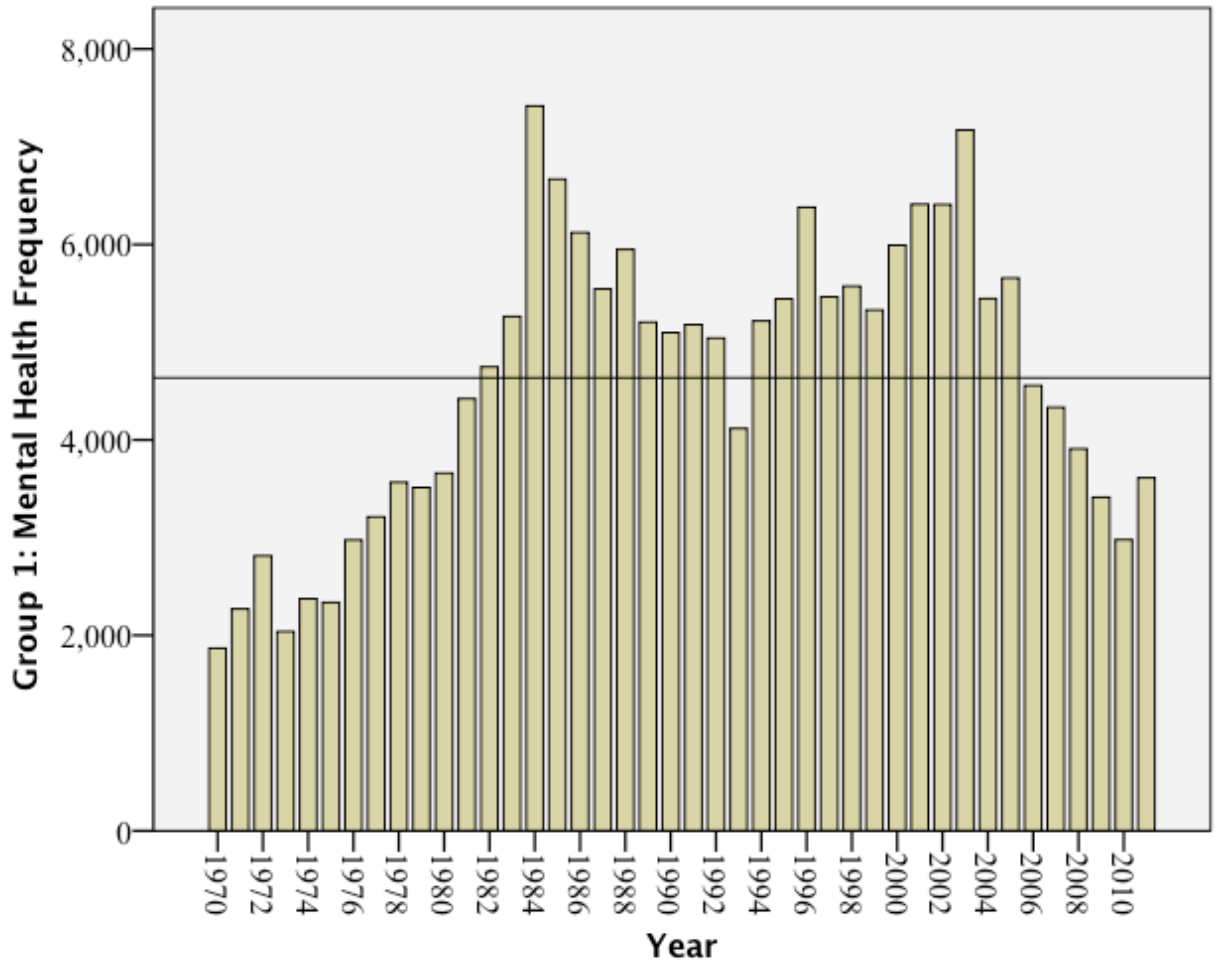


Figure 4.206 Simple Bar Chart for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 1: Mental Health Mean Line (4,635.76) of archival data (1970-2011)



Figure 4.207 Multiple Line Chart for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011). A descriptive statistical analysis was conducted to evaluate the Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011). The results of the descriptive statistical analysis reported a sum of 1,324.63% for the Major Group 1: Mental Health category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 31.54% and a standard deviation of 10.43%. Descriptive statistical analysis reported a minimum frequency of 14.14% and a maximum frequency of 49.55% for the Major Group 1: Mental Health category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011) are reported in Table 4.107. Figure 4.208 provides a visual representation for the Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the

archival data (1969-2011). Figure 4.209 provides a visual representation for the Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1969-2011) with a percentage (%) Major Group 1: Mental Health category mean line (31.54%). Black bars represent the years reported as having the highest (2011) and the lowest (1973) frequency.

Table 4.107

Descriptive Statistics for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency (1969-2011)

Descriptive Statistics		
		Major Group 1: Mental Health Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		14.14%
Maximum		49.55%
Sum		1,324.63%
Mean		31.54%
Standard Deviation		10.43%



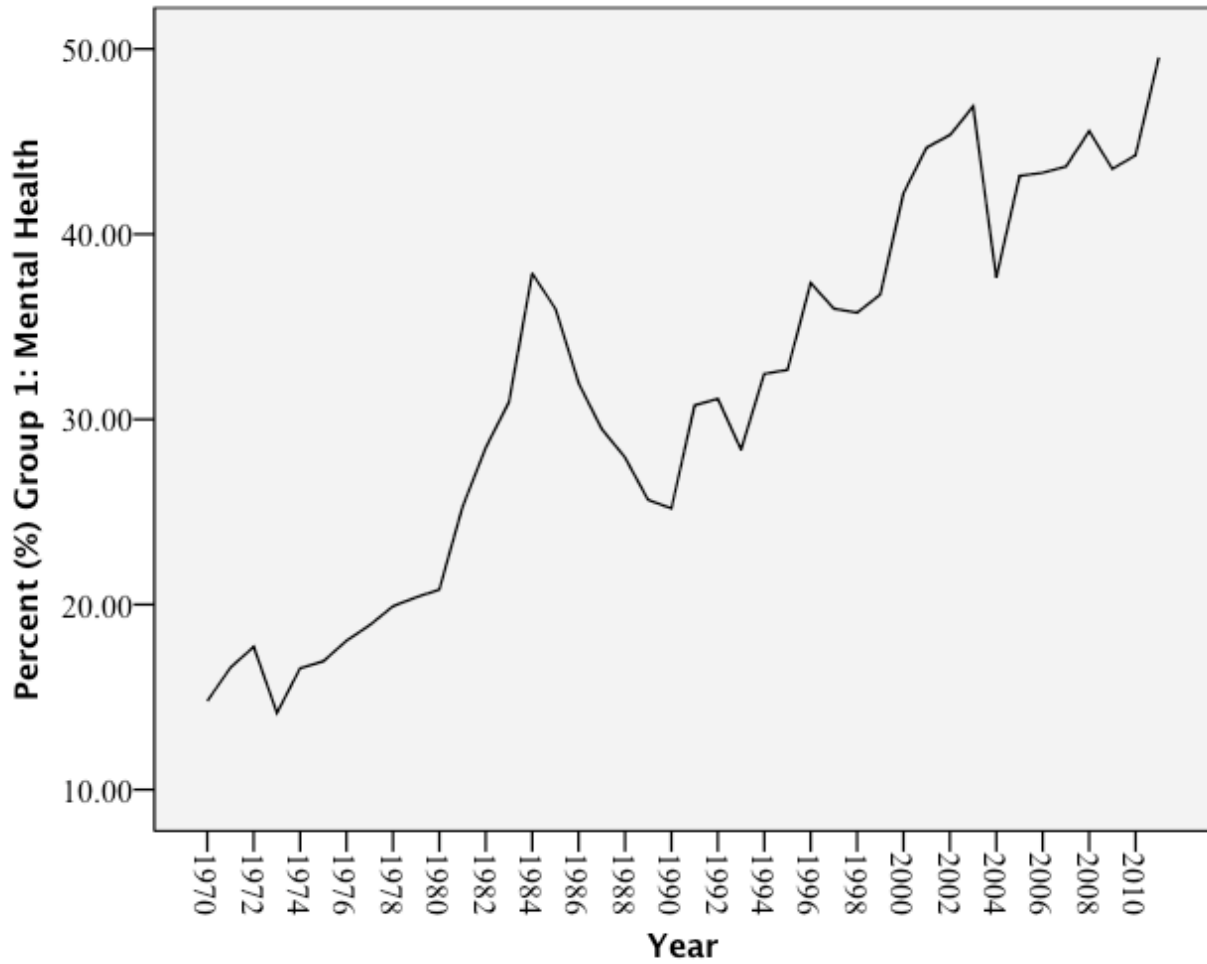


Figure 4.208 Simple Line Chart for Major Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency (1970-2011)

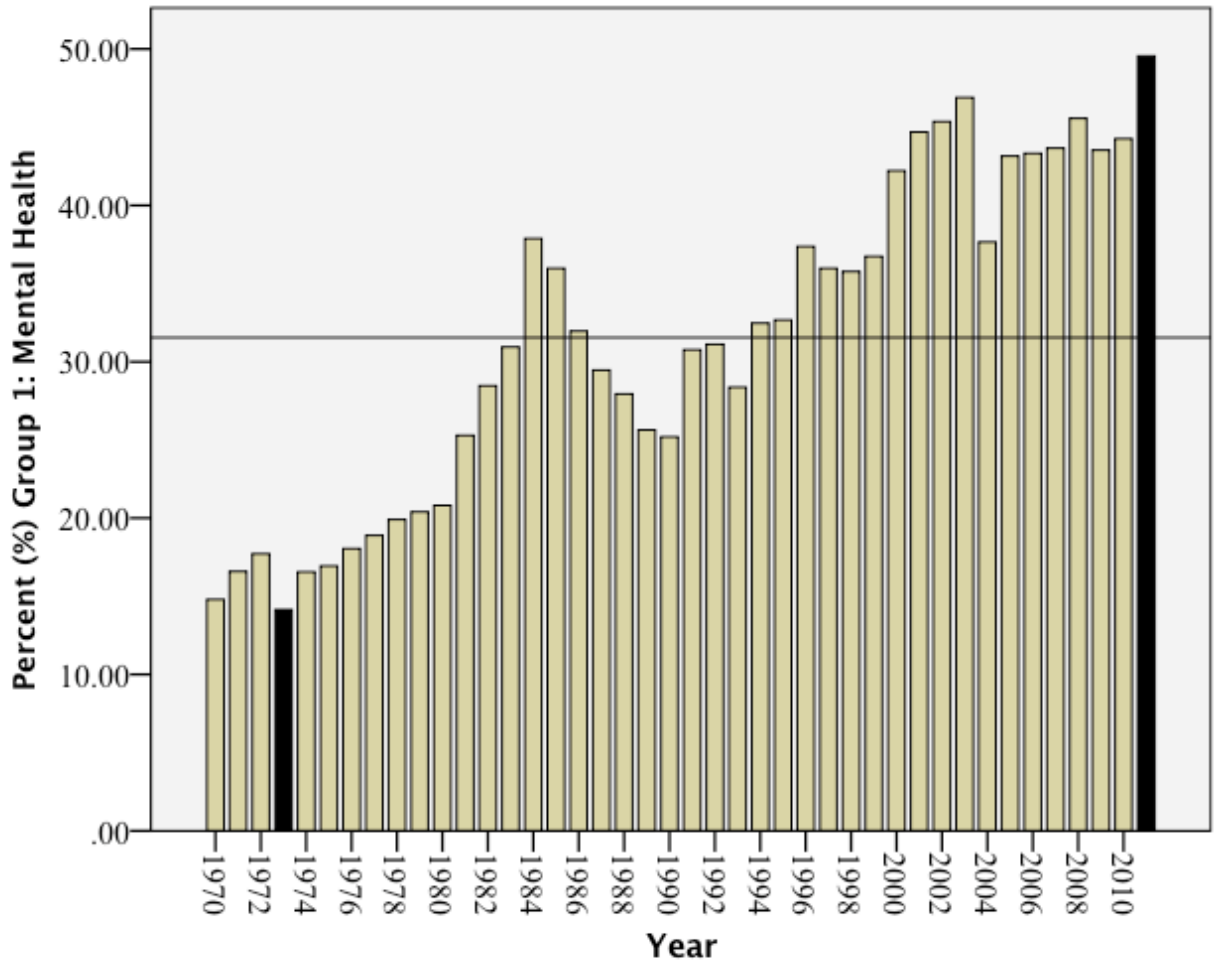


Figure 4.209 Simple Bar Chart for Group 1: Mental Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 1 Category Mean Line (31.54%) of archival data (1970-2011)

Examination of the descriptive statistical results for the Major Group 1: Mental Health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the Major Group 1: Mental Health category frequency has remained consistently increased since 1970 and composes the largest proportion of the annual total of crisis center call category frequency (49.55% in 2011).

Anecdotal evidence gathered from conversation with administrative personnel suggests that the increase in proportion of Major Group 1: Mental Health category frequency is reflective of individuals in chronic nonspecific crisis rather than individuals experiencing a specific acute crisis episode. More information is necessary to determine the exact nature of the individual's distress.

## Annual Total of Crisis Center Call Category Frequency and Major Group 2: Interpersonal

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 2: Interpersonal Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. Call categories were coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). However, all call categories were not coded for all years of the archival data. When zero (0) is reported in the major category frequency of the annual total of crisis center call category frequency, the number may reflect the absence of call frequency related to the major group category or the absence of data for the major group category.

CONTACT USA, Incorporated is the national umbrella organization through which CONTACT of Chattanooga is affiliated. CONTACT USA, Inc. suggests eight (8) major grouping of crisis center call categories. Major Group 2: Interpersonal incorporates eleven (11) call categories of (3) Appreciation, (4) Dating, (7) Desertion, (11) Family, (18) Juvenile, (21) Marital, (25) Other Family, (28) Relationship, (29) Religious, (30) School and (34) Unwed Parent encompassing all forty-three (43) years of the archival data (1969-2011). Some definitional ambiguities were noted in the assignment of call categories to a major group. No assumptions were made as to the source of those ambiguities. No corrections or alterations were made to the group assignment to reconcile any call category ambiguities.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise

indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category frequency were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call shift frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 159,090 for the Major Group 2 category of the annual total of crisis center call category frequency with a mean of 3,787.86 and a standard deviation of 1,428.51. Descriptive statistical analysis reported a minimum frequency of 1,035 and a maximum frequency of 7,315 for the Major Group 2: Interpersonal category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the

annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011) are reported in Table 4.108. Figure 4.210 provides a visual representation for the Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1969-2011). Figure 4.211 provides a visual representation for the Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1969-2011) with a Major Group 2 category mean line (3,787.86). Figure 4.212 provides a visual representation for the Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1969-2011).

Table 4.108

Descriptive Statistics for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Major Group 2: Interpersonal Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		1,035	6,733
Maximum		7,315	21,292
Sum		159,090	639,102
Mean		3,787.86	15,216.71
Standard Deviation		1,428.51	3,470.44

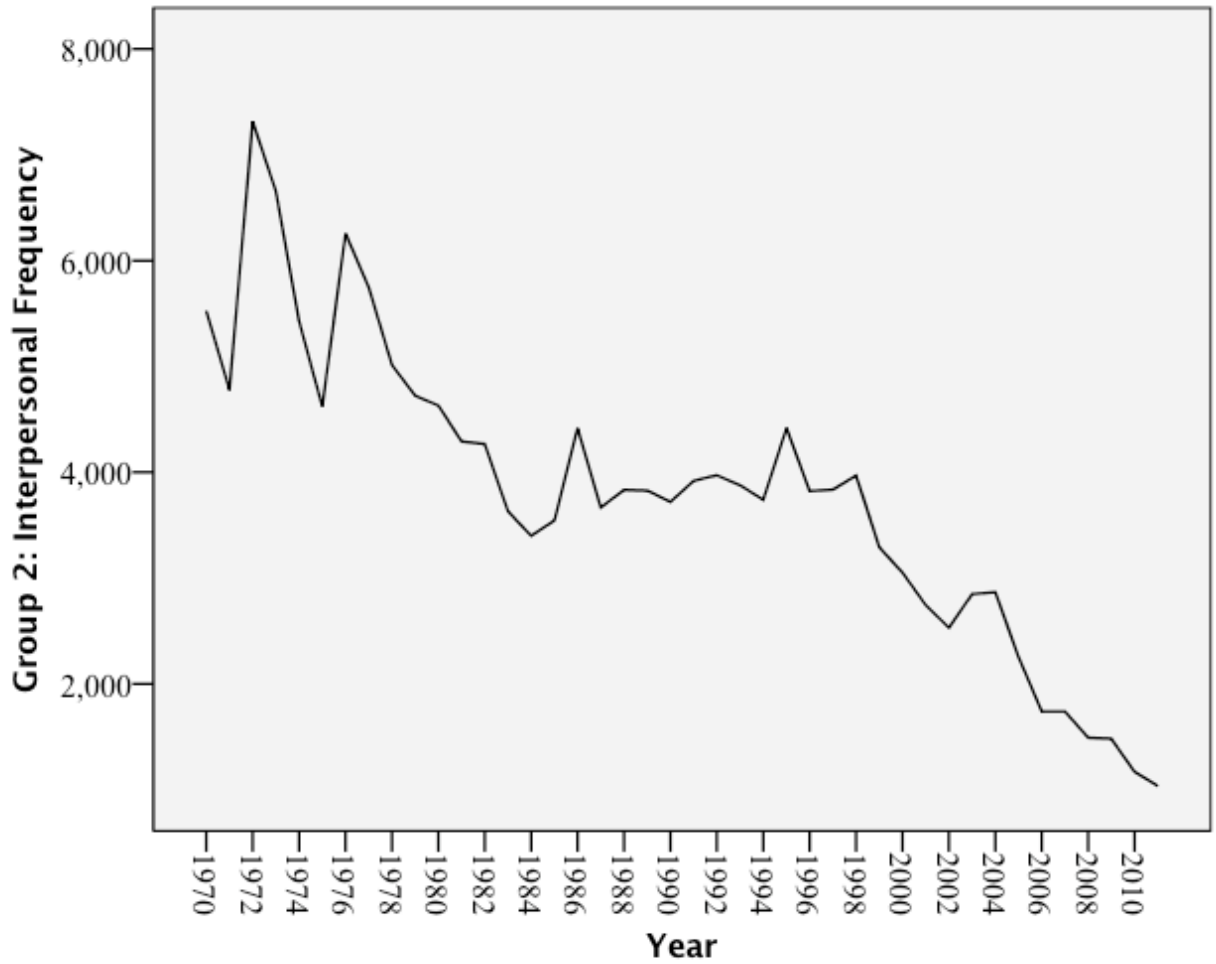


Figure 4.210 Simple Line Chart for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)



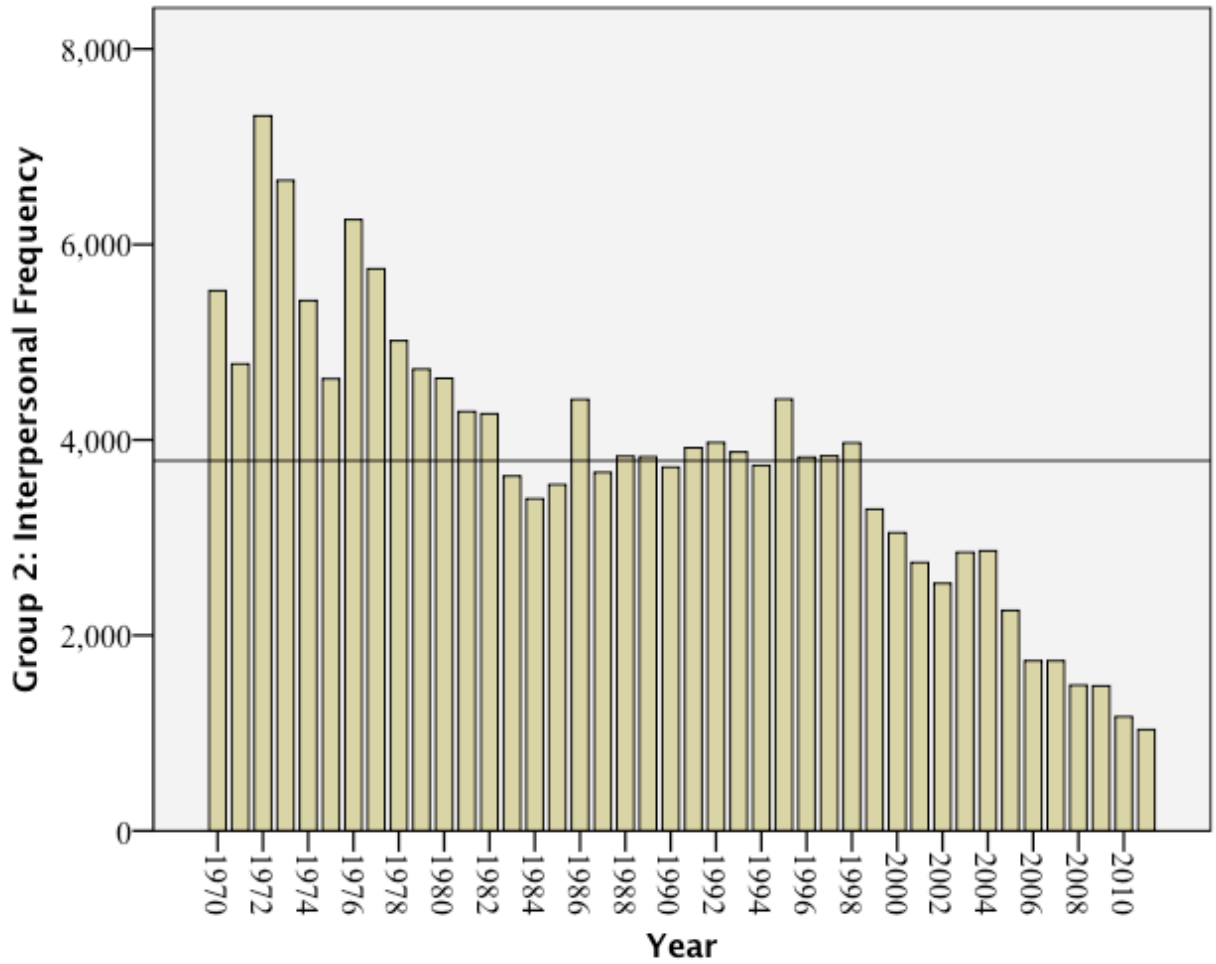


Figure 4.211 Simple Bar Chart for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 2 Mean Line (3,787.86) of archival data (1970-2011)

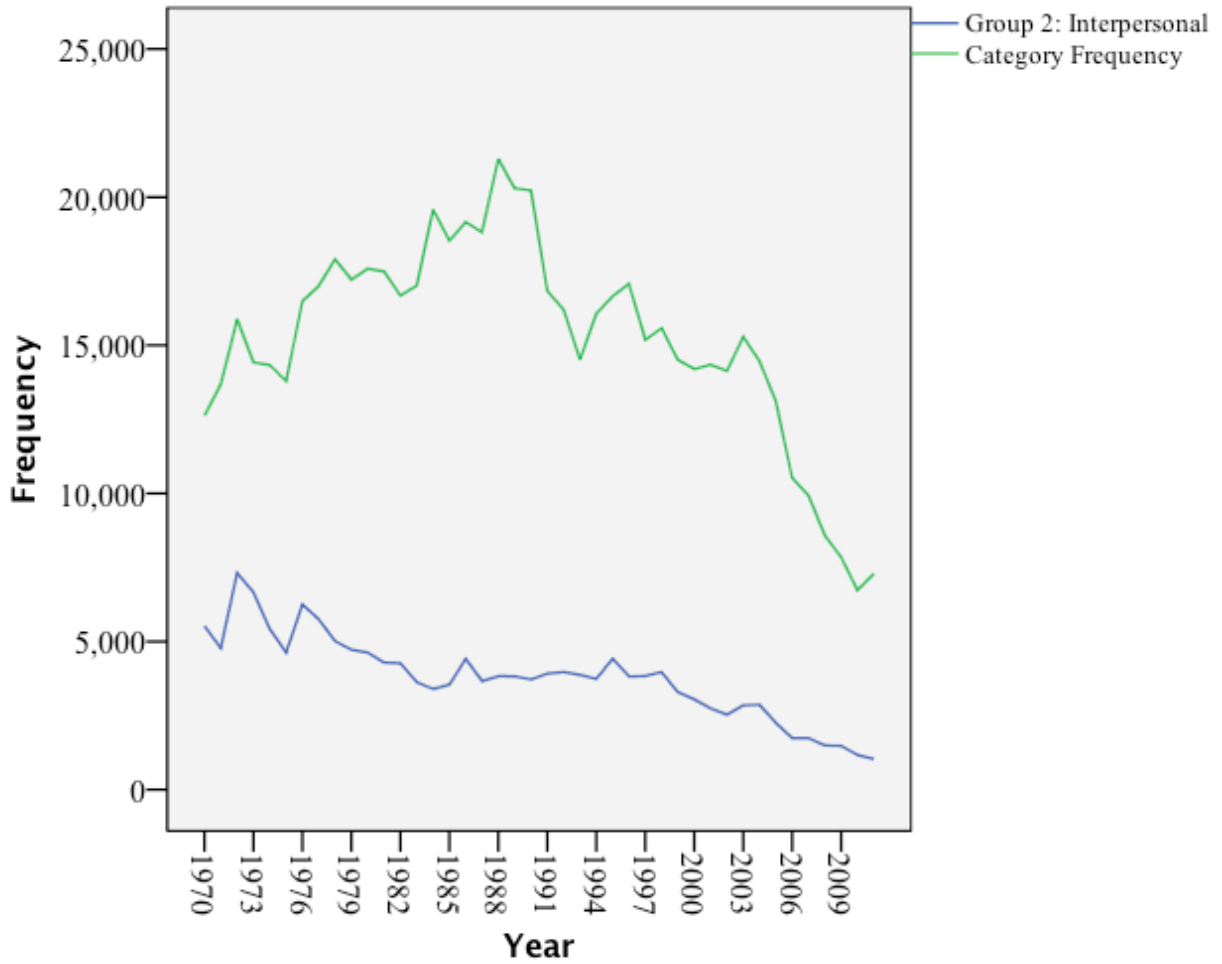


Figure 4.212 Multiple Line Chart for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011). A descriptive statistical analysis was conducted to evaluate the Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011). The results of the descriptive statistical analysis reported a sum of 1,037.66% for the Major Group 2: Interpersonal category frequency of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 24.71% and a standard deviation of 8.20%. Descriptive statistical analysis reported a minimum frequency of 14.20% and a maximum frequency of 46.14% for the Major Group 2: Interpersonal category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011) are reported in Table 4.109. Figure 4.213 provides a visual representation for the Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the

archival data (1969-2011). Figure 4.214 provides a visual representation for the Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1969-2011) with a percentage (%) Major Group 2: Interpersonal category mean line (24.71%). Black bars represent the years reported as having the highest (1973) and the lowest (2011) frequency.

Table 4.109

Descriptive Statistics for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1969-2011)

Descriptive Statistics		
		Major Group 2: Interpersonal Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		14.20%
Maximum		46.15%
Sum		1,037.66%
Mean		24.71%
Standard Deviation		8.20%

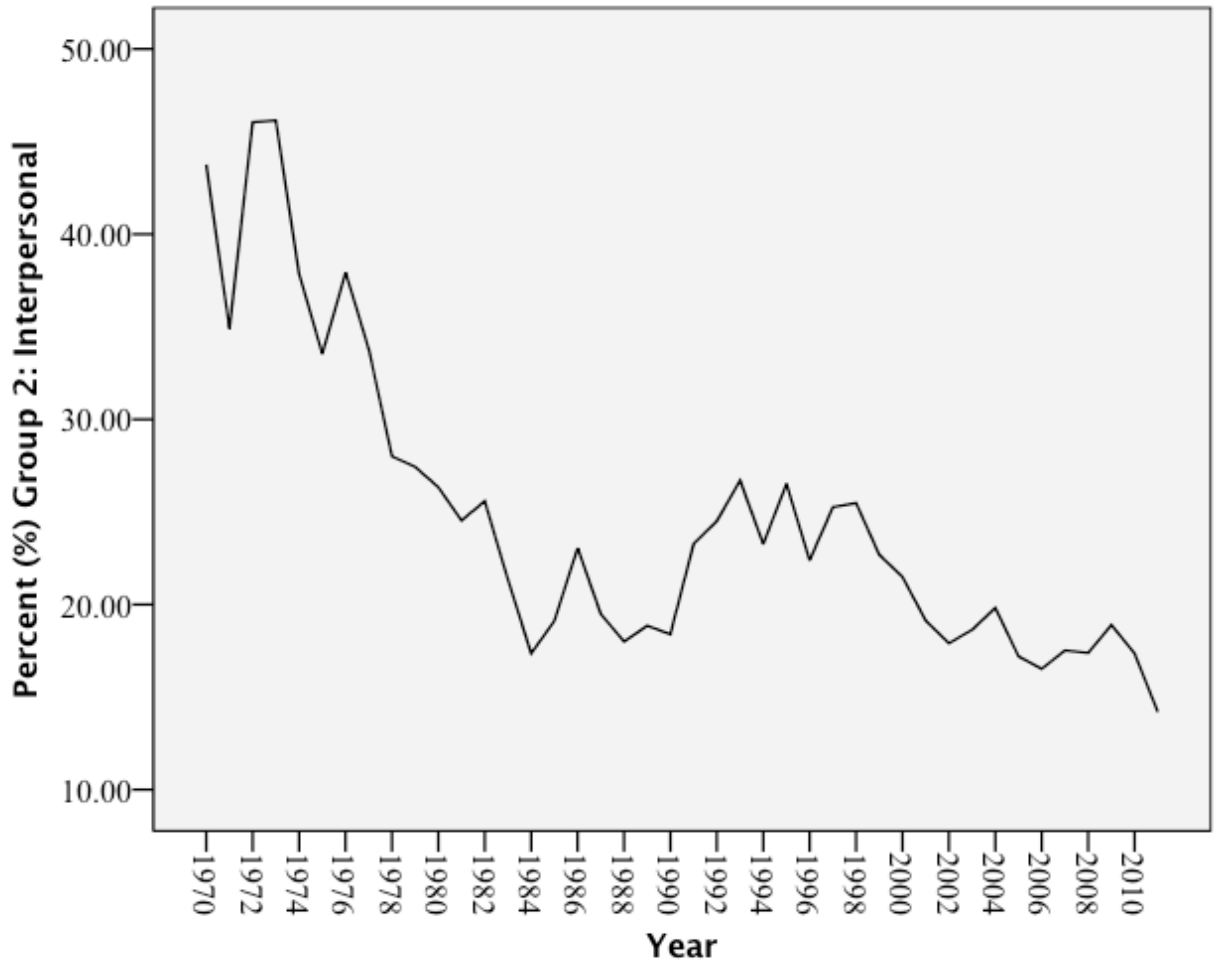


Figure 4.213 Simple Line Chart for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

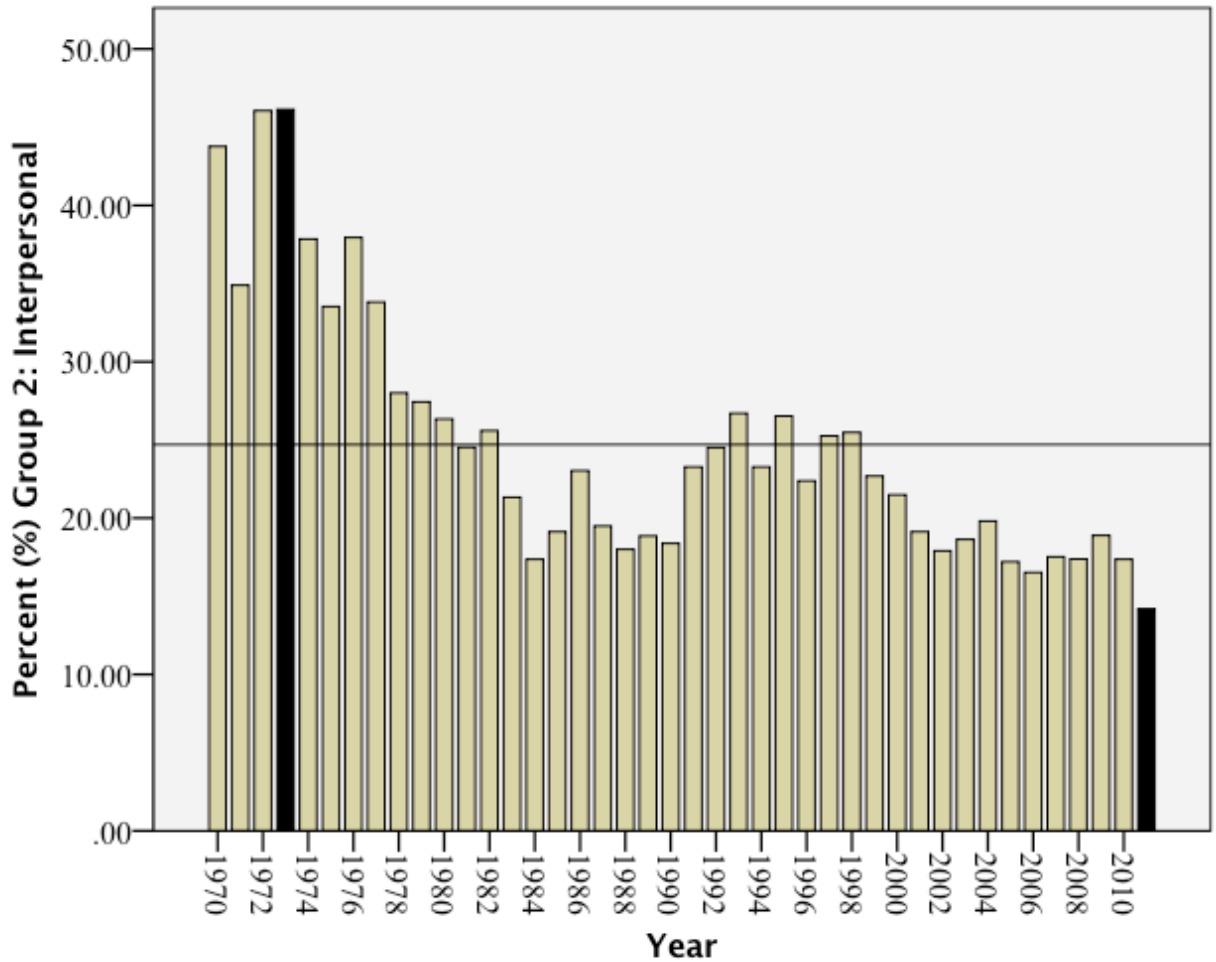


Figure 4.214 Simple Bar Chart for Major Group 2: Interpersonal Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 2 Category Mean Line (24.71%) of archival data (1970-2011)

Examination of the descriptive statistical results for the Major Group 2: Interpersonal category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the Major Group 2: Interpersonal category frequency as consistently decreased (from 46.15% to 14.20%) throughout the forty-two (42) years for which it was coded.

*Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Major Group 1: Mental Health Category as Ratio of Annual Total of Crisis Center Call Frequency and Annual Total of Crisis Center Call Frequency per Major Group 2: Interpersonal Category as Ratio of Annual Total of Crisis Center Call Frequency*

Correlation coefficients were computed among the annual total of crisis center call frequency per Major Group 1: Mental Health category as a ratio (%) of the annual total of crisis center call frequency and the annual total of crisis center call frequency per Major Group 2: Interpersonal category as a ratio (%) of the annual total of crisis center call frequency encompassing-forty-two (22) years of archival data (1970 to 2011). Results of the correlation analysis reported a  $r = -.821$  with a  $p < .001$ . Results strongly suggest a negative correlation when the annual total of crisis center call frequency per Major Group 1: Mental Health as a ratio (%) of annual total of crisis center call frequency is compared to the annual total of crisis center call frequency per Group 2: Interpersonal Category as a ratio (%) of the annual total of crisis center call frequency that reported strong negative correlation is highly statistically significant.

Correlation coefficients for the annual total of crisis center call frequency per Major Group 1: Mental Health as a ratio (%) of the annual total of crisis center call frequency and the annual total of crisis center call frequency per Major Group 2: Interpersonal category as a ratio (%) of the annual total of crisis center call frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.110. Figure 4.215 provides a visual representation for the annual total of crisis center call frequency per Major Group 1: Mental Health as a ratio (%) of the annual total of crisis center call frequency and the annual total of crisis center call frequency per Major Group 2: Interpersonal category as a ratio (%) of the annual total of crisis center call frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).



Table 4.110

Correlation Coefficients for Annual Total of Crisis Center Call Frequency per Major Group 1: Mental Health Category as Ratio (%) of Annual Total of Crisis Center Call Frequency and Annual Total of Crisis Center Call Frequency per Major Group 2: Interpersonal Category as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1970-2011)

Correlation Coefficients			
		% Group 1 Mental Health	% Group 2 Interpersonal
% Group 1 Mental Health	Pearson Correlation	1	-0.821**
	Sig. (2-tailed)		0.000
	N	42	42
% Group 2 Interpersonal	Pearson Correlation	-0.821**	1
	Sig. (2-tailed)	0.000	
	N	42	42

\*\* Correlation is significant at the 0.01 level (2-tailed).

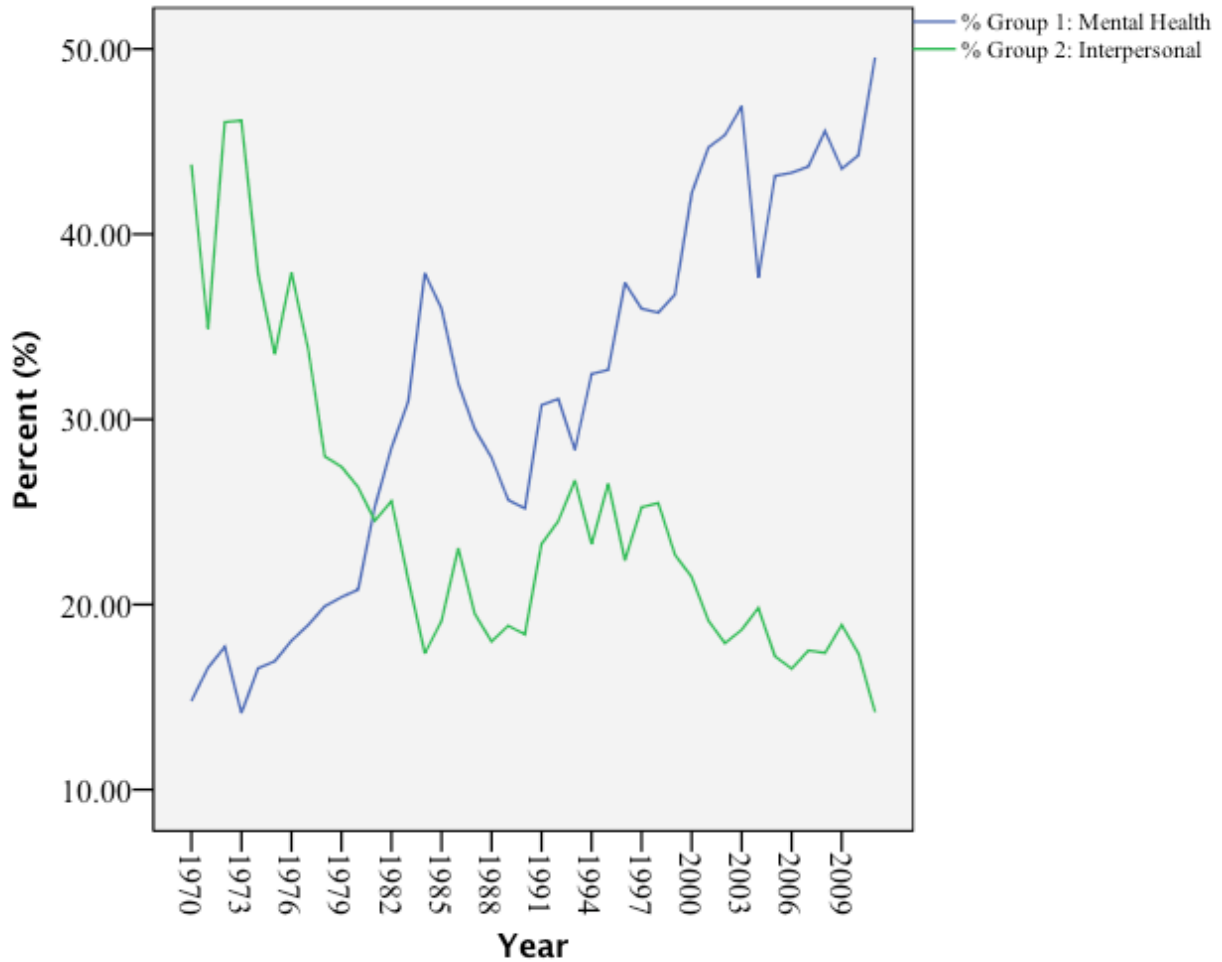


Figure 4.216 Multiple Line Chart of Annual Total of Crisis Center Call Frequency per Major Group 1: Mental Health Category as Ratio (%) of Annual Total of Crisis Center Call Frequency and Annual Total of Crisis Center Call Frequency per Major Group 2: Interpersonal Category as Ratio (%) of Annual Total of Crisis Center Call Frequency of archival data (1970-2011)

The correlation coefficient strongly suggests that the annual total of crisis center call frequency per Major Group 1: Mental Health as a ratio (%) of the annual total of crisis center call frequency has statistically significantly increased as the annual total of crisis center call frequency per Major Group 2: Interpersonal category as a ratio (%) of the annual total of crisis center call frequency and that this strong inverse relationship is highly statistically significant.

Anecdotal evidence collected during discussions with longtime administrative personnel suggests that this strong inverse correlation reflects observed changes in the topic of concern related to the annual total of crisis center call frequency.

## Annual Total of Crisis Center Call Category Frequency and Major Group 3: Suicide

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 3: Suicide Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. Call categories were coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). However, all call categories were not coded for all years of the archival data. When zero (0) is reported in the major category frequency of the annual total of crisis center call category frequency, the number may reflect the absence of call frequency related to the major group category or the absence of data for the major group category.

CONTACT USA, Incorporated is the national umbrella organization through which CONTACT of Chattanooga is affiliated. CONTACT USA, Inc. suggests eight (8) major grouping of crisis center call categories. Major Group 3: Suicide incorporates one (1) call category of (33) Suicide encompassing forty-three (43) years of the archival data (1969-2011). With only one (1) crisis center call category included in the Major Group category, Major Group 3: Suicide category descriptive statistical analysis will be identical to crisis center call category (33) Suicide. Inclusion of descriptive statistical analysis for Major Group 3: Suicide category is made in the interest of thoroughness of reporting Major Group descriptive analyses.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise

indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the Major Group 3: Suicide category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 5,511 for the Major Group 3 category of the annual total of crisis center call category frequency with a mean of 131.21 and a standard deviation of 49.15. Descriptive statistical analysis reported a minimum frequency of 58 and a maximum frequency of 242 for the Major Group 3: Suicide category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the

annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 3: Suicide category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.111. Figure 4.216 provides a visual representation for the Major Group 3: Suicide category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.217 provides a visual representation for the Major Group 3: Suicide category frequency of the annual total of crisis center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a Major Group 3: Suicide category mean line (131.21). Figure 4.218 provides a visual representation for the Major Group 3: Suicide category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.111

Descriptive Statistics for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Major Group 3: Suicide Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		58	6,733
Maximum		242	21,292
Sum		5,511	639,102
Mean		131.21	15,216.71
Standard Deviation		49.15	3,470.44

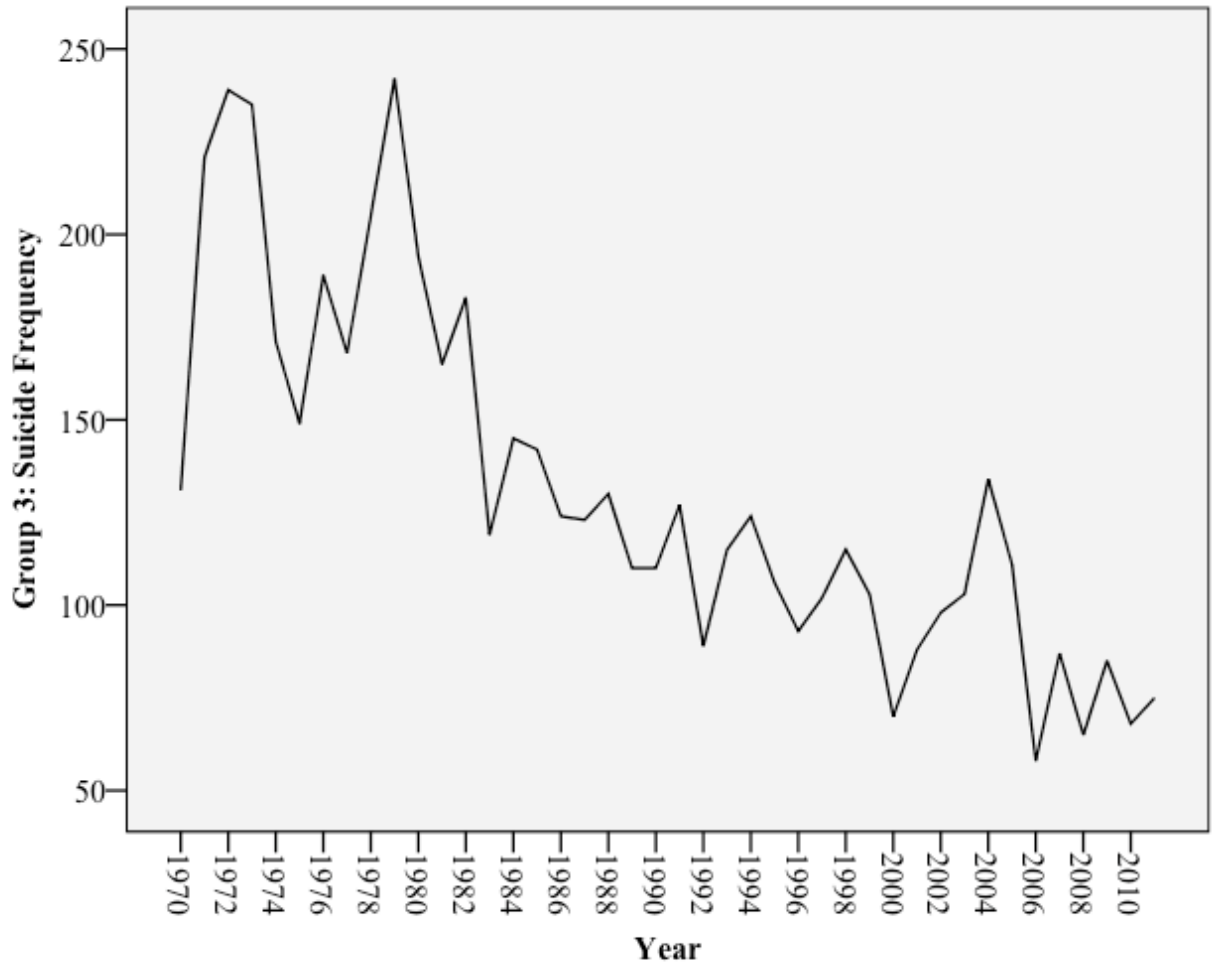


Figure 4.216 Simple Line Chart for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)



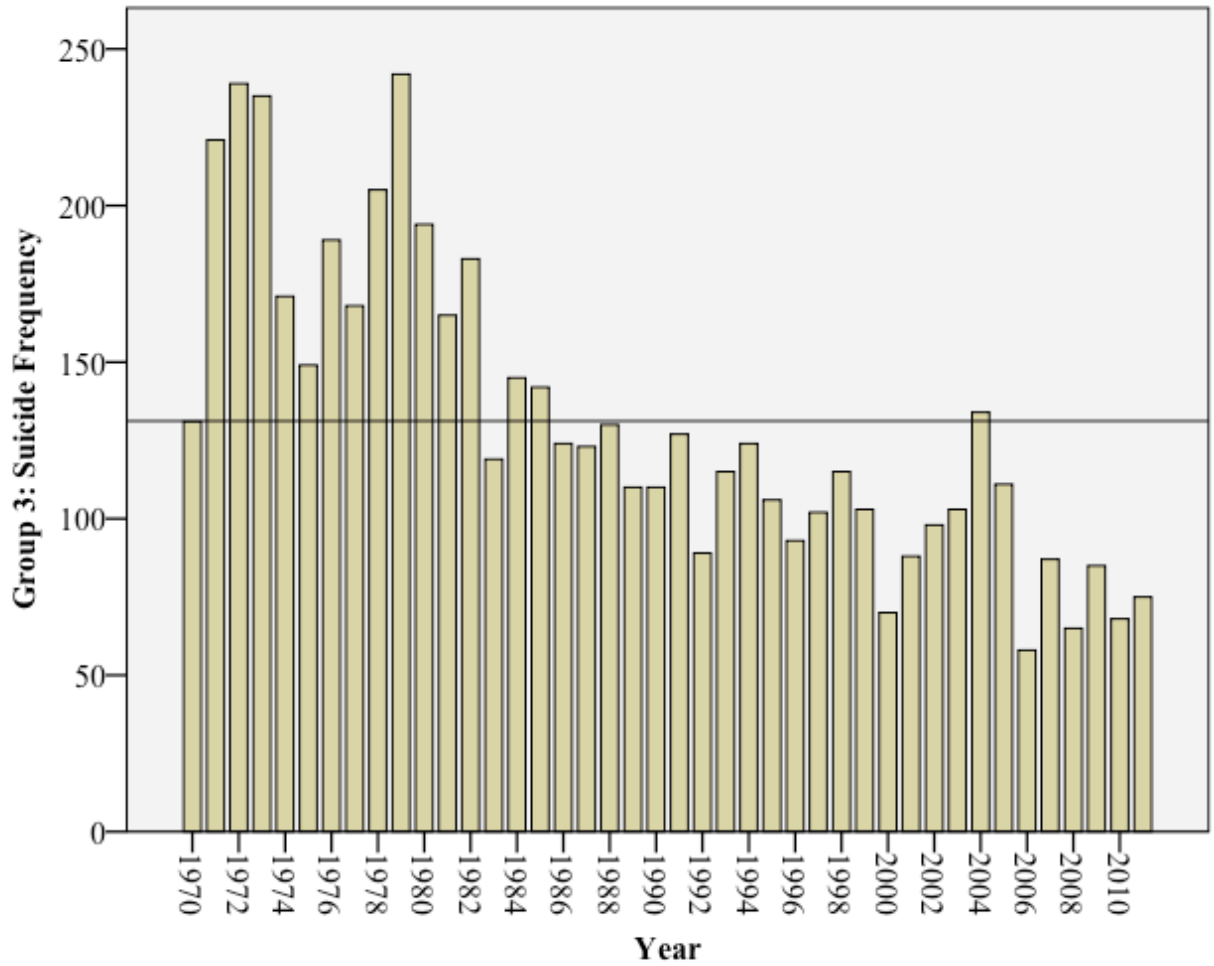


Figure 4.217 Simple Bar Chart for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 3: Suicide Category Mean Line (131.21) of archival data (1970-2011)



Figure 4.218 Multiple Line Chart for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The Major Group 3: Suicide category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the Major Group 3: Suicide category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 36.81% for the Major Group 3: Suicide category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 0.88% and a standard deviation of 0.29%. Descriptive statistical analysis reported a minimum frequency of 0.49% and a maximum frequency of 1.63% for the Major Group 3: Suicide category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 3: Suicide category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.112. Figure 4.219 provides a visual representation for the Major Group 3: Suicide category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.220 provides a visual representation for the Major Group 3: Suicide category frequency of the

annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) Major Group 3: Suicide category mean line (0.88%). Black bars represent the years reported as having the highest (1973) and the lowest (2000) frequency.

Table 4.112

Descriptive Statistics for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Major Group 3: Suicide Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		0.49%
Maximum		1.63%
Sum		36.81%
Mean		0.88%
Standard Deviation		0.29%

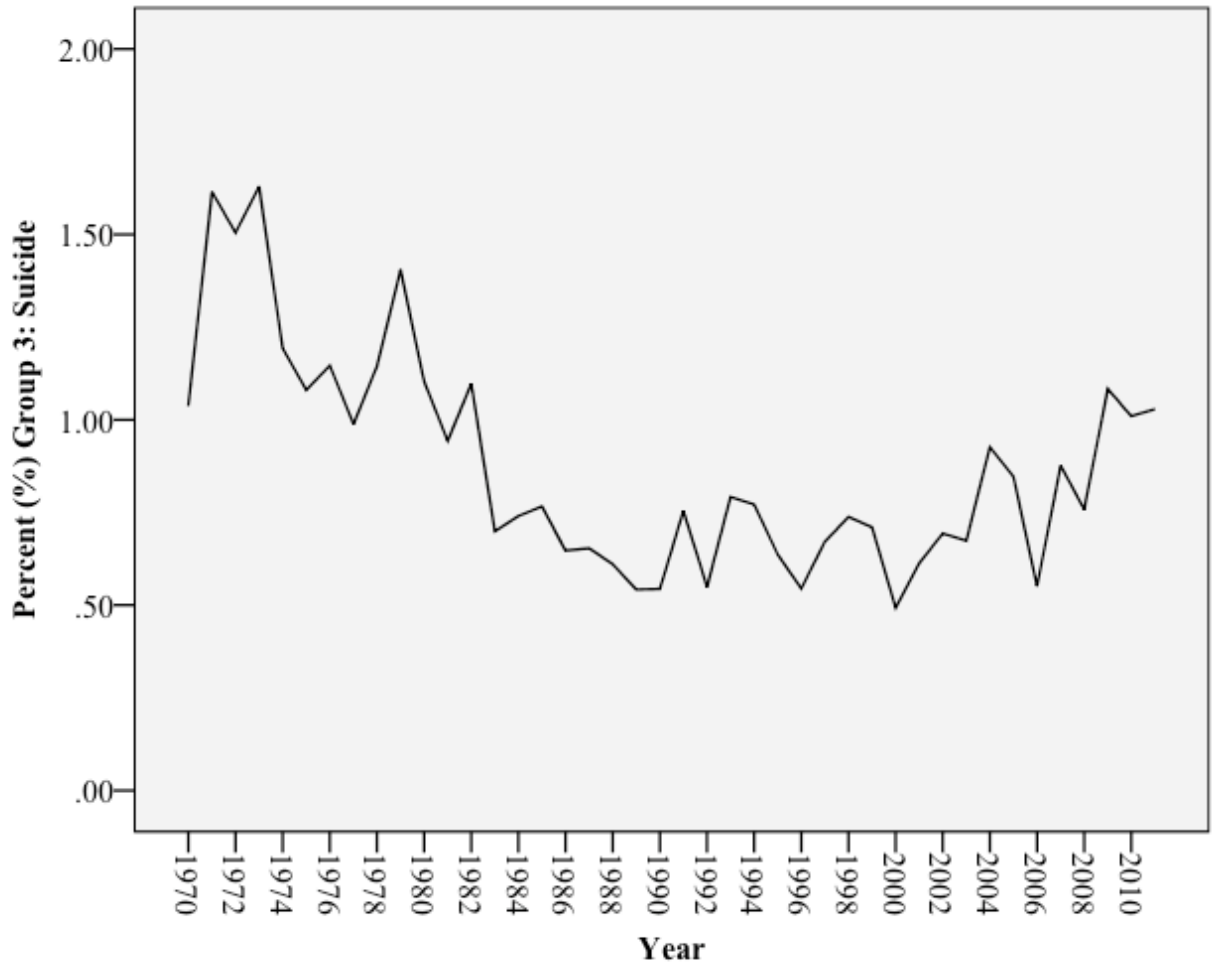


Figure 4.219 Simple Line Chart for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

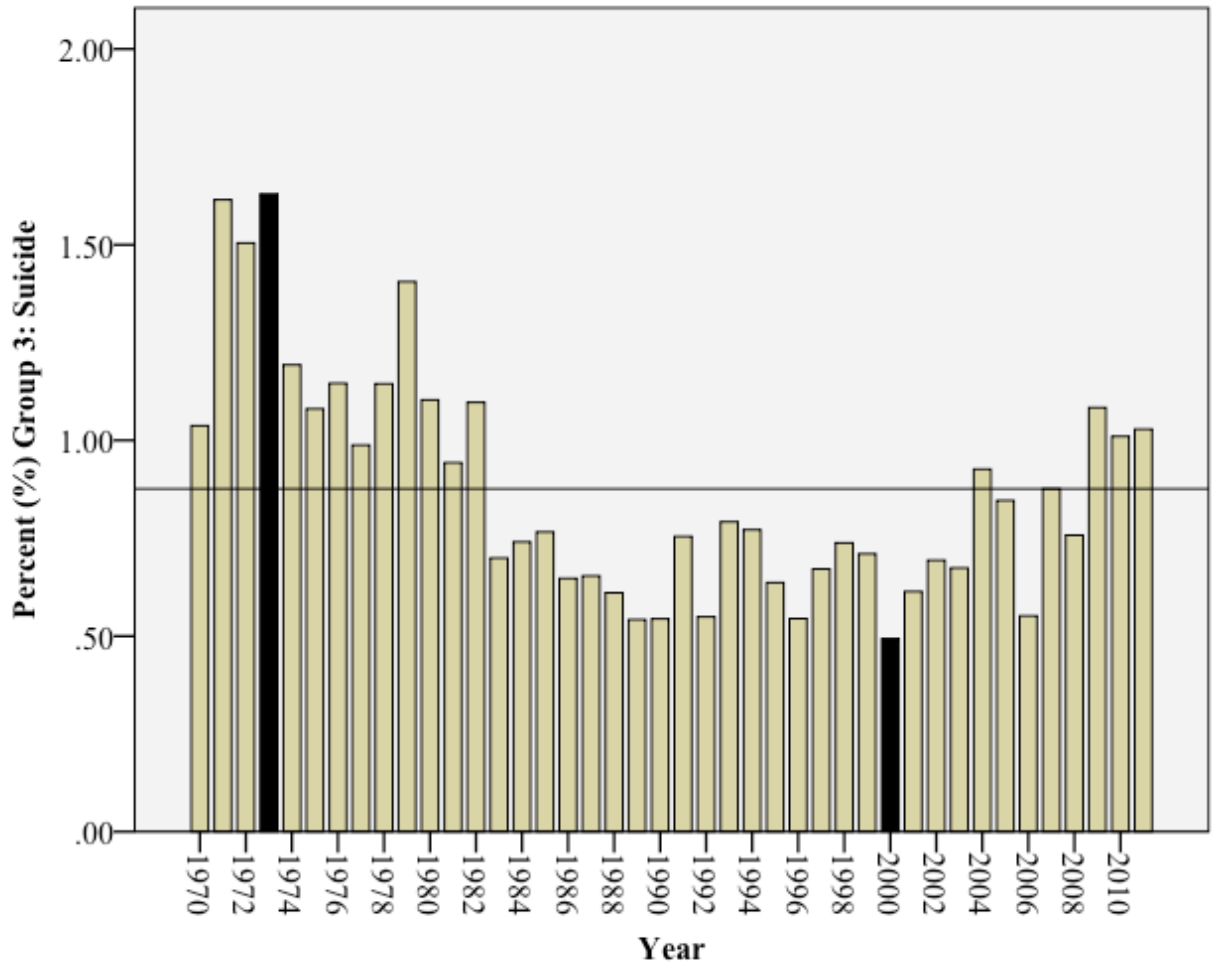


Figure 4.220 Simple Bar Chart for Major Group 3: Suicide Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 3: Suicide Category Mean Line (0.29%) of archival data (1970-2011)

Examination of the descriptive statistical results for the Major Group 3: Suicide category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the Major Group 3: Suicide category frequency has remained a relatively small proportion of the annual total of crisis center call category frequency throughout the forty-two (42) years of coding (between 0.49% and 1.63%).

## Annual Total of Crisis Center Call Category Frequency and Major Group 4: Physical Health

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 4: Physical Health Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. Call categories were coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). However, all call categories were not coded for all years of the archival data. When zero (0) is reported in the major category frequency of the annual total of crisis center call category frequency, the number may reflect the absence of call frequency related to the major group category or the absence of data for the major group category.

CONTACT USA, Incorporated is the national umbrella organization through which CONTACT of Chattanooga is affiliated. CONTACT USA, Inc. suggests eight (8) major grouping of crisis center call categories. Major Group 4: Physical Health incorporates five (5) call categories of (1) Abortion, (2) Alcohol, (5) Deaf, (8) Drugs, and (15) Health encompassing forty-three (43) years of the archival data (1969-2011). Some definitional ambiguities were noted in the assignment of call categories to a major group. No assumptions were made as to the source of those ambiguities. No corrections or alterations were made to the group assignment to reconcile any call category ambiguities.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise



indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category frequency were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call shift frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 52,745 for the Major Group 4: Physical Health category of the annual total of crisis center call category frequency with a mean of 1,255.83 and a standard deviation of 465.65. Descriptive statistical analysis reported a minimum frequency of 596 and a maximum frequency of 2,761 for the Major Group 4: Physical Health category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the

annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.113. Figure 4.221 provides a visual representation for the Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.222 provides a visual representation for the Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a Major Group 4: Physical Health category mean line (1,255.83). Figure 4.223 provides a visual representation for the Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.113

Descriptive Statistics for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Major Group 4: Physical Health Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		596	6,733
Maximum		2,761	21,292
Sum		52,745	639,102
Mean		1,255.83	15,216.71
Standard Deviation		465.65	3,470.44

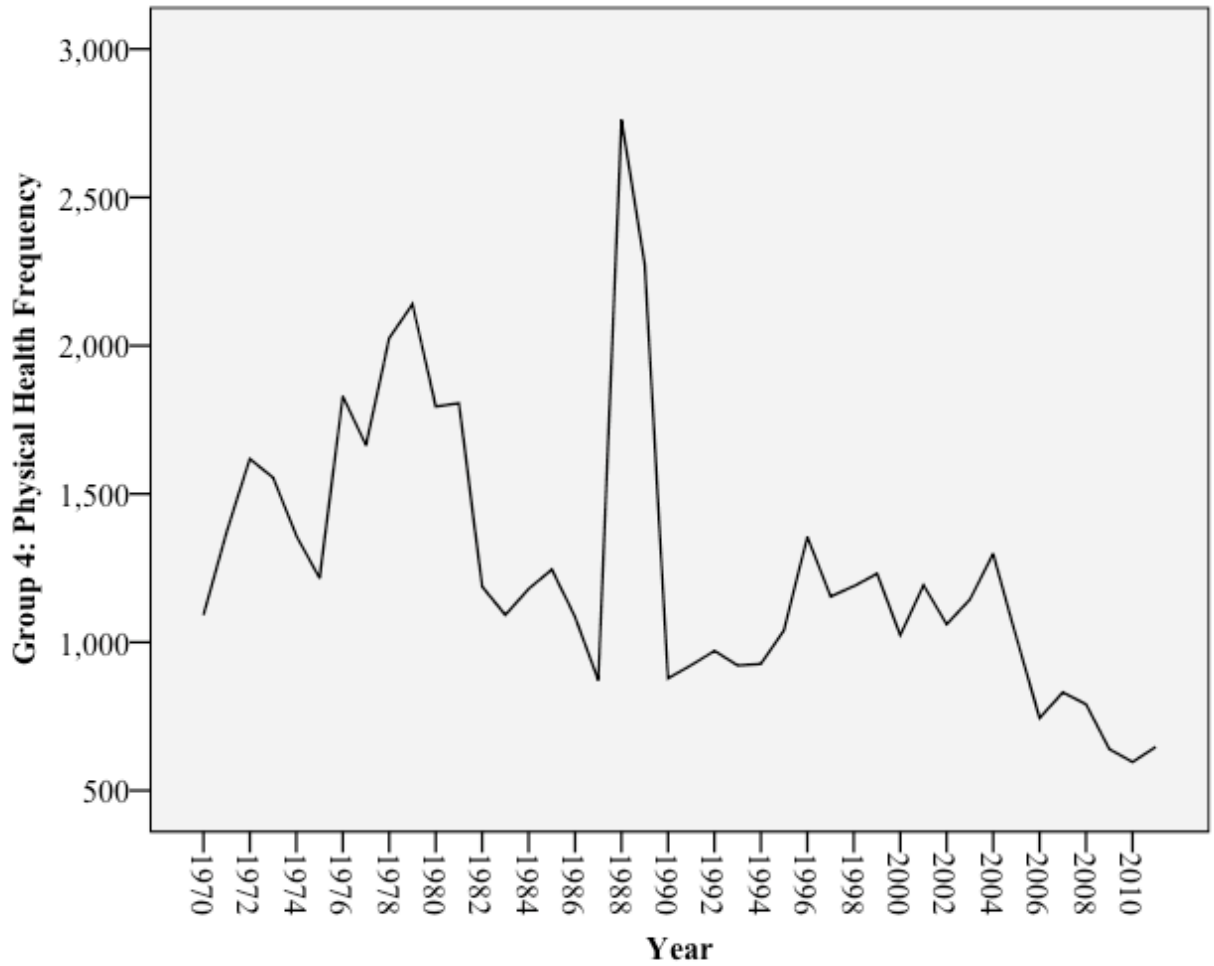


Figure 4.221 Simple Line Chart for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

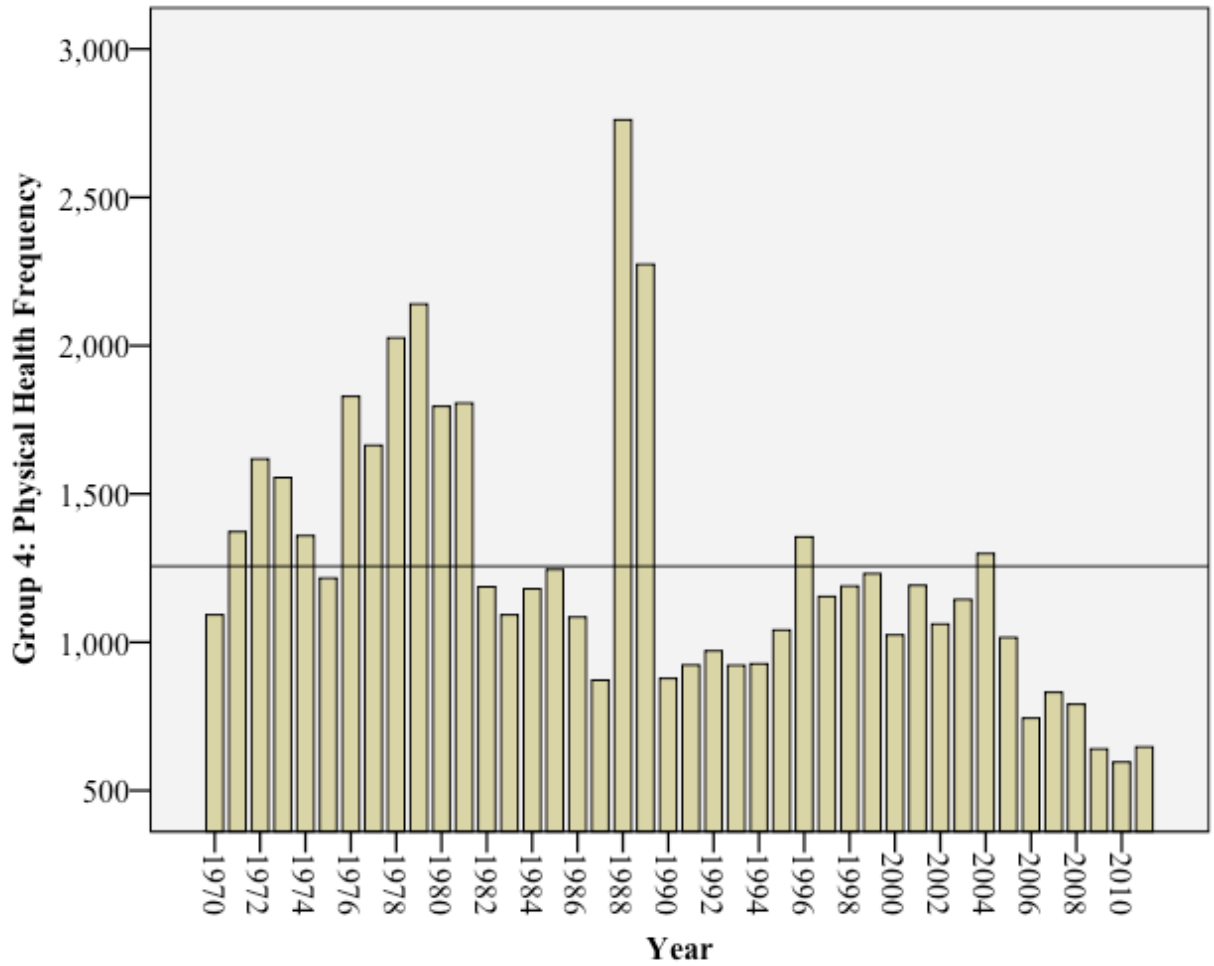


Figure 4.222 Simple Bar Chart for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 4: Physical Health Mean Line (1,255.83) of archival data (1970-2011)

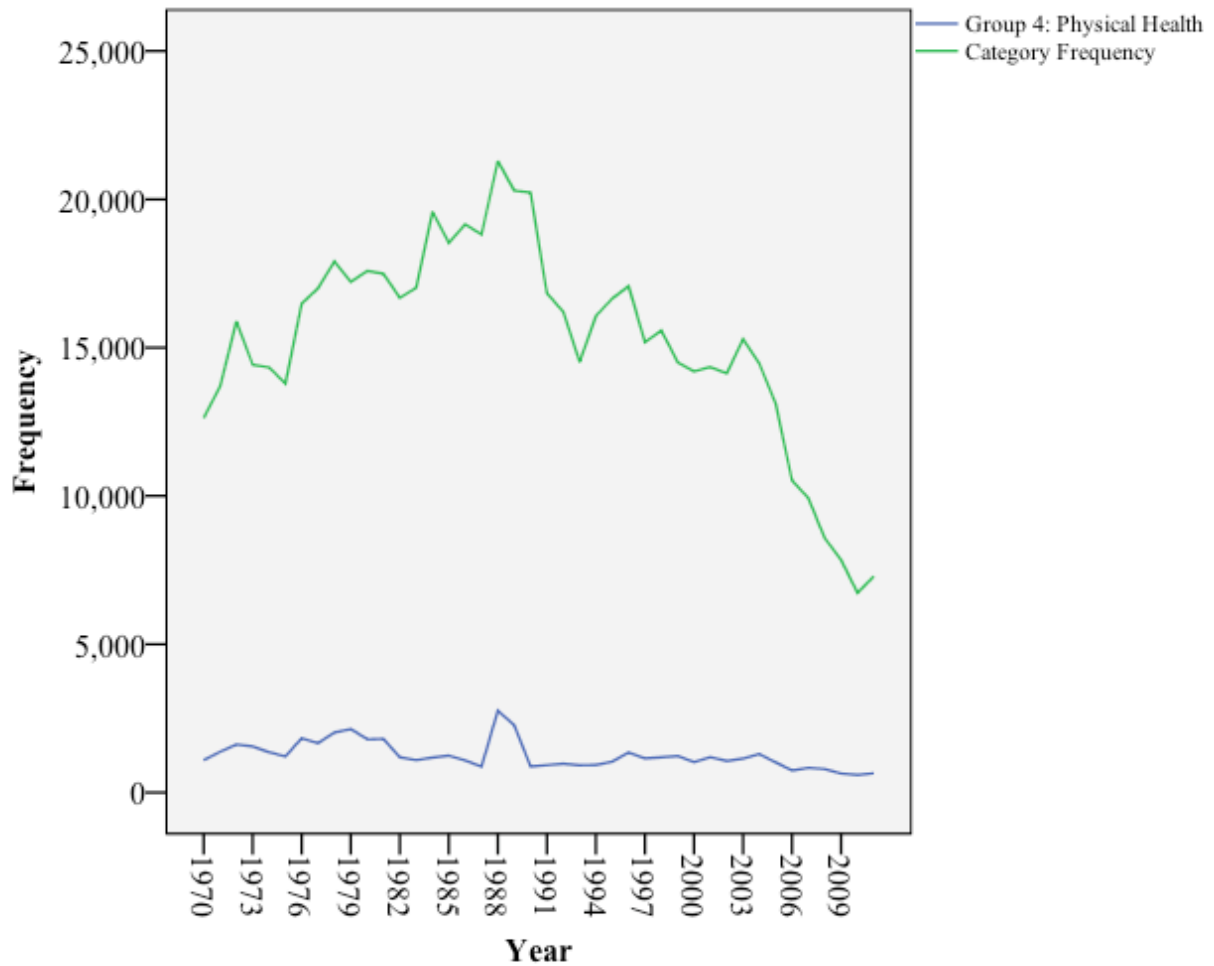


Figure 4.223 Multiple Line Chart for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011). A descriptive statistical analysis was conducted to evaluate the Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011). The results of the descriptive statistical analysis reported a sum of 347.48% for the Major Group 4: Physical Health category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 8.27% and a standard deviation of 2.05%. Descriptive statistical analysis reported a minimum frequency of 4.34% and a maximum frequency of 12.97% for the Major Group 4: Physical Health category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011) are reported in Table 4.114. Figure 4.224 provides a visual representation for the Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the

archival data (1969-2011). Figure 4.225 provides a visual representation for the Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1969-2011) with a percent (%) Major Group 4: Physical Health category mean line (8.27%). Black bars represent the years reported as having the highest (1988) and the lowest (1990) frequency.



Table 4.114

Descriptive Statistics for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1969-2011)

Descriptive Statistics		
		Major Group 4: Physical Health Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		4.34%
Maximum		12.97%
Sum		347.48%
Mean		8.27%
Standard Deviation		2.05%



Figure 4.224 Simple Line Chart for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

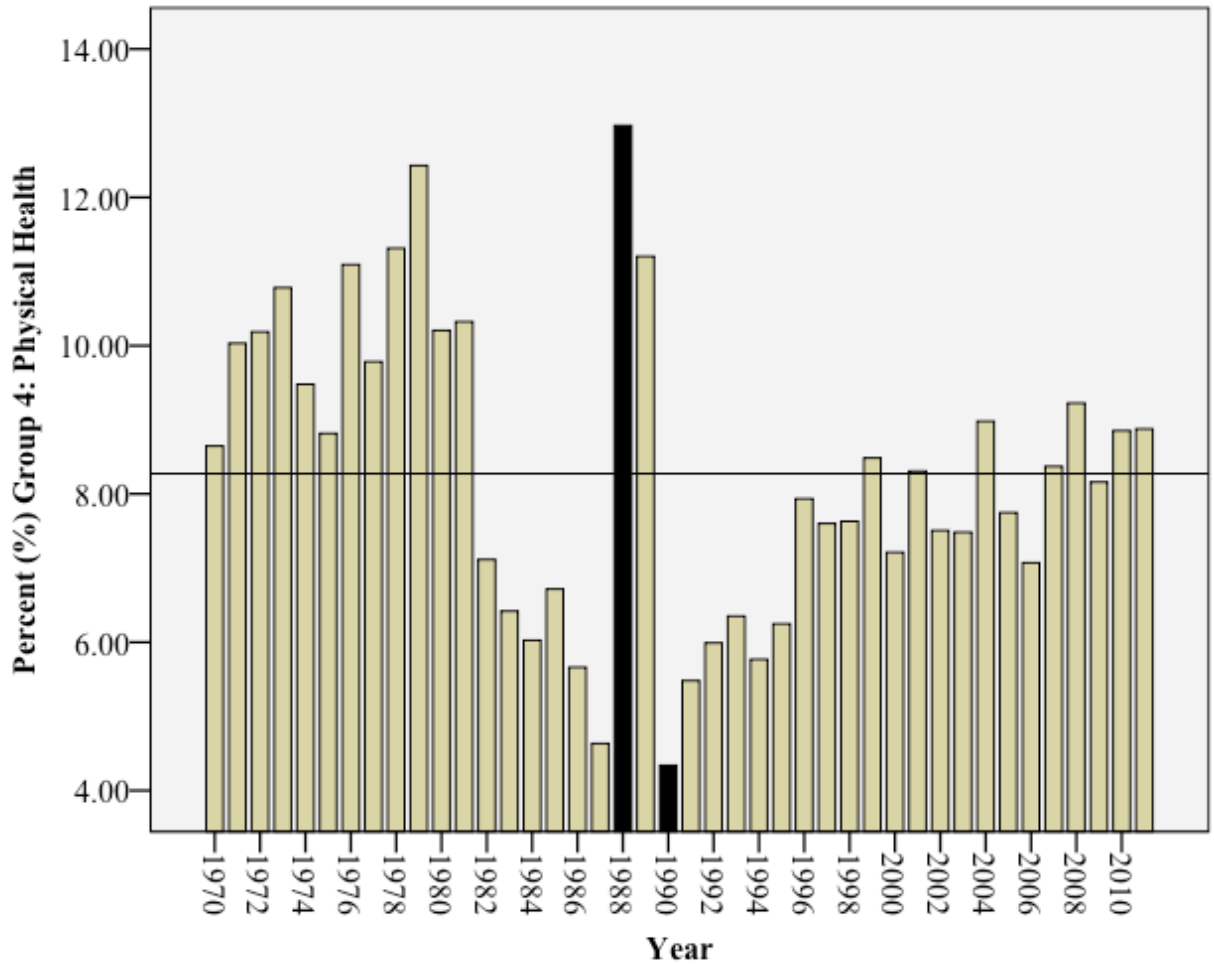


Figure 4.225 Stacked Bar Chart for Major Group 4: Physical Health Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 4: Physical Health Category Mean Line (8.27%) of archival data (1970-2011)

Examination of the descriptive statistical results for the Major Group 4: Physical Health category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the Major Group 4: Physical Health category frequency has remained relatively consistent throughout the forty-two (42) years of coding and has remained a relatively moderate proportion of the annual total of crisis center

call category frequency (between 4.34% and 12.97%) with the exception of a marked increase in frequency for the years of 1988 and 1989 relative to the years 1987 and 1990. Anecdotal evidence gathered from conversation with administrative personnel suggests the years of increase (1988 and 1989) of Major Category 4: Physical Health category frequency was reflective of an individual experiencing a chronic crisis rather than an increase in frequency due to multiple individuals experiencing an acute crisis episode.

## Annual Total of Crisis Center Call Category Frequency and Major Group 5: Abuse and Violence

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 5: Abuse and Violence Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. CONTACT USA, Incorporated is the national umbrella organization through which CONTACT of Chattanooga is affiliated. CONTACT USA, Inc. suggests eight (8) major grouping of crisis center call categories. Major Group 5: Abuse and Violence incorporates one (1) call category of (26) Physical Abuse encompassing forty-three (43) years of the archival data (1969-2011). With only one (1) crisis center call category included in the Major Group category, Major Group 5: Abuse and Violence category descriptive statistical analysis will be similar to crisis center call category (26) Physical Abuse. Inclusion of descriptive statistical analysis for Major Group 5: Abuse and Violence category is made in the interest of thoroughness of reporting Major Group descriptive statistical analyses

The call category (33) physical abuse was coded on VCLs throughout thirty-four (34) years of the archival data (1978-2011). Although the archival data for physical abuse category frequency of the annual total of crisis center call category frequency is limited in scope, it is sufficiently statistically salient as to warrant evaluation as an individual call category. When zero (0) is reported for the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category frequency for years 1969-1977, the number reflects the absence of data for the physical abuse category. When zero (0) is reported for the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category

frequency for years 1978-2011, the number reflects the absence of call frequency related to the physical abuse category rather than the absence of data for the physical abuse category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Thirty-four (34) complete years were identified and used for statistical analysis (1977-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call category frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 8,448 for the Major Group 5: Abuse and Violence category of the annual total of crisis center call category frequency with a mean of

201.14 and a standard deviation of 145.68. Descriptive statistical analysis reported a minimum frequency of 0 and a maximum frequency of 490 for the Major Group 5: Abuse and Violence category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.115. Figure 4.226 provides a visual representation for the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.227 provides a visual representation for the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a Major Group 5: Abuse and Violence category mean line (201.14). Figure 4.228 provides a visual representation for the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category frequency and the annual

total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).



Table 4.115

Descriptive Statistics for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Major Group 5: Abuse and Violence Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		0	6,733
Maximum		490	639,102
Sum		8,448	639,102
Mean		201.14	15,216.71
Standard Deviation		145.68	3,470.44



Figure 4.226 Simple Line Chart for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

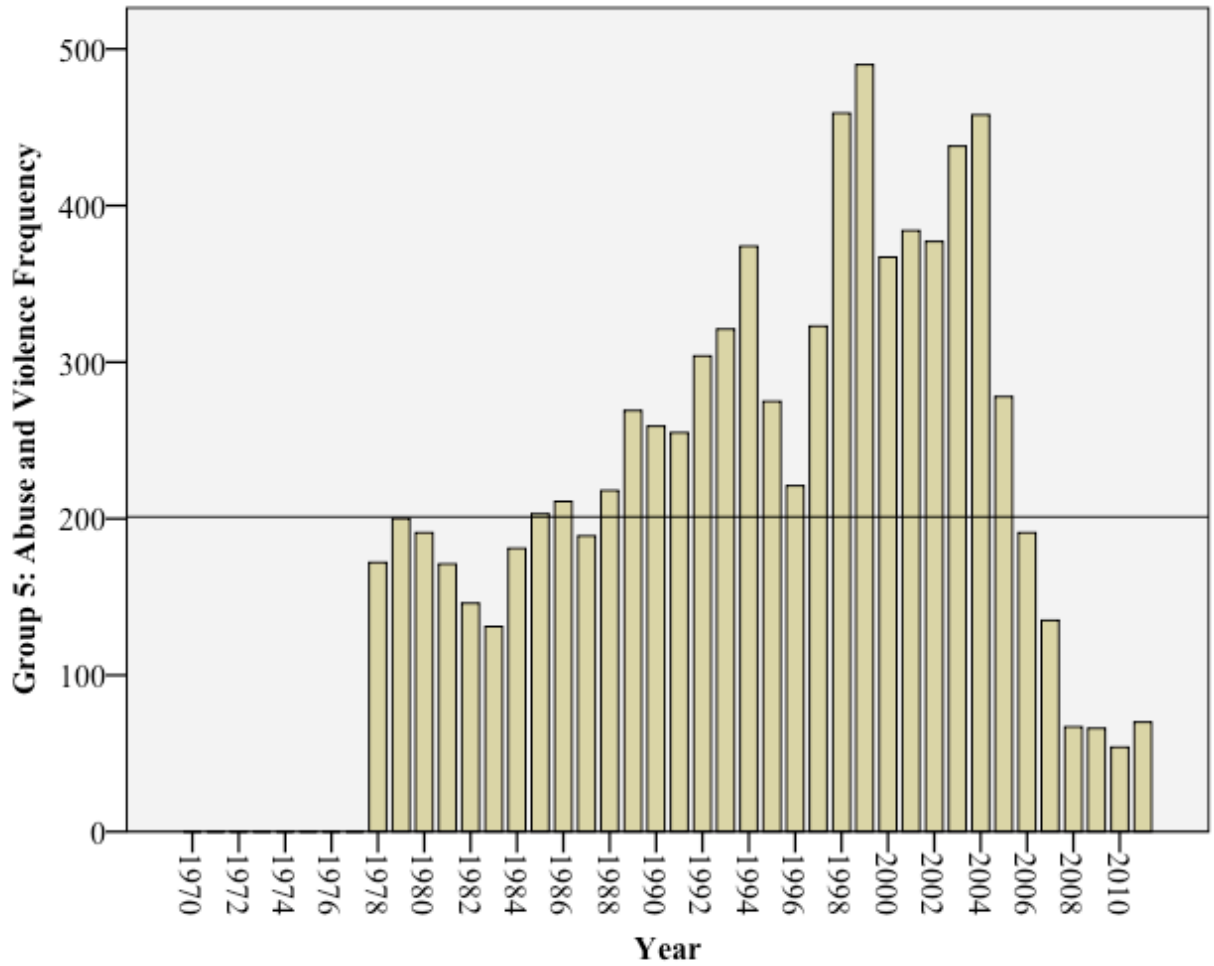


Figure 4.227 Simple Bar Chart for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 5: Abuse and Violence Category Mean Line (201.14) of archival data (1970-2011)

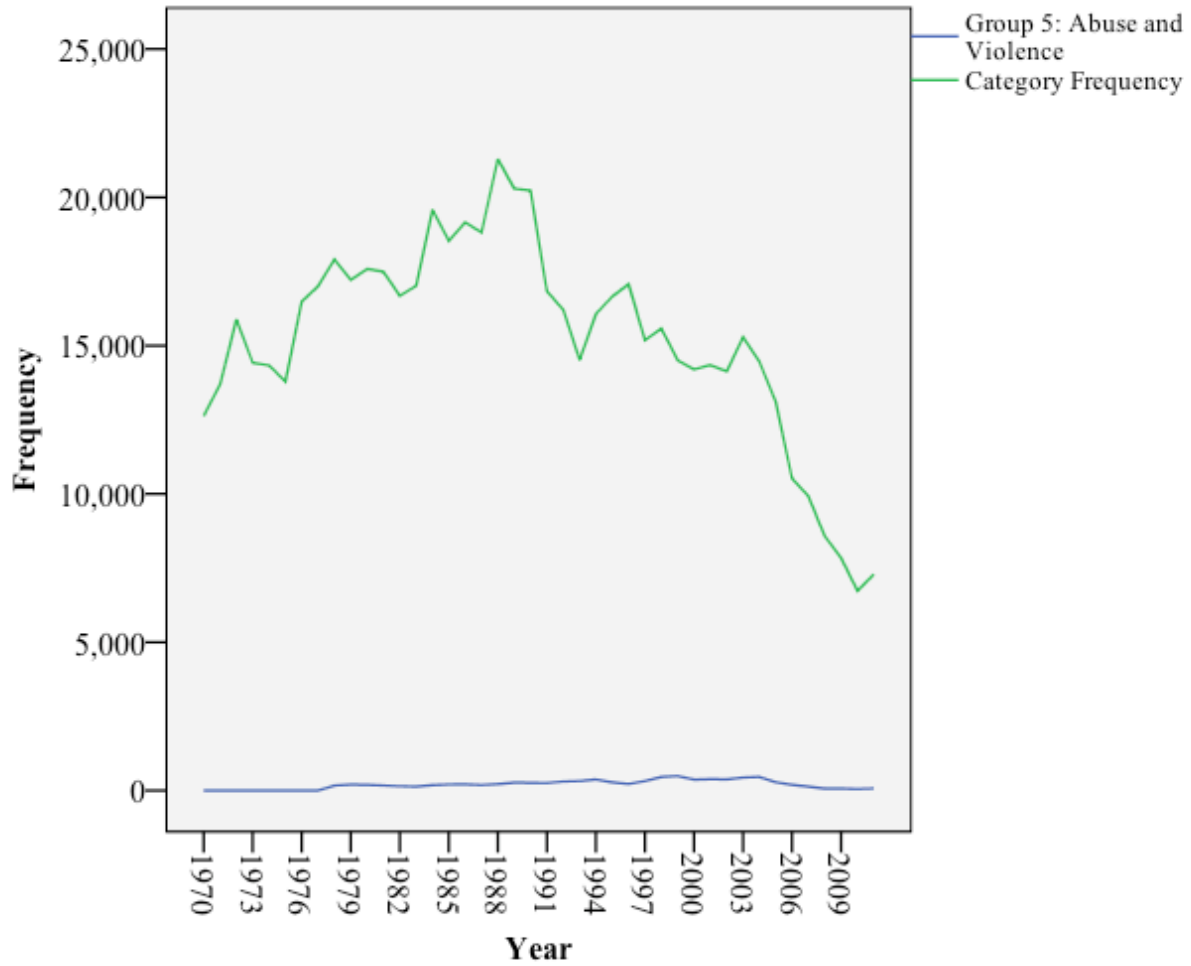


Figure 4.228 Multiple Line Chart for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing all forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 55.55% for the Major Group 5: Abuse and Violence category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 1.32% and a standard deviation of 0.96%. Descriptive statistical analysis reported a minimum frequency of 0.00% and a maximum frequency of 3.38% for the Major Group 5: Abuse and Violence category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.116. Figure 4.229 provides a visual representation for the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years

of the archival data (1970-2011). Figure 4.230 provides a visual representation for the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) Major Group 5: Abuse and Violence category mean line (1.32%). Black bar represents year reported as having the highest (1999) frequency.

Table 4.116

Descriptive Statistics for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Major Group 5: Abuse and Violence Frequency as Ratio (%) of Category Frequency
N	Valid	34
	Missing	0
Minimum		0.00%
Maximum		3.38%
Sum		55.55%
Mean		1.32%
Standard Deviation		0.96%

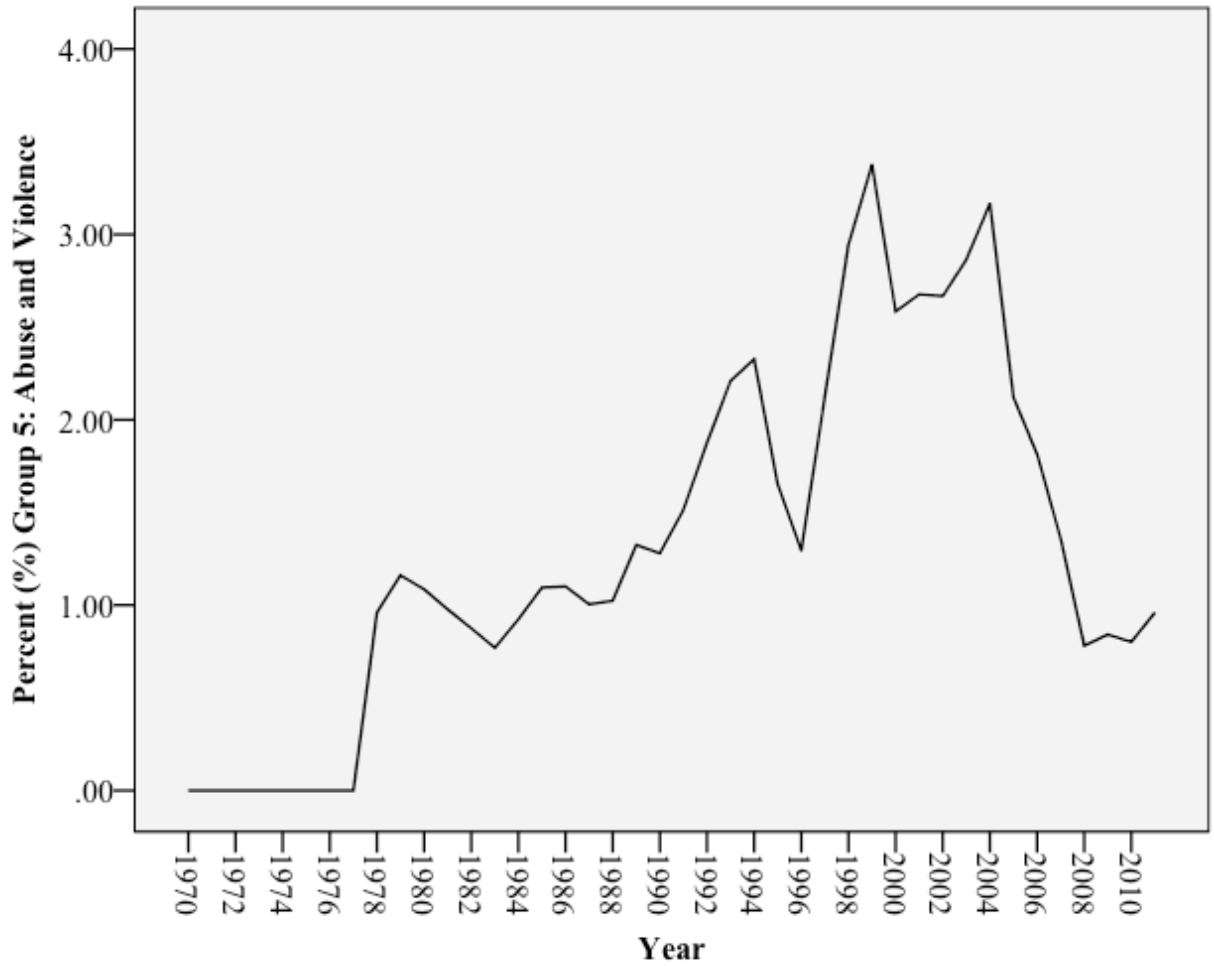


Figure 4.229 Simple Line Chart for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data ( 1970-2011)



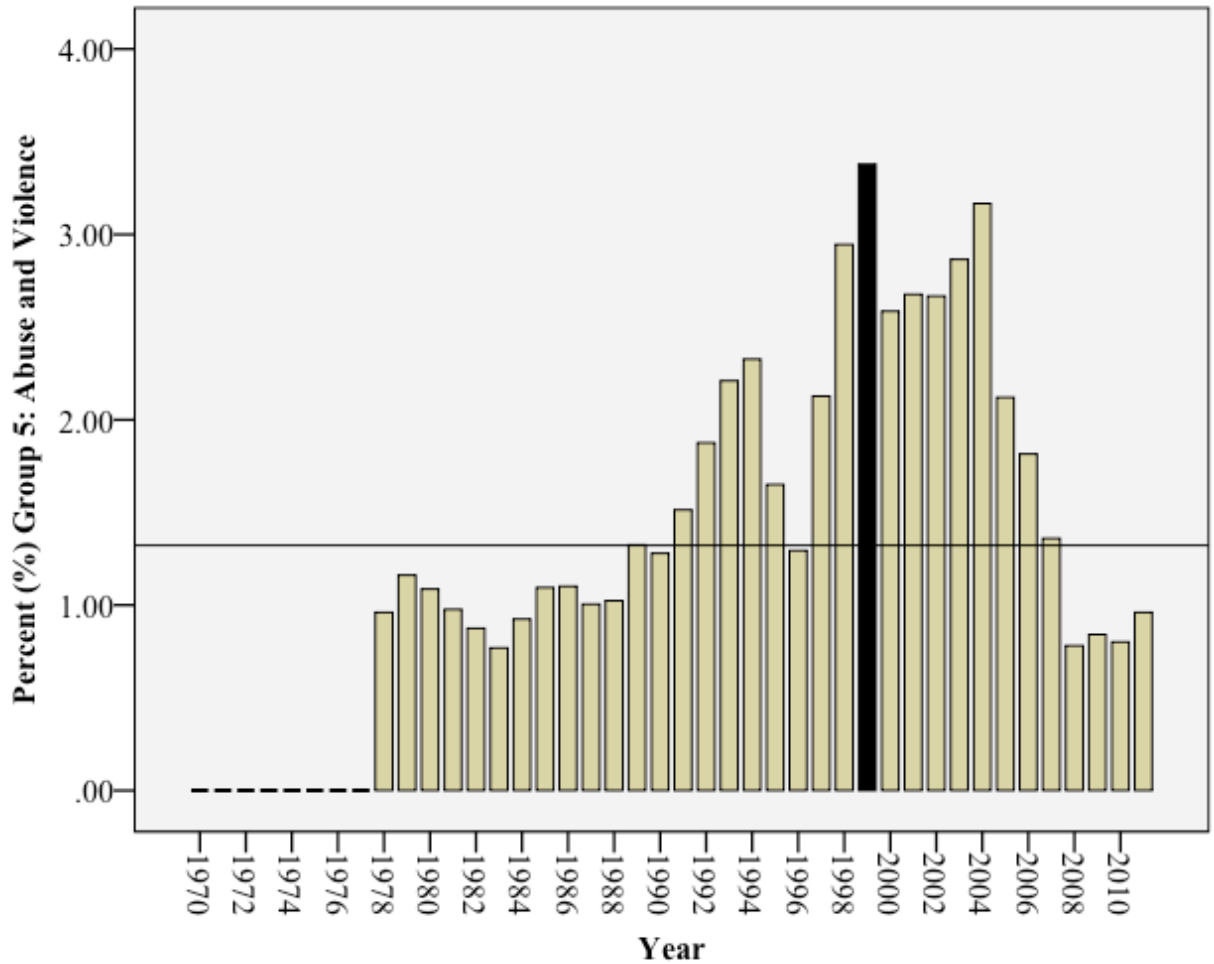


Figure 4.230 Simple Bar Chart for Major Group 5: Abuse and Violence Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 5: Abuse and Violence Category Mean Line (1.32%) of archival data (1970-2011)

Examination of the descriptive statistical results for the Major Group 5: Abuse and Violence category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the Major Group 5: Abuse and Violence category frequency has decreased significantly since 2008 and has remained

a relatively small proportion of the annual total of crisis center call category frequency (< 1%) since it's peak in 1999 (3.38%).

## Annual Total of Crisis Center Call Category Frequency and Major Group 6: Basic Necessities

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 6: Basic Necessities Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. Call categories were coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). However, all call categories were not coded for all years of the archival data. When zero (0) is reported in the major category frequency of the annual total of crisis center call category frequency, the number may reflect the absence of call frequency related to the major group category or the absence of data for the major group category.

CONTACT USA, Incorporated is the national umbrella organization through which CONTACT of Chattanooga is affiliated. CONTACT USA, Inc. suggests eight (8) major grouping of crisis center call categories. Major Group 6: Basic Necessities category incorporates the five (5) call categories of (9) Employment, (12) Finances, (13) Food/Shelter, (17) Information, and (1) Legal encompassing forty-three (43) years of the archival data (1969-2011). Some definitional ambiguities were noted in the assignment of call categories to a major group. No assumptions were made as to the source of those ambiguities. No corrections or alterations were made to the group assignment to reconcile any call category ambiguities.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise

indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category frequency were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call shift frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 105,001 for the Major Group 6: Basic Necessities category of the annual total of crisis center call category frequency with a mean of 2,500.02 and a standard deviation of 867.63. Descriptive statistical analysis reported a minimum frequency of 825 and a maximum frequency of 3,828 for the Major Group 6: Basic Necessities category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the

annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011) are reported in Table 4.117. Figure 4.231 provides a visual representation for the Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1969-2011). Figure 4.232 provides a visual representation for the Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1969-2011) with a Major Group 6: Basic Necessities category mean line (2,500.02). Figure 4.233 provides a visual representation for the Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1969-2011).

Table 4.117

Descriptive Statistics for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Major Group 6: Basic Necessities Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		825	6,733
Maximum		3,828	21,292
Sum		105,001	639,102
Mean		2,500.02	15,216.71
Standard Deviation		867.63	3,470.44



Figure 4.231 Simple Line Chart for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

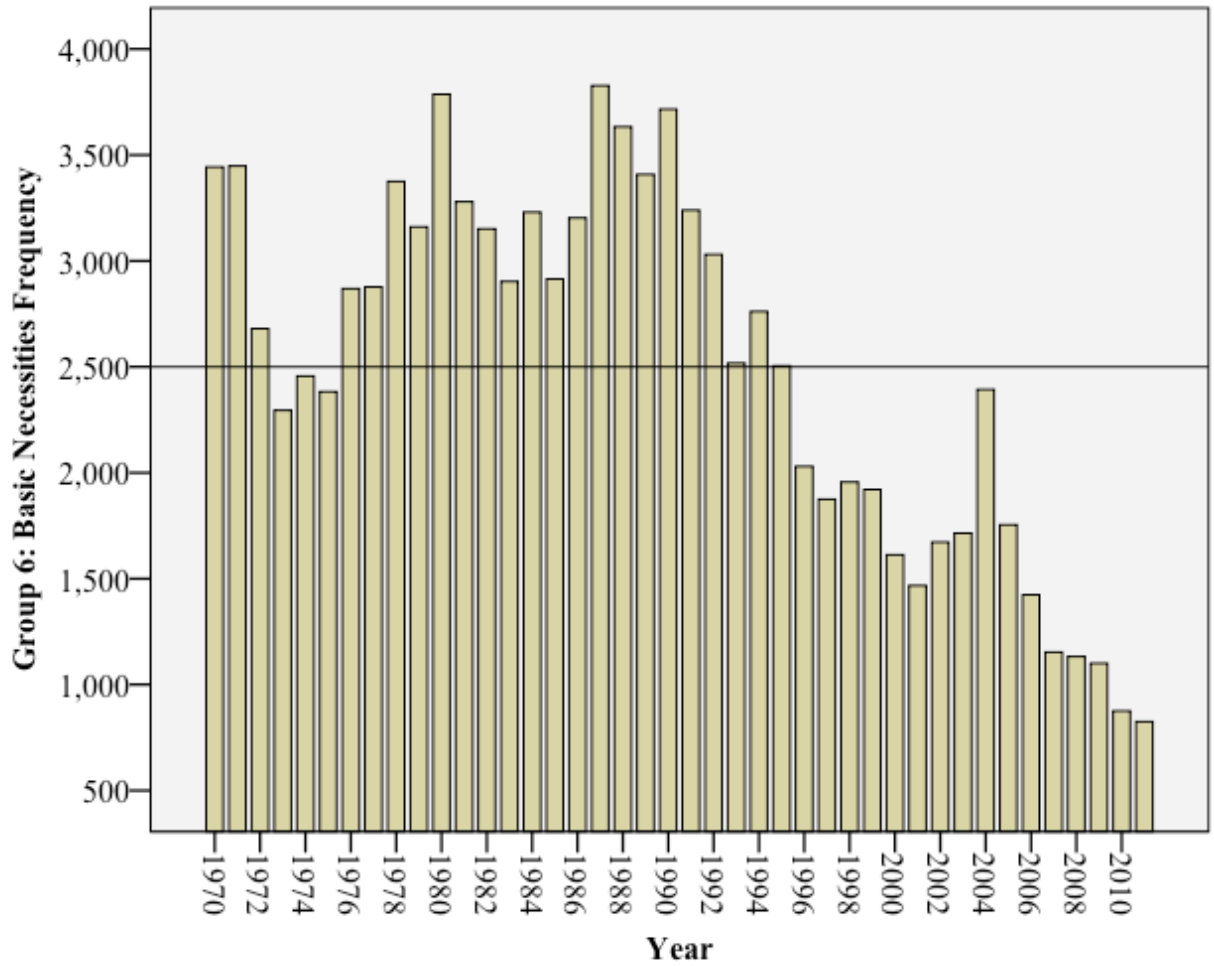


Figure 4.232 Simple Bar Chart for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 6 Mean Line (1,255.83) of archival data (1970-2011)



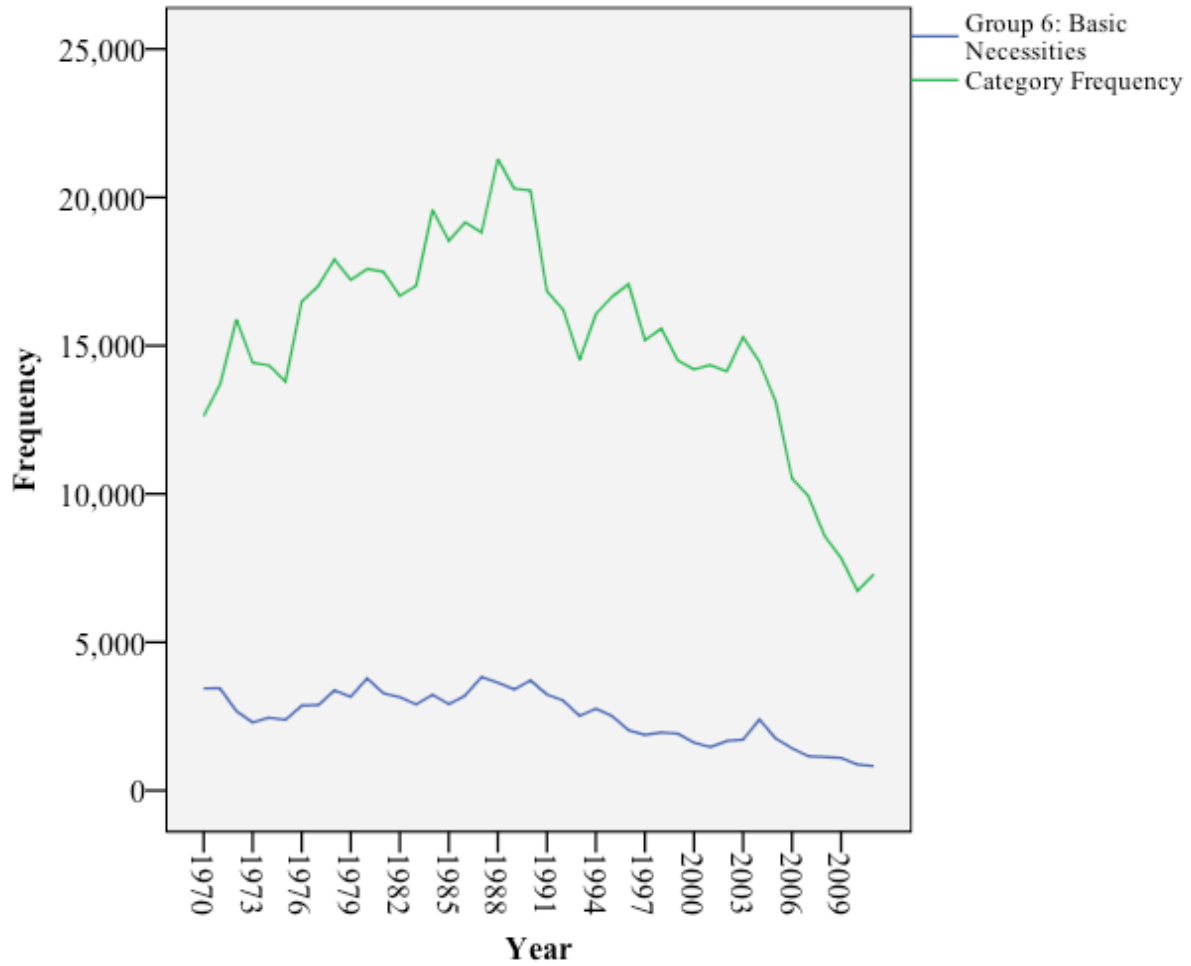


Figure 4.233 Multiple Line Chart for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011). A descriptive statistical analysis was conducted to evaluate the Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011). The results of the descriptive statistical analysis reported a sum of 677.73% for the Major Group 6: Basic Necessities category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 16.14% and a standard deviation of 3.65%. Descriptive statistical analysis reported a minimum frequency of 10.23% and a maximum frequency of 27.26% for the Major Group 6: Basic Necessities category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011) are reported in Table 4.118. Figure 4.234 provides a visual representation for the Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the

archival data (1969-2011). Figure 4.235 provides a visual representation for the Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1969-2011) with a percentage (%) Major Group 6: Basic Necessities category mean line (16.14%). Black bars represent years reported as having highest (1970) and lowest (2001) frequency.

Table 4.118

Descriptive Statistics for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency (1970-2011)

Descriptive Statistics		
		Major Group 6: Basic Necessities Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		10.23%
Maximum		27.26%
Sum		677.73%
Mean		16.14%
Standard Deviation		3.65%

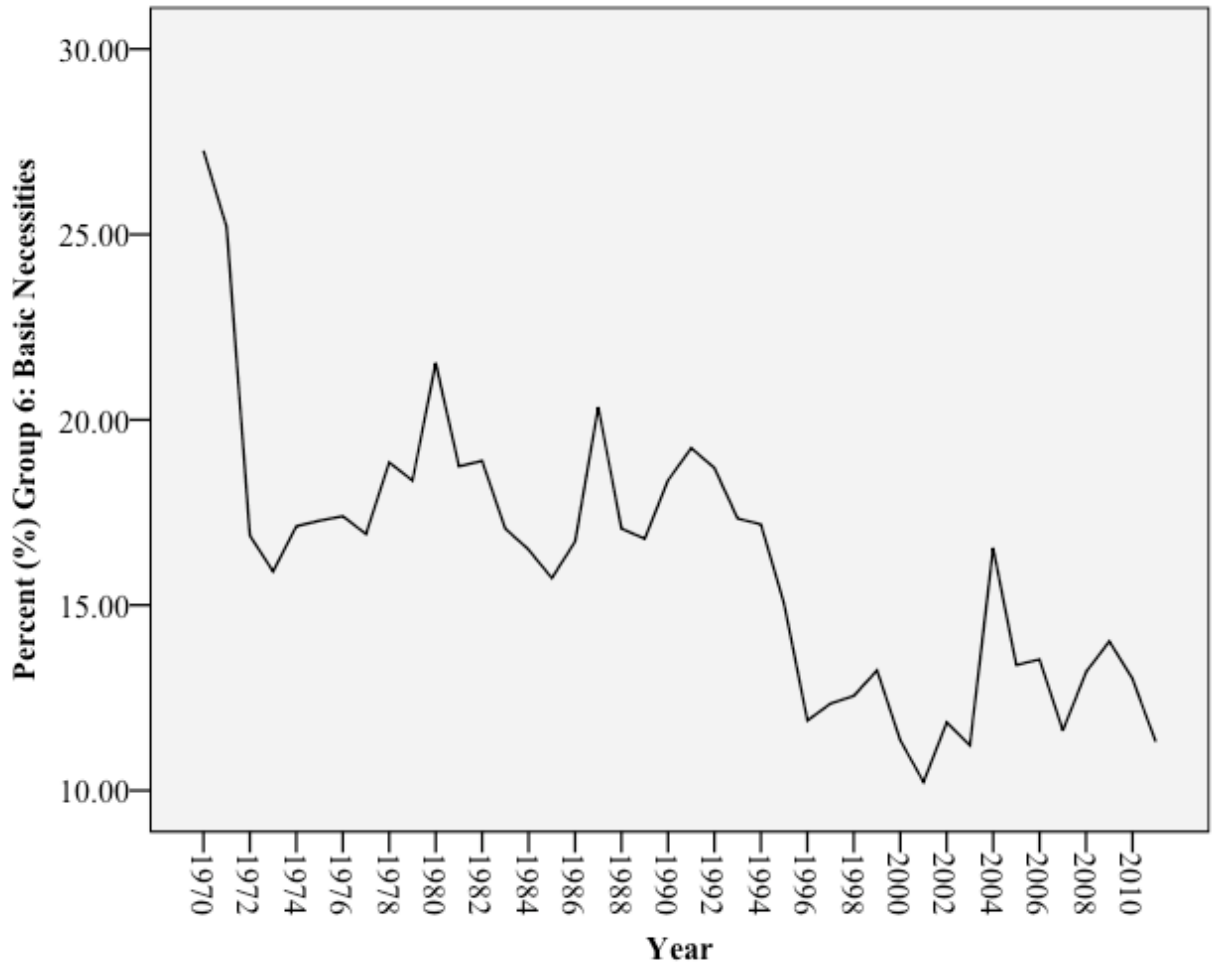


Figure 4.234 Simple Line Chart for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

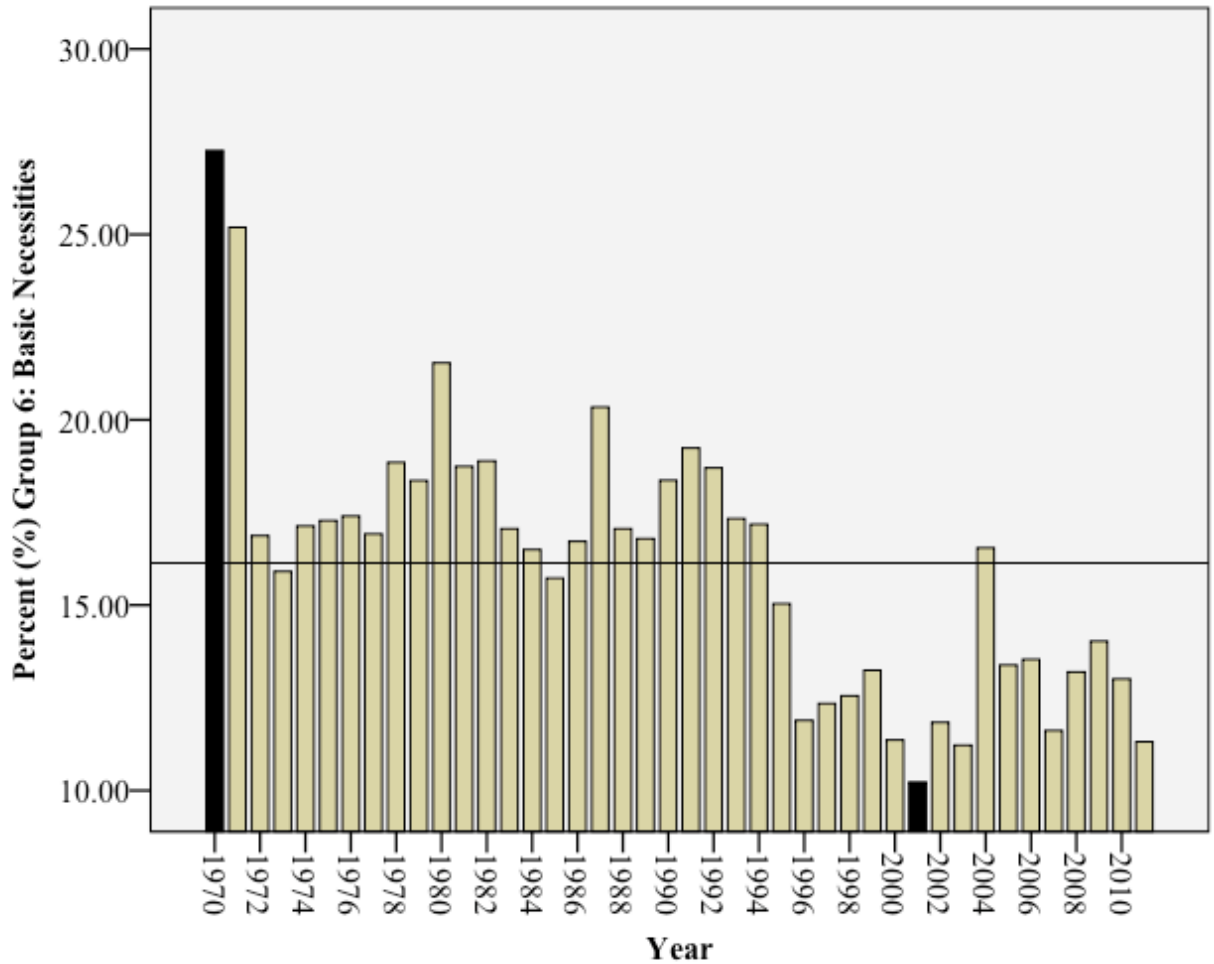


Figure 4.235 Simple Bar Chart for Major Group 6: Basic Necessities Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 6: Basic Necessities Category Mean Line (16.14%) of archival data (1970-2011)

Examination of the descriptive statistical results for the Major Group 6: Basic Necessities category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the Major Group 6: Basic Necessities category frequency has decreased significantly since it's peak in 1970 (27.26%) and

has remained a relatively moderate proportion of the annual total of crisis center call category frequency (< 15%) since 1995.

## Annual Total of Crisis Center Call Category Frequency and Major Group 7: Sexual

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 7: Sexual Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. Call categories were coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). However, all call categories were not coded for all years of the archival data. When zero (0) is reported in the major category frequency of the annual total of crisis center call category frequency, the number may reflect the absence of call frequency related to the major group category or the absence of data for the major group category.

CONTACT USA, Incorporated is the national umbrella organization through which CONTACT of Chattanooga is affiliated. CONTACT USA, Inc. suggests eight (8) major grouping of crisis center call categories. Major Group 7: Sexual category incorporates the two (2) call categories of (16) Homosexual and (31) Sex encompassing forty-three (43) years of the archival data (1969-2011). Some definitional ambiguities were noted in the assignment of call categories to a major group. No assumptions were made as to the source of those ambiguities. No corrections or alterations were made to the group assignment to reconcile any call category ambiguities.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise



indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category frequency were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call shift frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 32,936 for the Major Group 7: Sexual category of the annual total of crisis center call category frequency with a mean of 784.19 and a standard deviation of 375.48. Descriptive statistical analysis reported a minimum frequency of 121 and a maximum frequency of 1,348 for the Major Group 7: Sexual category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the

annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011) are reported in Table 4.119. Figure 4.236 provides a visual representation for the Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1969-2011). Figure 4.237 provides a visual representation for the Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1969-2011) with a Major Group 7: Sexual category mean line (784.19). Figure 4.238 provides a visual representation for the Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1969-2011).

Table 4.119

Descriptive Statistics for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Major Group 7: Sexual Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		121	6,733
Maximum		1,348	21,292
Sum		32,936	639,102
Mean		784.19	15,216.71
Standard Deviation		375.48	3,470.44

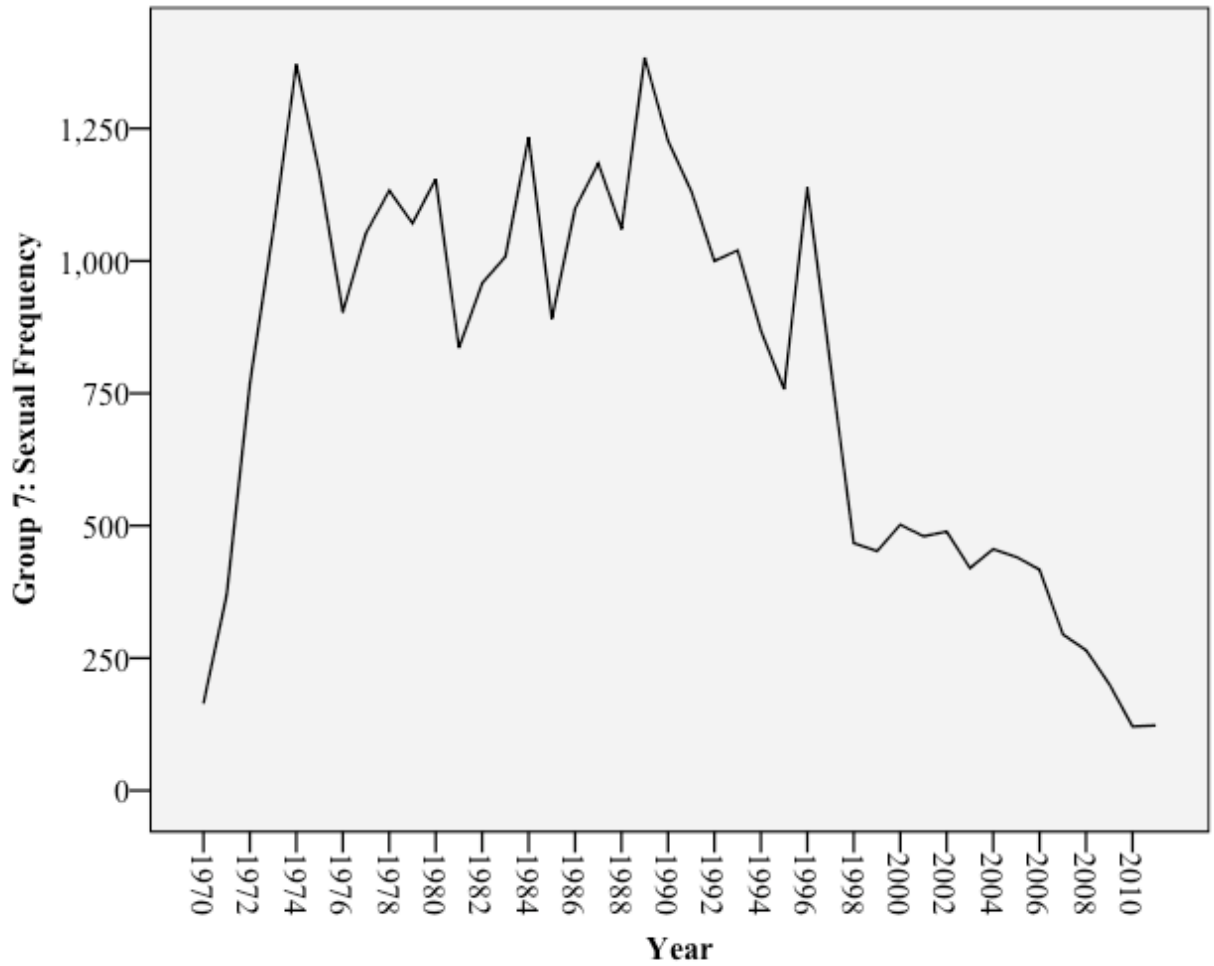


Figure 4.236 Simple Line Chart for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

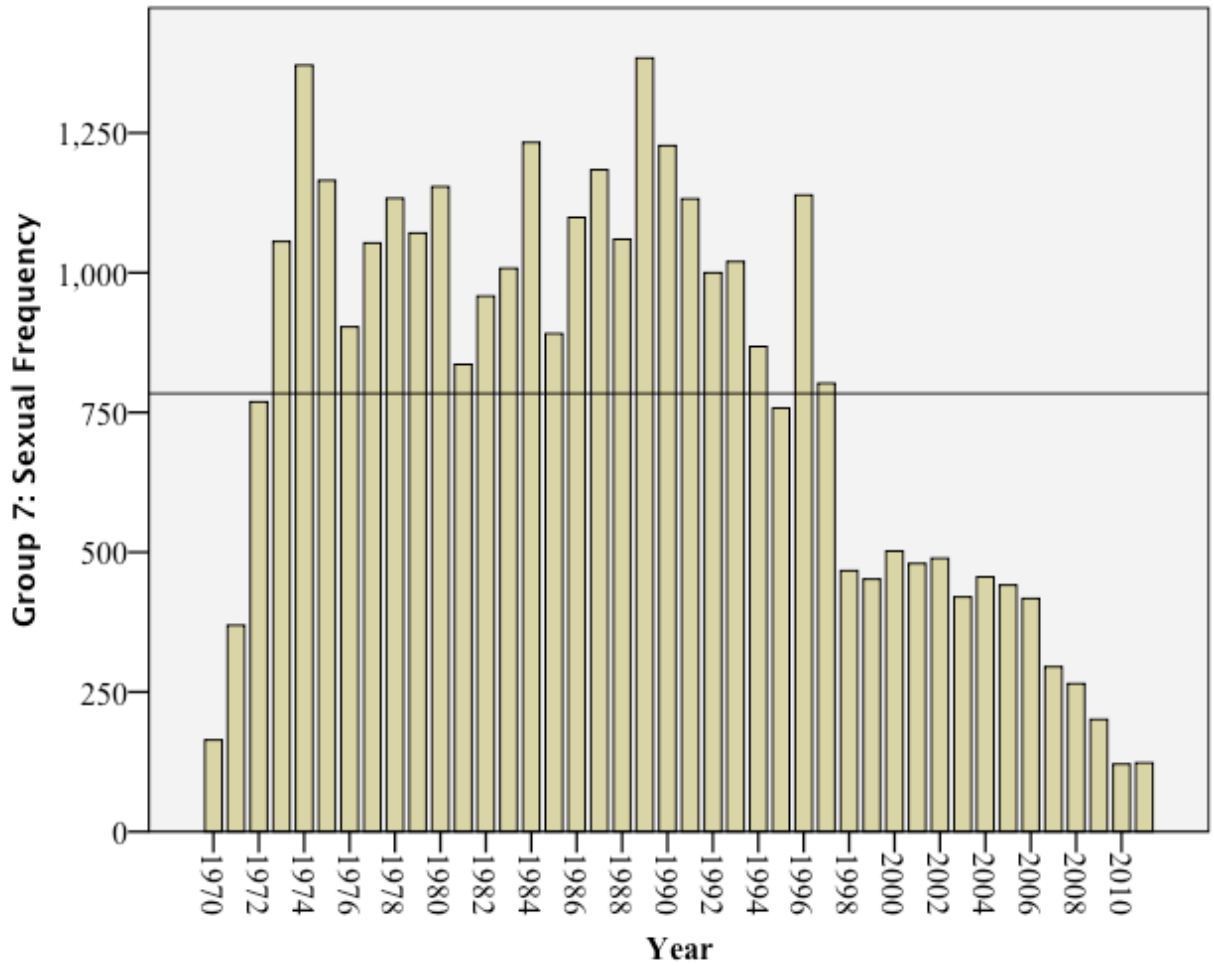


Figure 4.237 Simple Bar Chart for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 7: Sexual Category Mean Line (784.19) of archival data (1970-2011)

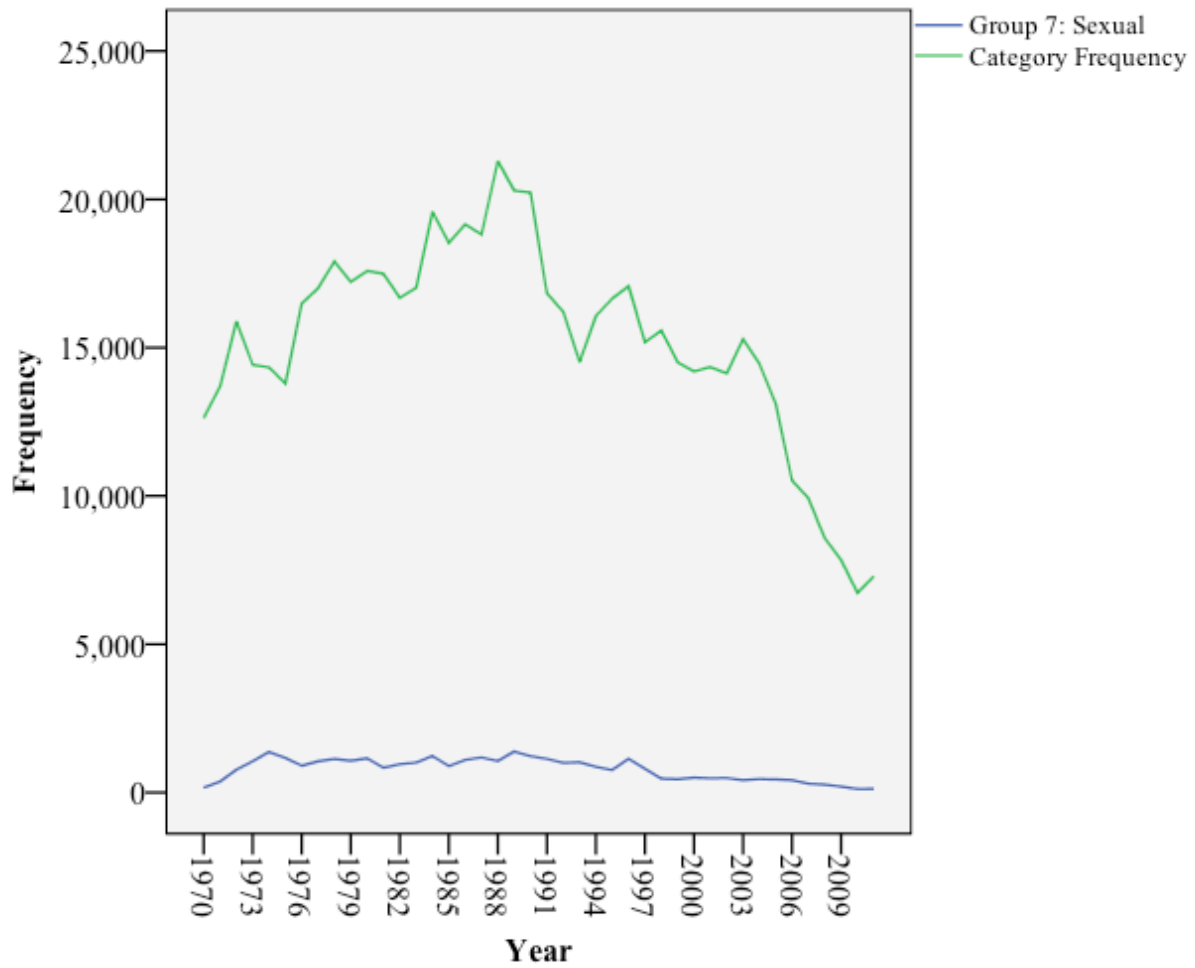


Figure 4.238 Multiple Line Chart for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011). A descriptive statistical analysis was conducted to evaluate the Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011). The results of the descriptive statistical analysis reported a sum of 206.01% for the Major Group 7: Sexual category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 4.90% and a standard deviation of 1.90%. Descriptive statistical analysis reported a minimum frequency of 1.30% and a maximum frequency of 9.56% for the Major Group 7: Sexual category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1969-2011) are reported in Table 4.120. Figure 4.239 provides a visual representation for the Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1969-2011). Figure

4.240 provides a visual representation for the Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1969-2011) with a percentage (%) Major Group 7: Sexual category mean line (4.90%). Black bars represent years reported as having the highest (1974) and lowest (1970) frequency.



Table 4.120

Descriptive Statistics for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics		
		Major Group 7: Sexual Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		1.30%
Maximum		9.56%
Sum		206.01%
Mean		4.90%
Standard Deviation		1.90%

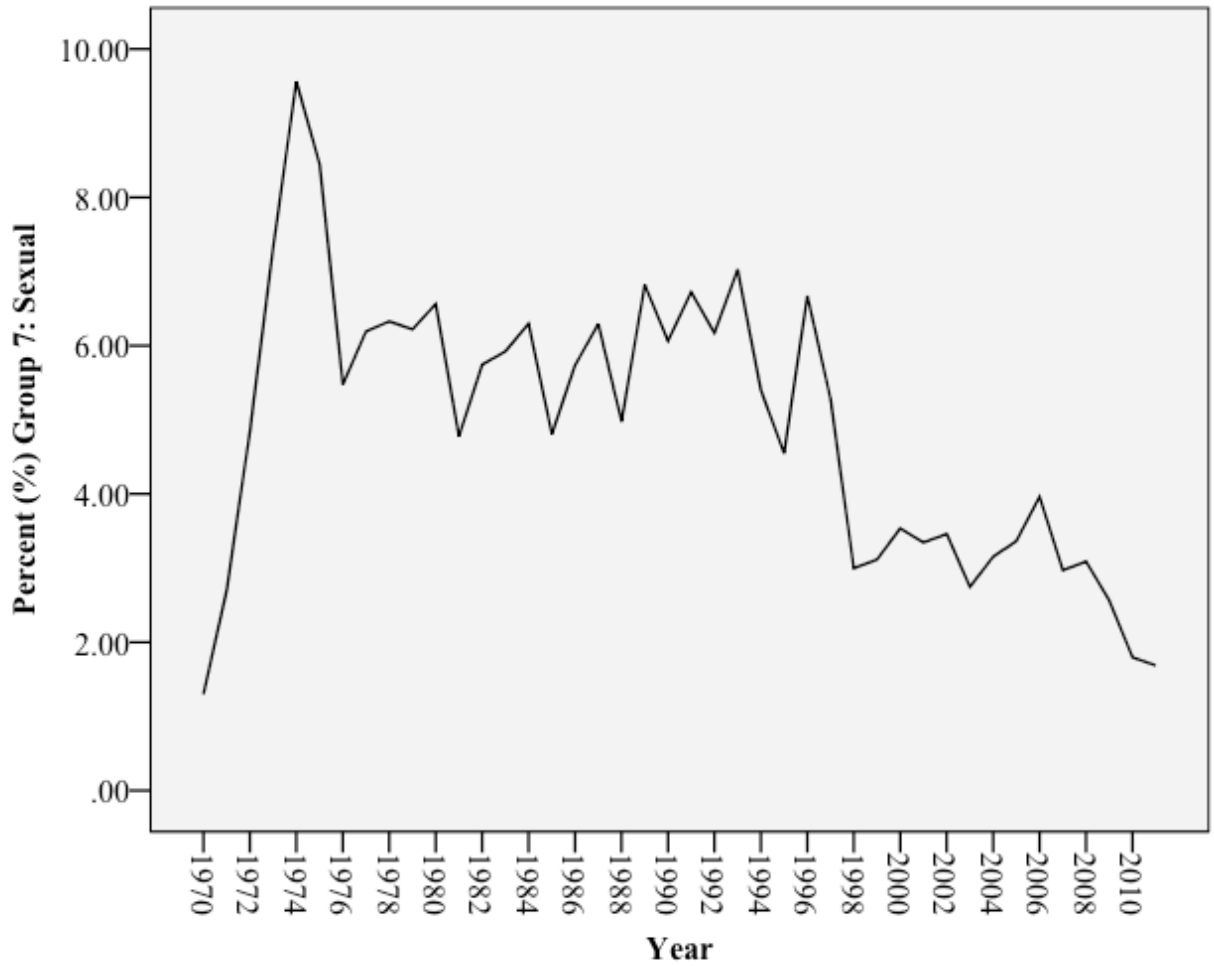


Figure 4.239 Simple Line Chart for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

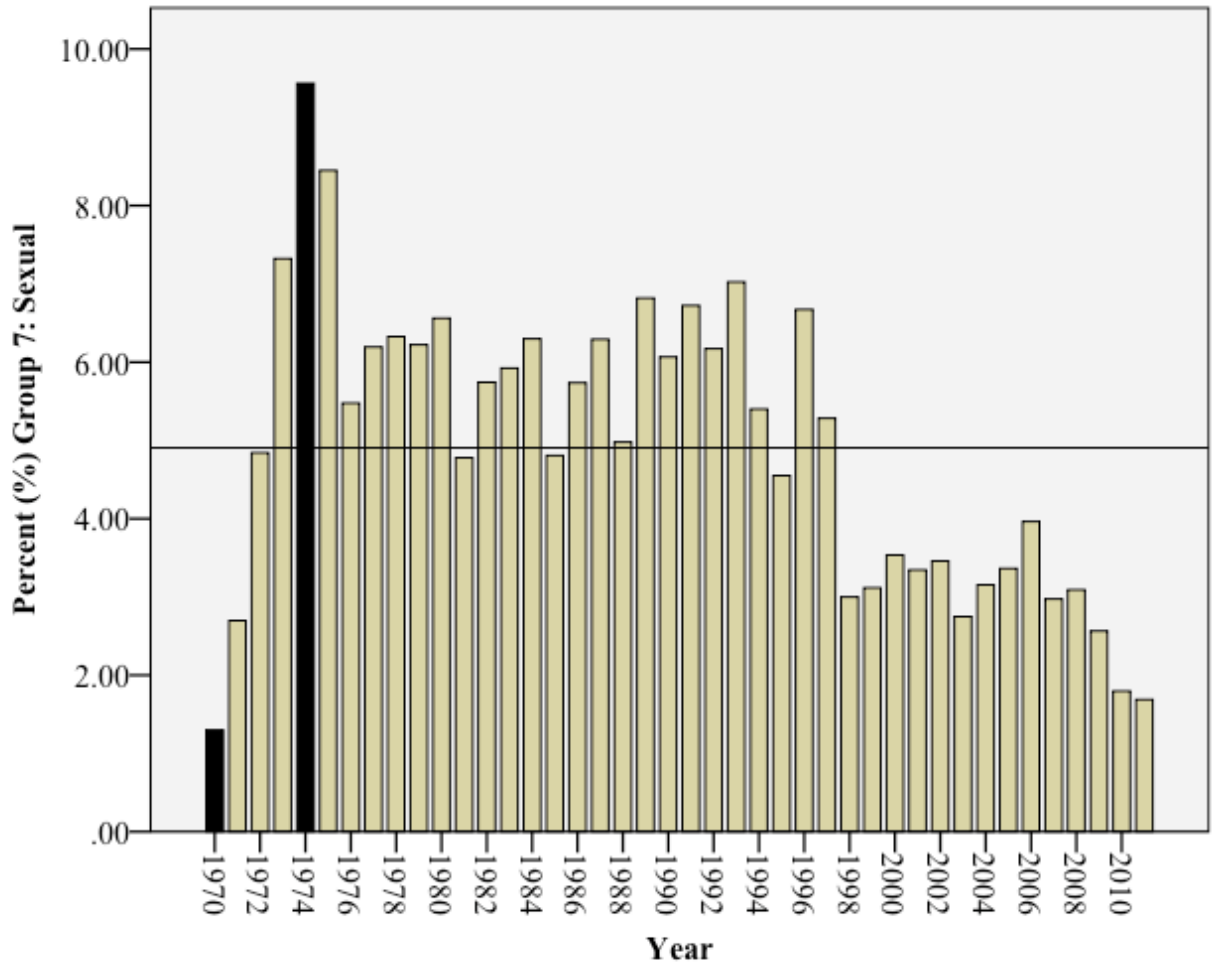


Figure 4.240 Simple Bar Chart for Major Group 7: Sexual Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 7: Sexual Category Mean Line (4.90%) of archival data (1970-2011)

Examination of the descriptive statistical results for the Major Group 7: Sexual category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the Major Group 7: Sexual category frequency has decreased significantly since it's peak in 1974 (9.56%) and has remained a

relatively small proportion of the annual total of crisis center call category frequency (< 4%) since 1998.

## Annual Total of Crisis Center Call Category Frequency and Major Group 8: Other

### *Descriptive Statistics for Annual Total of Crisis Center Call Category Frequency per Major Group 8: Other Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, volunteers documented a crisis center call by designating a category for each call. Call categories were coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). However, all call categories were not coded for all years of the archival data. When zero (0) is reported in the major category frequency of the annual total of crisis center call category frequency, the number may reflect the absence of call frequency related to the major group category or the absence of data for the major group category.

CONTACT USA, Incorporated is the national umbrella organization through which CONTACT of Chattanooga is affiliated. CONTACT USA, Inc. suggests eight (8) major grouping of crisis center call categories. Major Group 8: Other category incorporates the three (3) call categories of (23) Miscellaneous, (24) Other and (32) Silent encompassing forty-three (43) years of the archival data (1969-2011). Some definitional ambiguities were noted in the assignment of call categories to a major group. No assumptions were made as to the source of those ambiguities. No corrections or alterations were made to the group assignment to reconcile any call category ambiguities.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise

indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category frequency were noted; reported annual total of crisis center call category frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call shift frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the Major Group 8: Other category frequency of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 80,699 for the Major Group 8: Other category of the annual total of crisis center call category frequency with a mean of 1,920.69 and a standard deviation of 965.89. Descriptive statistical analysis reported a minimum frequency of 404 and a maximum frequency of 5,224 for the Major Group 8: Other category of the annual total of crisis center call category frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 639,102 for the

annual total of crisis center call category frequency with a mean of 15,216.71 and a standard deviation of 3,470.44. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,292 for the annual total of crisis center call category frequency.

Descriptive statistical analyses results for the Major Group 8: Other category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.121. Figure 4.241 provides a visual representation for the Major Group 8: Other category frequency of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1969-2011). Figure 4.242 provides a visual representation for the Major Group 8: Other category frequency of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1969-2011) with a Major Group 8: Other category mean line (1,920.69). Figure 4.243 provides a visual representation for the Major Group 8: Other category frequency of the annual total of crisis center call category frequency and the annual total of crisis center call category frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.121

Descriptive Statistics for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

Descriptive Statistics			
		Major Group 8: Other Frequency	Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		404	6,733
Maximum		5,224	21,292
Sum		80,669	639,102
Mean		1,920.69	15,216.71
Standard Deviation		965.89	3,470.44



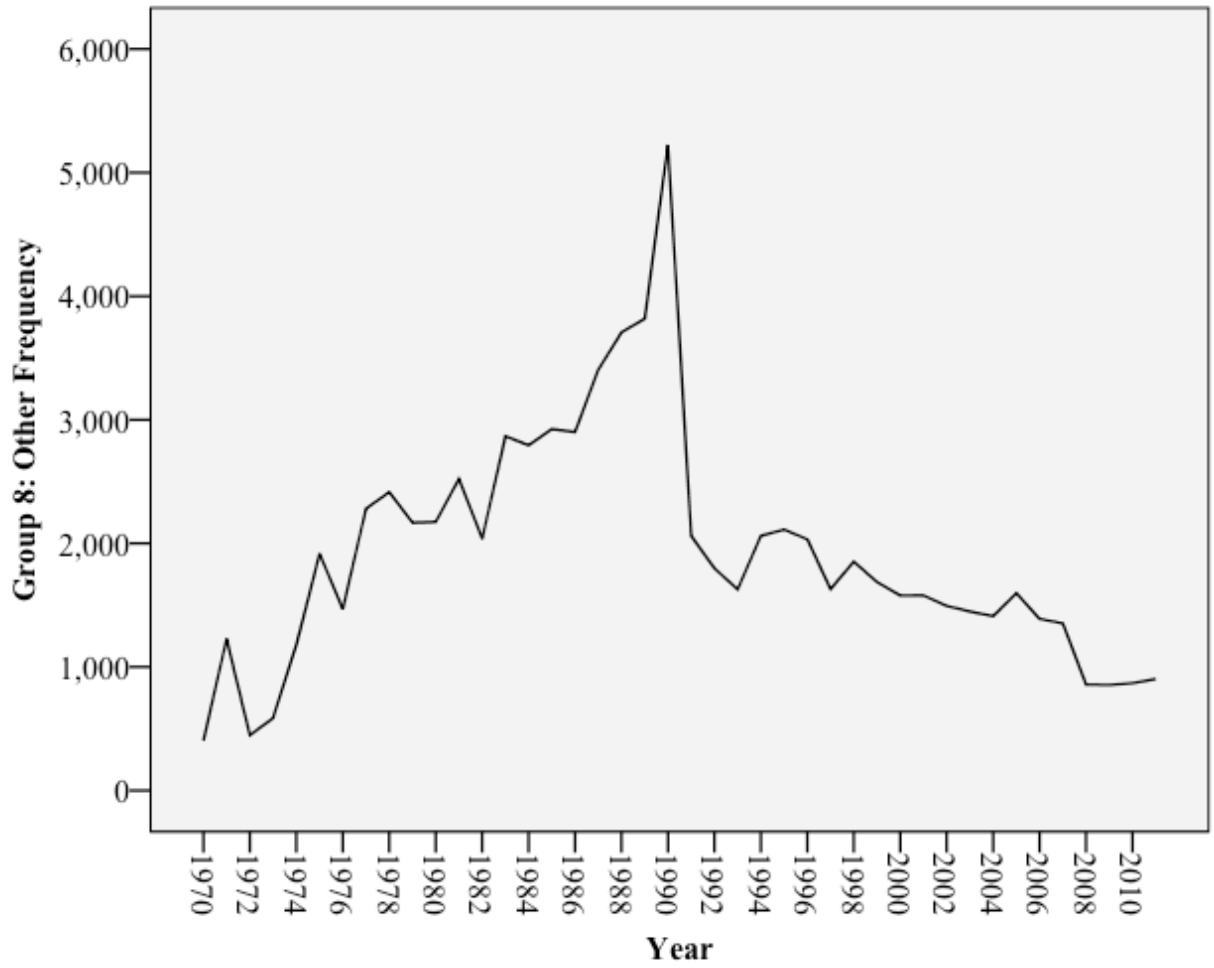


Figure 4.241 Simple Line Chart for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

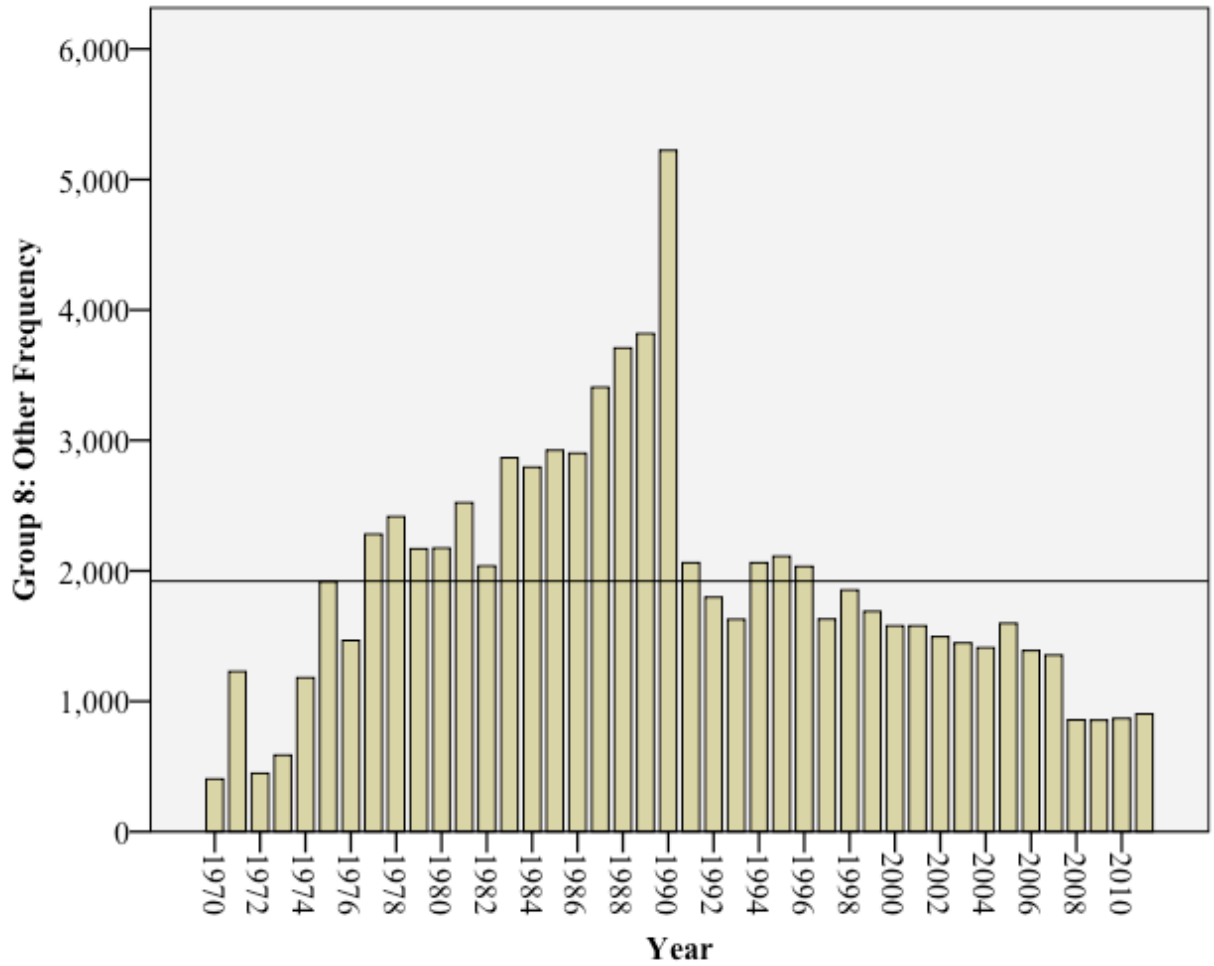


Figure 4.242 Simple Bar Chart for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency with Major Group 8: Other category Mean Line (1,920.69) of archival data (1970-2011)



Figure 4.243 Multiple Line Chart for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency and Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio of Annual Total of Crisis Center Call Category Frequency*

The Major Group 8: Other category frequency of the annual total of crisis center call category frequency was transformed into a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the Major Group 8: Other category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 514.12% for the Major Group 8: Other category of the annual total of the crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency with a mean of 12.24% and a standard deviation of 4.00%. Descriptive statistical analysis reported a minimum frequency of 2.82% and a maximum frequency of 25.82% for the Major Group 8: Other category of the annual total of crisis center call category frequency.

Descriptive statistical analyses results or the Major Group 8: Other category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.122. Figure 4.244 provides a visual representation for the Major Group 8: Other category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure

4.245 provides a visual representation for the Major Group 8: Other category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011) with a percentage (%) Major Group 8: Other category mean line (12.24%). Black bars represent years reported as having the highest (1990) and lowest (1972) frequency.

Table 4.122

Descriptive Statistics for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency (1970-2011)

Descriptive Statistics		
		Major Group 8: Other Frequency as Ratio (%) of Category Frequency
N	Valid	42
	Missing	0
Minimum		2.82%
Maximum		25.82%
Sum		514.12%
Mean		12.24%
Standard Deviation		4.00%

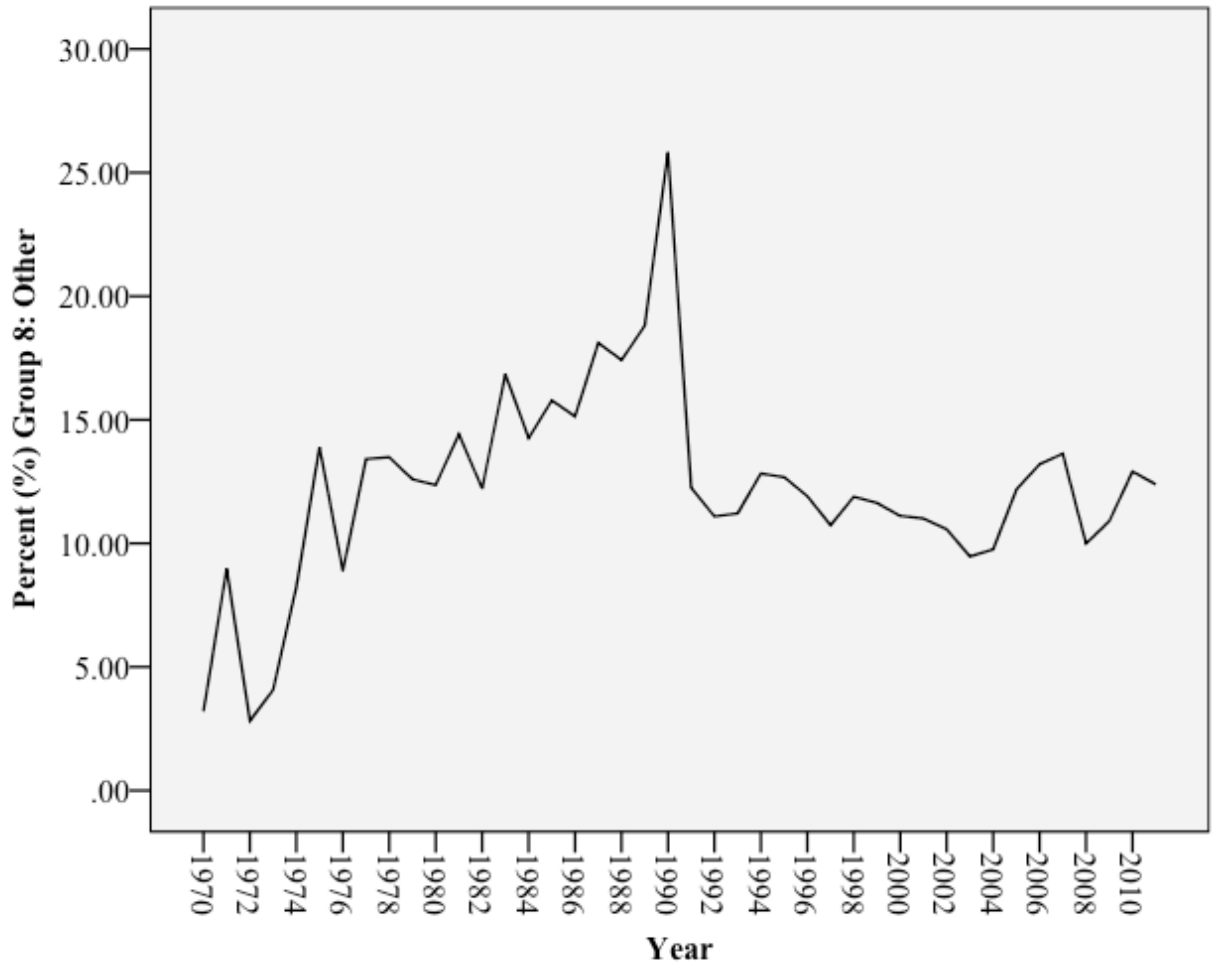


Figure 4.244 Simple Line Chart for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency of archival data (1970-2011)

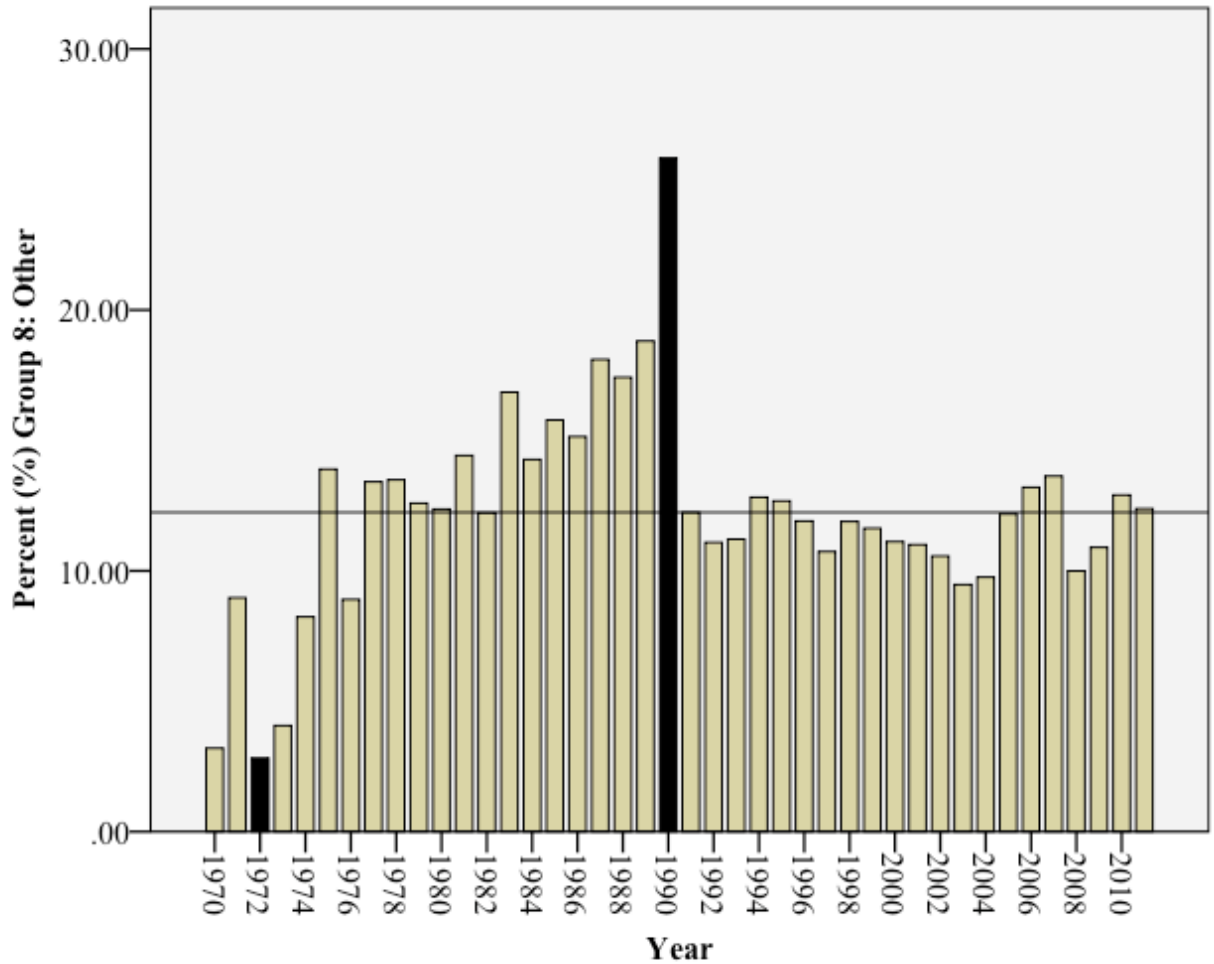


Figure 4.245 Simple Bar Chart for Major Group 8: Other Category Frequency of Annual Total of Crisis Center Call Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Category Frequency with % Major Group 8: Other Category Mean Line (12.24%) of archival data (1970-2011)

Examination of the descriptive statistical results for the Major Group 8: Other category frequency of the annual total of crisis center call category frequency as a ratio (%) of the annual total of crisis center call category frequency suggests that the Major Group 8: Other category frequency has remained relatively consistent since 1974 and has remained a relatively moderate proportion of the annual total of crisis center call category frequency (between 10% and 15%)



with the exception of a marked increase in 1990. Anecdotal evidence gathered from conversation with administrative personnel suggests the 1990 increase in proportion of Major Group 8: Other category frequency was reflective of an individual experiencing a chronic crisis rather than an increase in frequency due to multiple individuals experiencing an acute crisis episode.

## Annual Total of Crisis Center Call Day Frequency and Days of the Week

### *Descriptive Statistics for Annual Total of Crisis Center Call Day Frequency per Day Categories*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. The archival data encompasses the years of 1969-2011. From 1969 to 1976, administrative personnel did not tabulate the VCLs by assigning a designation of a day category. Beginning in 1977, administrative personnel began to code VCLs by assigning a designation of Sunday, Monday, Tuesday, Wednesday, Thursday, Friday or Saturday category for each crisis center call. All statistical analysis for the annual total of crisis center call frequency when grouped per day category encompasses thirty-five (35) years of archival data (1977-2011)

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Thirty-five (35) complete years were identified and used for statistical analysis (1977-2011).

In the tabulation of VCLs, some inconsistencies in the annual totals of crisis center call frequency when grouped per day category were noted; reported annual total crisis center call day frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total of crisis center call frequency

data grouped per day identification ensuring grouped frequency results accurately report the archival data. All statistical analysis is based on annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011).

A descriptive statistical analysis was conducted to evaluate the Sunday category frequency of the annual total of crisis center call frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 71,248 for the Sunday category of the annual total of crisis center call day frequency with a mean of 2,025.66 and a standard deviation of 471.03. Descriptive statistical analysis reported a maximum frequency of 2,716 and a minimum frequency of 947 for the Sunday category of the annual total of crisis center call day frequency.

A descriptive statistical analysis was conducted to evaluate the Monday category frequency of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 74,849 for the Monday category of the annual total of crisis center call day frequency with a mean of 2,138.54 and a standard deviation of 560.00. Descriptive statistical analysis reported a maximum frequency of 3,073 and a minimum frequency of 967 for the Monday category of the annual total of crisis center call day frequency.

A descriptive statistical analysis was conducted to evaluate the Tuesday category frequency of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 77,058 for the Tuesday category of the annual total of crisis center call day frequency with a mean of 2,201.66 and a standard deviation of 558.435. Descriptive statistical analysis

reported a maximum frequency of 3,130 and a minimum frequency of 920 for the Tuesday category of the annual total of crisis center call day frequency.

A descriptive statistical analysis was conducted to evaluate the Wednesday category frequency of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 76,711 for the Wednesday category of the annual total of crisis center call day frequency with a mean of 2,191.74 and a standard deviation of 556.92. Descriptive statistical analysis reported a maximum frequency of 3,137 and a minimum frequency of 1,007 for the Wednesday category of the annual total of crisis center call day frequency.

A descriptive statistical analysis was conducted to evaluate the Thursday category frequency of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 72,533 for the Thursday category of the annual total of crisis center call day frequency with a mean of 2,072.37 and a standard deviation of 513.21. Descriptive statistical analysis reported a maximum frequency of 3,055 and a minimum frequency of 917 for the Thursday category of the annual total of crisis center call day frequency.

A descriptive statistical analysis was conducted to evaluate the Friday category frequency of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 73,707 for the Friday category of the annual total of crisis center call day frequency with a mean of 2,105.91 and a standard deviation of 506.73. Descriptive statistical analysis reported a

maximum frequency of 3,048 and a minimum frequency of 968 for the Friday category of the annual total of crisis center call day frequency.

A descriptive statistical analysis was conducted to evaluate the Saturday category frequency of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the statistical analysis reported a sum of 74,614 for the Saturday category of the annual total of crisis center call day frequency with a mean of 2,131.83 and a standard deviation of 533.458. Descriptive statistical analysis reported a maximum frequency of 3,140 and a minimum frequency of 987 for the Saturday category of the annual total of crisis center call day frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call frequency when grouped per day category encompassing thirty-five (35) complete years of the archival data (1977-2011). Results of the descriptive statistical analysis reported a sum of 520,720 for the annual total of crisis center call frequency when grouped per day category with a mean of 14,877.71 and a standard deviation of 3,627.12. Descriptive statistical analysis reported a maximum frequency of 6,733 and a minimum frequency of 21,292 for the annual total of crisis center call day frequency.

Descriptive statistical analysis results for the day category frequencies of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are reported in Table 4.123. Figure 4.246 provides a visual representation for the day category frequencies of the annual total of crisis center call day frequency as a multiple line chart encompassing thirty-five (35) complete years of the archival data (1977-2011). Figure 4.247 provides a visual representation for the day category frequencies of the annual total of

crisis center call day frequency as a stacked bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011).

Table 4.123  
 Descriptive Statistics for Day Category Frequencies of Annual Total of Crisis Center Call Day  
 Frequency of archival data (1970-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
Sunday	35	947	2,716	71,248	2,035.66	471.03
Monday	35	967	3,073	74,849	2,138.54	560.00
Tuesday	35	920	3,130	77,058	2,201.66	558.44
Wednesday	35	1,007	3,157	76,711	2,191.74	556.92
Thursday	35	917	3,055	72,533	2,072.37	513.21
Friday	35	968	3,048	73,707	2,105.91	506.73
Saturday	35	987	3,140	74,614	2,131.83	533.46
Day Frequency	35	6,733	21,292	520,720	14,877.71	3,627.12
Valid N (listwise)	35					

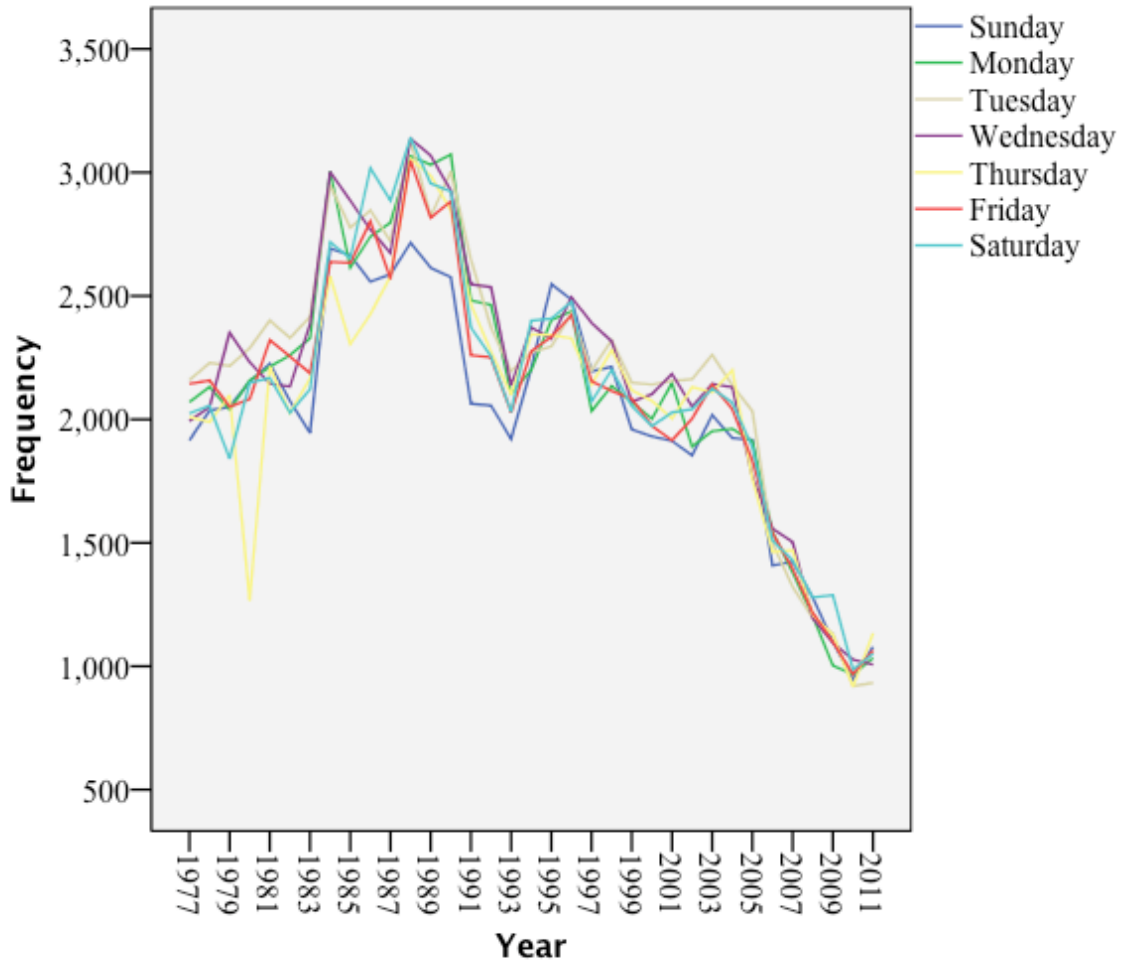


Figure 4.246 Multiple Line Chart for Day Category of Annual Total of Crisis Center Call Day Frequency of archival data (1970-2011)



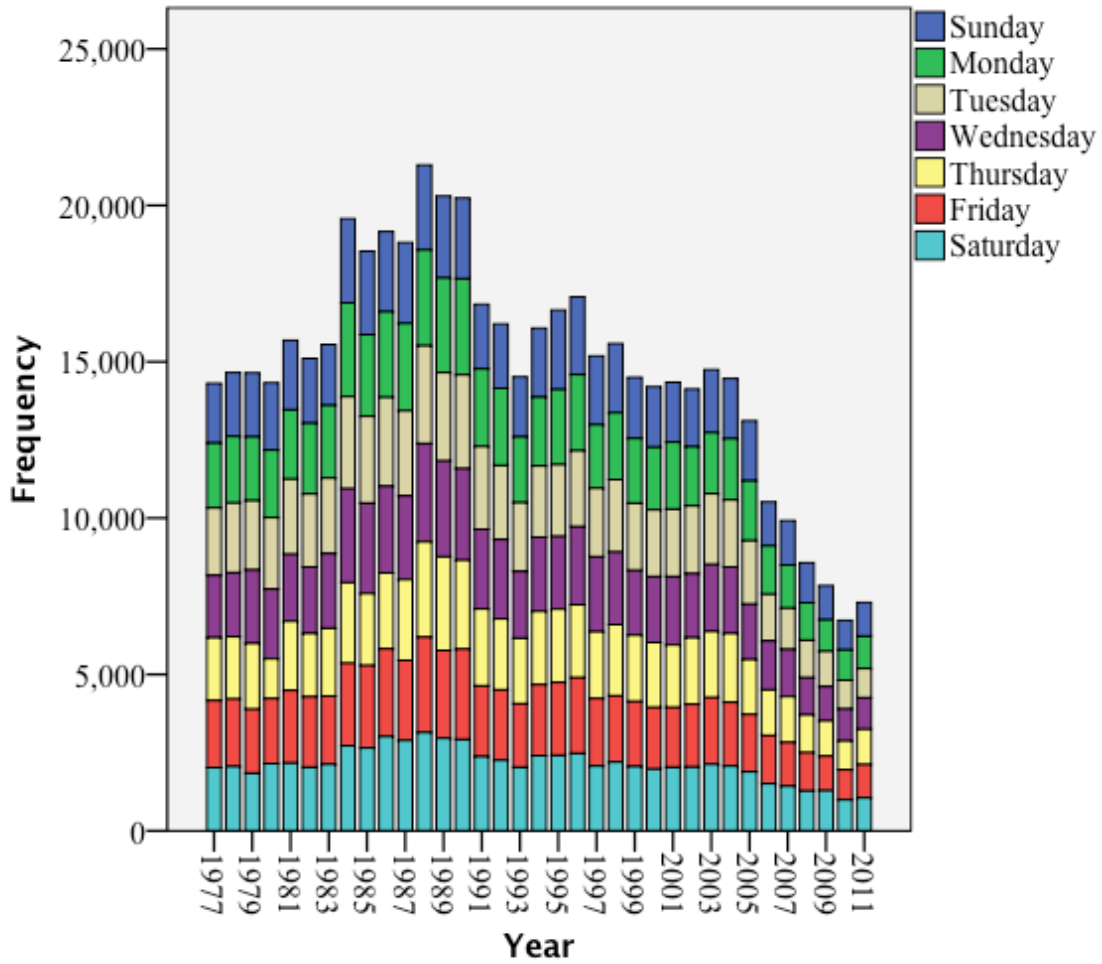


Figure 4.247 Stacked Bar Chart of Day Categories of Annual Total of Crisis Center Call Day Frequency of archival data (1970-2011)

*Day Category Frequencies of Annual Total of Crisis Center Call Day Frequency as Ratio (%) of Annual Total of Crisis Center Call Day Frequency*

The day category frequencies of the annual total of crisis center call day frequency were transformed into a ratio (%) of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). A descriptive statistical analysis was conducted to evaluate the Sunday category frequency of the annual total of crisis center call day frequency as ratio (%) of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 481.41% for the Sunday category of the annual total of crisis center call day frequency with a mean of 13.7546% and a standard deviation of 0.75%. Descriptive statistical analysis reported a maximum frequency of 2,716 and a minimum frequency of 947 for the Sunday category of the annual total of crisis center call day frequency.

A descriptive statistical analysis was conducted to evaluate the Monday category frequency of the annual total of crisis center call day frequency as ratio (%) of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 501.10% for the Monday category of the annual total of crisis center call day frequency with a mean of 14.32% and a standard deviation of 0.61%.

A descriptive statistical analysis was conducted to evaluate the Tuesday category frequency of the annual total of crisis center call day frequency as ratio (%) of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 515.70% for the

Tuesday category of the annual total of crisis center call day frequency with a mean of 14.73% and a standard deviation of 0.70%.

A descriptive statistical analysis was conducted to evaluate the Wednesday category frequency of the annual total of crisis center call day frequency as ratio (%) of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 514.49% for the Wednesday category of the annual total of crisis center call day frequency with a mean of 14.70% and a standard deviation of 0.65%.

A descriptive statistical analysis was conducted to evaluate the Thursday category frequency of the annual total of crisis center call day frequency as ratio (%) of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 489.00% for Thursday category of the annual total of crisis center call day frequency with a mean of 0.49.24% and a standard deviation of 1.11%.

A descriptive statistical analysis was conducted to evaluate the Friday category frequency of the annual total of crisis center call day frequency as ratio (%) of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 496.12% for the Friday category of the annual total of crisis center call day frequency with a mean of 14.18% and a standard deviation of 0.41%.

A descriptive statistical analysis was conducted to evaluate the Saturday category frequency of the annual total of crisis center call day frequency as ratio (%) of the annual total of

crisis center call day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011). The results of the descriptive statistical analysis reported a sum of 502.19% for the Saturday category of the annual total of crisis center call day frequency with a mean of 14.35% and a standard deviation of 0.67%.

Descriptive statistical analysis results for the day categories of the annual total of crisis center call day frequency as a ratio (%) of the annual total of the crisis center day frequency encompassing thirty-five (35) complete years of the archival data (1977-2011) are presented in Table 4.124. Figure 4.248 provides a visual representation for the day category frequencies of the annual total of crisis center call day frequency as a ratio (%) of the annual total of the crisis center day frequency as a multiple line chart of the annual total of crisis center call day frequency encompassing thirty-five (35) complete years of archival data (1977-2011). Figure 4.249 provides a visual representation for the day categories of the annual total of crisis center call day frequency as a ratio (%) of the annual total of the crisis center day frequency as a stacked bar chart encompassing thirty-five (35) complete years of the archival data (1977-2011).

Table 4.124

Descriptive Statistics of Day Category Frequencies of Annual Total of Crisis Center Call Day Frequency as Ratio (%) of Annual Total of Crisis Center Call Day Frequency of the archival data (1970-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
% Sunday	35	12.25%	15.30%	481.41%	13.75%	0.74%
% Monday	35	12.79%	15.34%	501.10%	14.32%	0.61%
% Tuesday	35	12.78%	15.97%	515.70%	14.73%	0.70%
% Wednesday	35	13.49%	16.05%	514.49%	14.70%	0.65%
% Thursday	35	8.84%	15.53%	489.00%	13.97%	1.11%
% Friday	35	13.35%	14.98%	496.12%	14.18%	0.41%
% Saturday	35	12.57%	16.42%	502.19%	14.35%	0.67%
Valid N (listwise)	35					

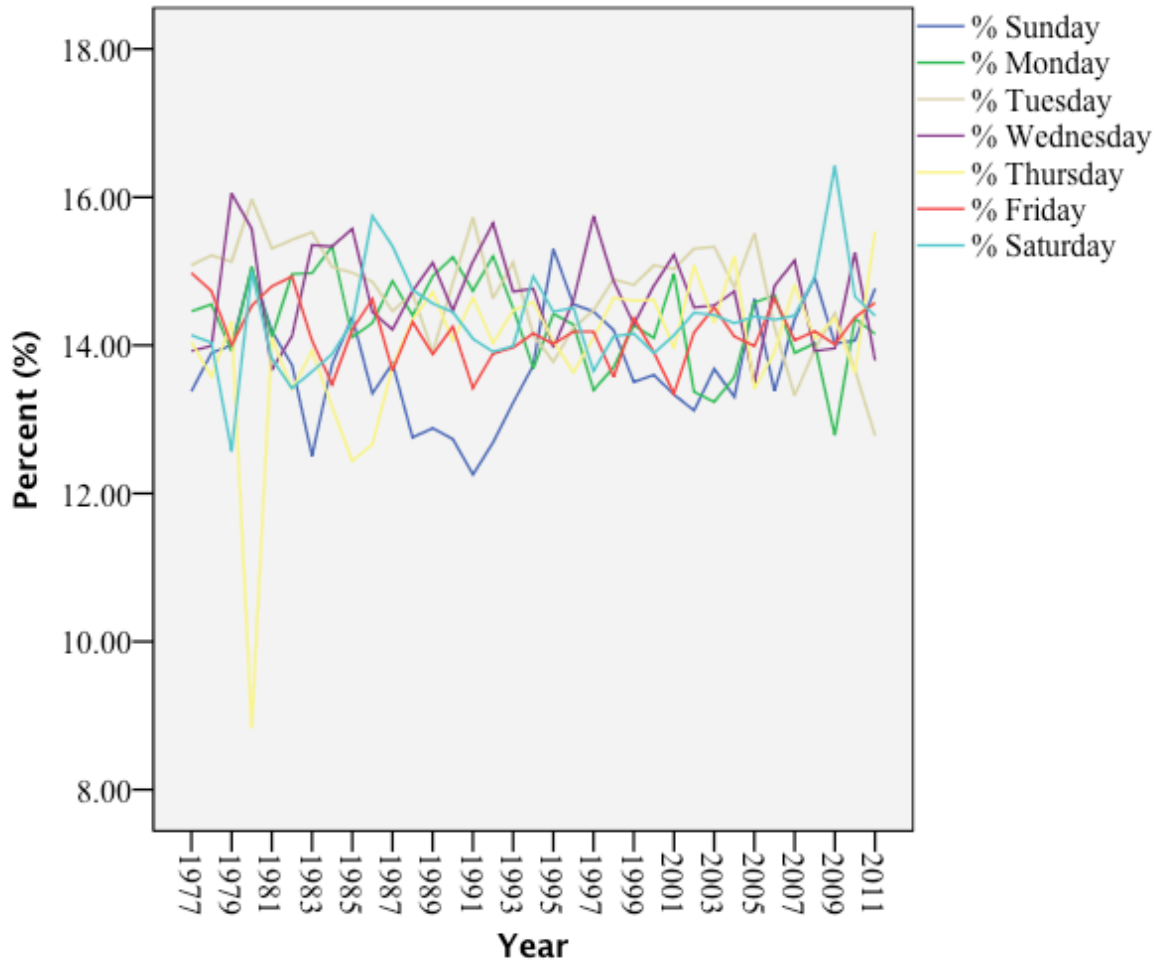


Figure 4.248 Multiple Line Chart of Day Category Frequencies of Annual Total of Crisis Center Call Day Frequency as Ratio (%) of Annual Total of Crisis Center Call Day Frequency of archival data (1970-2011)

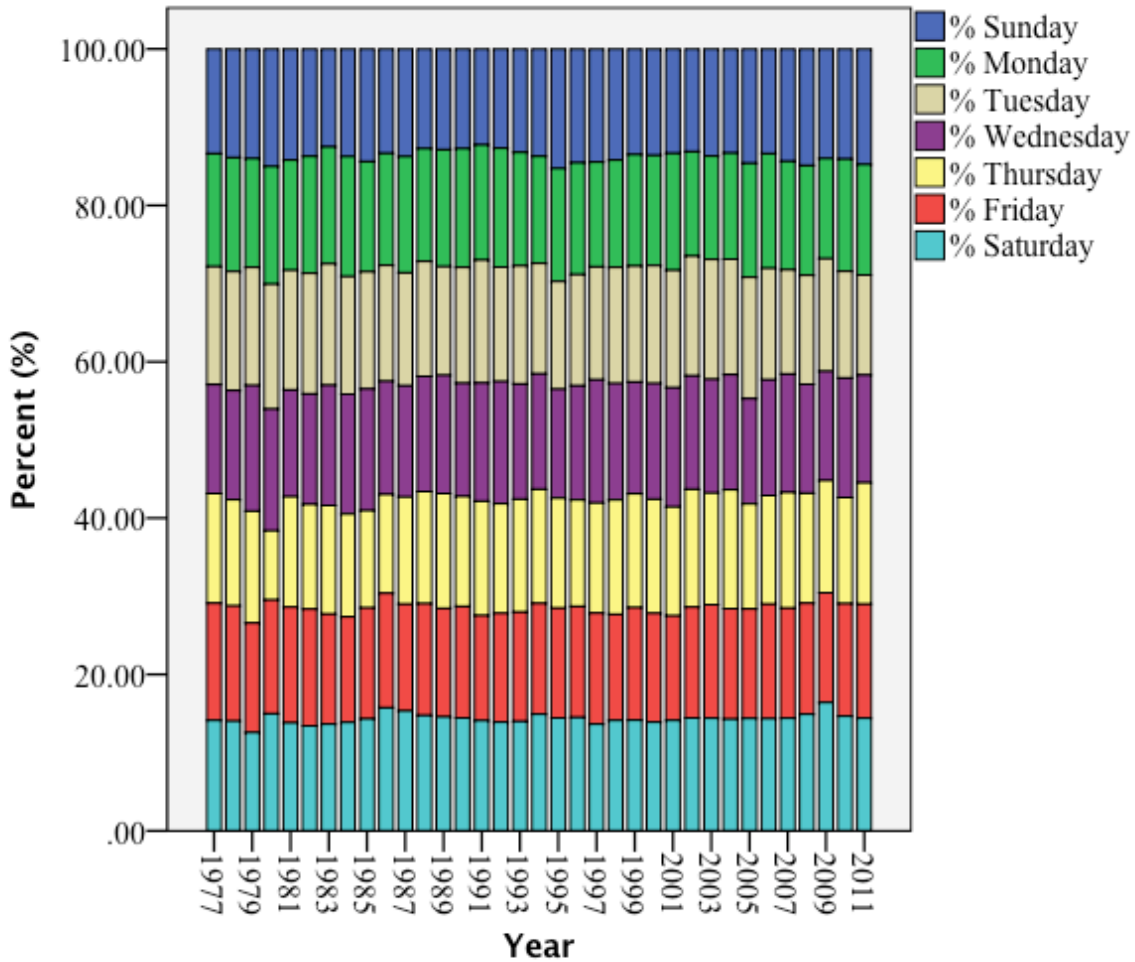


Figure 4.249 Stacked Bar Chart for Day Category Frequencies of Annual Total of Crisis Center Call Day Frequency as Ratio (%) of Annual Total of Crisis Center Call Day Frequency of archival data (1970-2011)

Examination of the descriptive statistical results for the day category frequencies of the annual total of crisis center call day frequency as a ratio (%) of the annual total of crisis center call day frequency suggests that the day category frequencies have remained relatively consistent since throughout the thirty-five (35) complete years of coding.

## Annual Total of Crisis Center Call Frequency and Month of Year

### *Annual Total of Crisis Center Call Month Category Frequencies per Month Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. The archival data encompasses the years of 1969-2011. From the beginning, administrative personnel tabulated the VCLs by assigning a designation of a month category for each crisis center call. The month category was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in information frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the month category rather than the absence of data for the month category.

The archival data for the annual total of crisis center call month frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call month frequency were noted; reported annual total of crisis center call month frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis



center call month category frequencies ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the January category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 55,596 for the January category of the annual total of crisis center call month frequency with a mean of 1,323.71 and a standard deviation of 309.19. Descriptive statistical analysis reported a minimum frequency of 593 and a maximum frequency of 1,842 for the January category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the February category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 49,327 for the February category of the annual total of crisis center call month frequency with a mean of 1,174.45 and a standard deviation of 281.110. Descriptive statistical analysis reported a minimum frequency of 590 and a maximum frequency of 1,736 for the February category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the March category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 53,118 for the March category of the annual total of crisis center call month frequency with a mean of 1,264.71 and a standard deviation of 305.34. Descriptive statistical analysis

reported a minimum frequency of 636 and a maximum frequency of 1,847 for the March category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the April category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 51,179 for the April category of the annual total of crisis center call month frequency with a mean of 1,218.55 and a standard deviation of 270.12. Descriptive statistical analysis reported a minimum frequency of 593 and a maximum frequency of 1,697 for the April category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the May category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 53,686 for the May category of the annual total of crisis center call month frequency with a mean of 1,278.24 and a standard deviation of 284.10. Descriptive statistical analysis reported a minimum frequency of 609 and a maximum frequency of 1,787 for the May category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the June category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 54,096 for the June category of the annual total of crisis center call month frequency with a mean of 1,288.00 and a standard deviation of 305.81. Descriptive statistical analysis reported a

minimum frequency of 499 and a maximum frequency of 1,702 for the June category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the July category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 55,515 for the July category of the annual total of crisis center call month frequency with a mean of 1,321.79 and a standard deviation of 342.97. Descriptive statistical analysis reported a minimum frequency of 458 and a maximum frequency of 1,936 for the July category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the August category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 56,986 for the August category of the annual total of crisis center call month frequency with a mean of 1,356.81 and a standard deviation of 342.50. Descriptive statistical analysis reported a minimum frequency of 540 and a maximum frequency of 2,153 for the August category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the September category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 51,092 for the September category of the annual total of crisis center call month frequency with a mean of 1,216.48 and a standard deviation of 297.15. Descriptive

statistical analysis reported a minimum frequency of 516 and a maximum frequency of 1,777 for the September category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the October category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 51,612 for the October category of the annual total of crisis center call month frequency with a mean of 1,228.86 and a standard deviation of 300.90. Descriptive statistical analysis reported a minimum frequency of 515 and a maximum frequency of 1,888 and for the October category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the November category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 51,580 for the November category of the annual total of crisis center call month frequency with a mean of 1,228.10 and a standard deviation of 311.81. Descriptive statistical analysis reported a minimum frequency of 479 and a maximum frequency of 1,835 for the November category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the December category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 54,946 for the December category of the annual total of crisis center call month frequency with a mean of 1,308.24 and a standard deviation of 324.29. Descriptive

statistical analysis reported a minimum frequency of 613 and a maximum frequency of 1,840 for the December category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the month frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 638,733 for the month category of the annual total of crisis center call month frequency with a mean of 15,207.93 and a standard deviation of 3,461.63. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,291 and for the December category of the annual total of crisis center call month category frequencies.

Descriptive statistical analyses results for the month category frequency of the annual total of crisis center call frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.125. Figure 4.250 provides a visual representation for the month category frequencies of the annual total of crisis center call month frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.251 provides a visual representation for the month category frequency of the annual total of crisis center call frequency as a multiple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.125

Descriptive Statistics for Month Category Frequencies of Annual Total of Crisis Center Call Month Frequency and Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
January	42	593	1,842	55,596	1,323.71	309.10
February	42	590	1,736	49,327	1,174.45	281.11
March	42	636	1,847	53,118	1,264.71	305.34
April	42	593	1,697	51,179	1,218.55	270.12
May	42	609	1,787	53,686	1,278.24	284.10
June	42	499	1,702	54,096	1,288.00	305.81
July	42	458	1,936	55,515	1,321.79	342.97
August	42	540	2,153	56,986	1,356.81	342.50
September	42	516	1,777	51,092	1,216.48	297.15
October	42	515	1,888	51,612	1,228.86	300.90
November	42	479	1,835	51,580	1,228.10	311.81
December	42	613	1,840	54,946	1,308.24	324.29
Month Frequency	42	6,733	21,291	638,733	15,207.93	3,451.63
Valid N (listwise)	42					

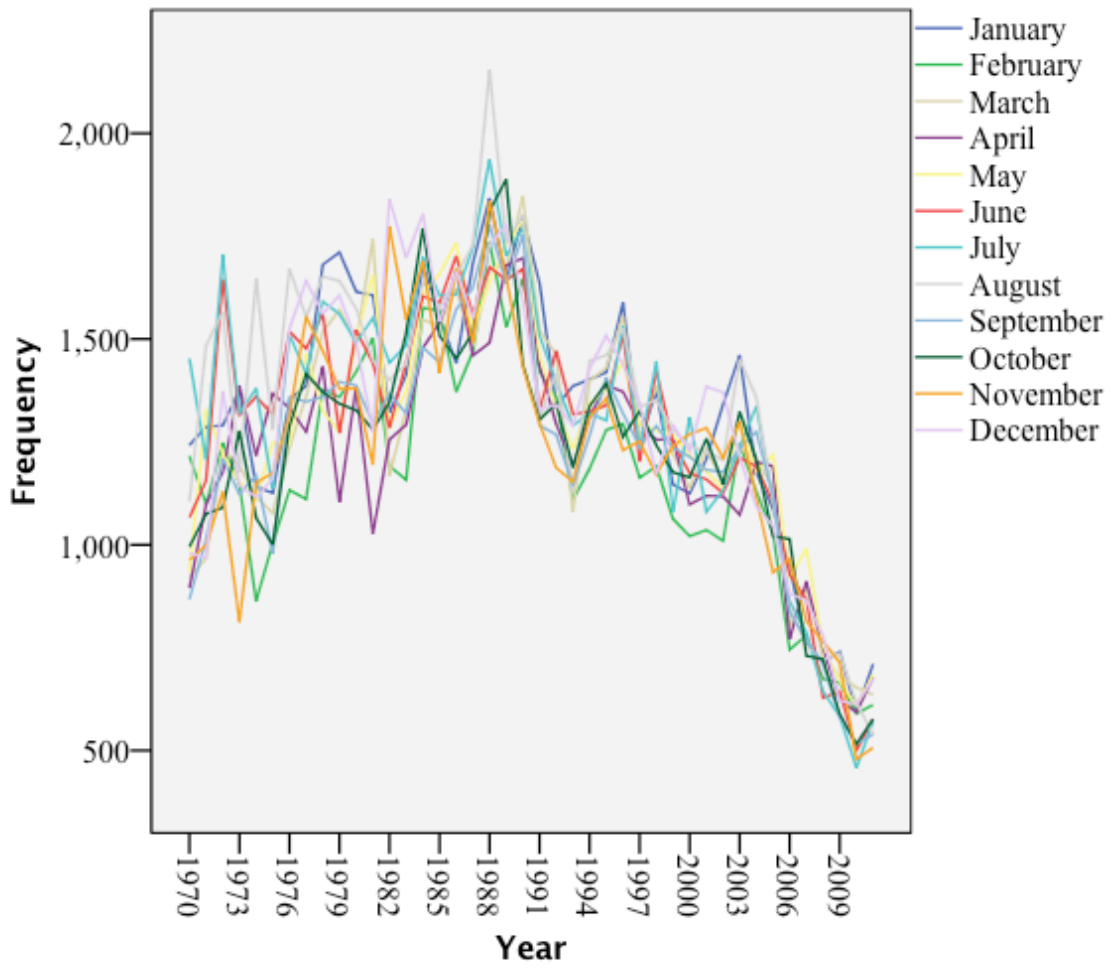


Figure 4.250 Simple Line Chart for Month Category Frequencies of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011)

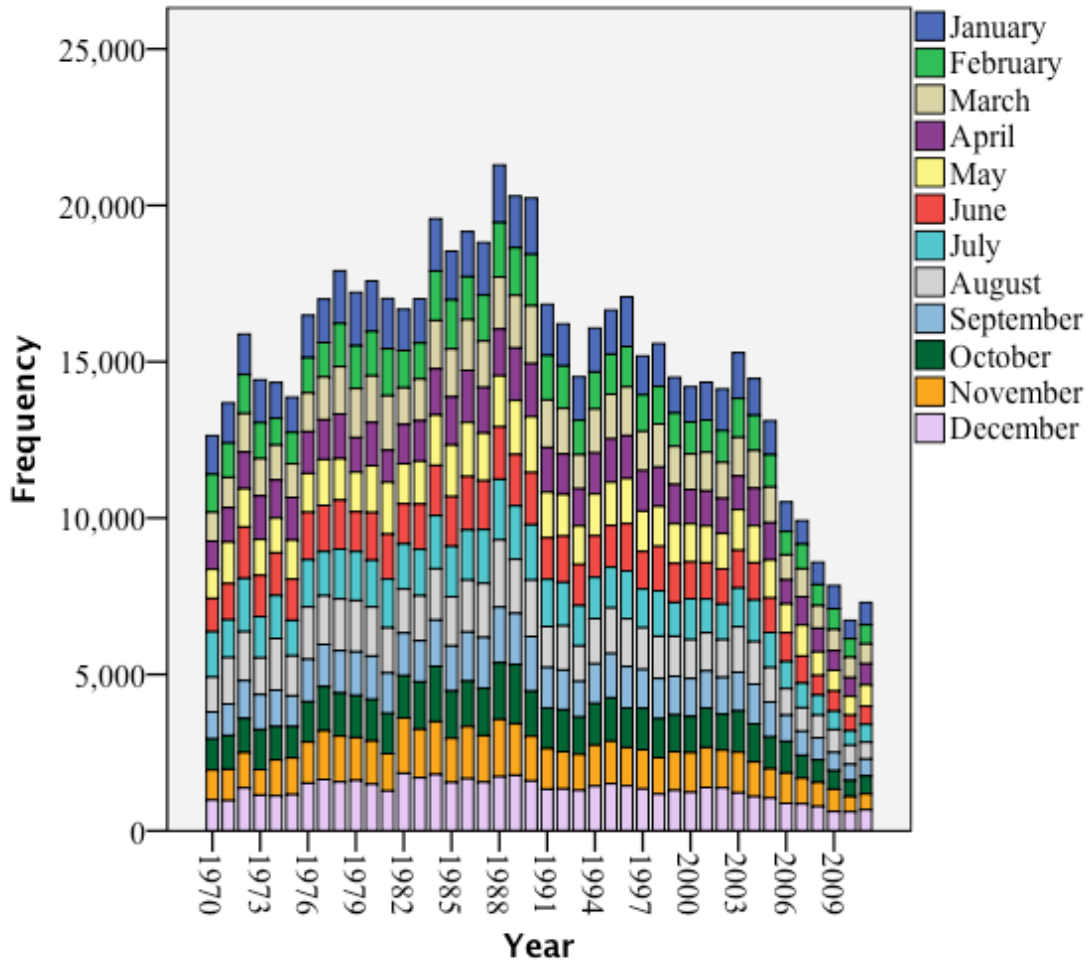


Figure 4.251 Multiple Bar Chart for Month Category Frequency of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011)



*Month Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio of Annual Total of Crisis Center Call Month Frequency*

The month category frequencies of the annual total of crisis center call month frequency were transformed into a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the January category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 366.37% for the January category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.72% and a standard deviation of 1.79%. Descriptive statistical analysis reported a minimum frequency of 7.52% and a maximum frequency of 9.94% for the January month category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the February category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 325.37% for the February category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 7.75% and a standard deviation of 0.66%. Descriptive statistical analysis reported a minimum frequency of 6.02% and a maximum frequency of 9.62% for the February category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the March category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 349.91% for the March category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month category frequencies with a mean of 8.33% and a standard deviation of 0.67%. Descriptive statistical analysis reported a minimum frequency of 7.00% and a maximum frequency of 10.24% for the March category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the April category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 339.11% for the April category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.07% and a standard deviation of 0.78%. Descriptive statistical analysis reported a maximum frequency of 9.86% and a minimum frequency of 6.03% for the April category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the May category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 355.05% for the

May category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.45% and a standard deviation of 0.63%. Descriptive statistical analysis reported a minimum frequency of 7.40% and a maximum frequency of 9.98% for the May category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the May category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 355.05% for the May category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.45% and a standard deviation of 0.63%. Descriptive statistical analysis reported a minimum frequency of 7.40% and a maximum frequency of 9.98% for the May category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the June category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 354.92% for the June category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.45% and a standard deviation of 0.61%. Descriptive statistical analysis reported a minimum frequency of 7.31% and a

maximum frequency of 10.36% for the June category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the July category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 362.14% for the June category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.62% and a standard deviation of 0.84%. Descriptive statistical analysis reported a minimum frequency of 6.80% and a maximum frequency of 11.50% for the July category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the August category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 373.35% for the August category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.89% and a standard deviation of 0.79%. Descriptive statistical analysis reported a minimum frequency of 7.40% and a maximum frequency of 11.48% for the August category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the September category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual

total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 334.82% for the September category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 7.97% and a standard deviation of 0.43%. Descriptive statistical analysis reported a minimum frequency of 6.86% and a maximum frequency of 8.82% for the September category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the October category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 338.90% for the October category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.07% and a standard deviation of 0.60%. Descriptive statistical analysis reported a minimum frequency of 6.86% and a maximum frequency of 9.64% for the October category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the November category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 338.84% for the November category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.07% and

a standard deviation of 0.86%. Descriptive statistical analysis reported a minimum frequency of 5.63% and a maximum frequency of 10.64% for the November category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the December category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 361.24% for the December category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.60% and a standard deviation of 0.76%. Descriptive statistical analysis reported a minimum frequency of 7.08% and a maximum frequency of 11.03% for the December category of the annual total of crisis center call month frequency.

Descriptive statistical analyses results for the month category frequencies of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.126. Figure 4.252 provides a visual representation for the month category frequencies of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.253 provides a visual representation for the month category frequencies of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency as a stacked bar chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.126  
 Descriptive Statistics for Month Category Frequencies of Annual Total of Crisis Center Call  
 Month Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Frequency of  
 archival data (1970-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
% January	42	7.52%	9.94%	366.37%	8.72%	0.67%
% February	42	6.02%	9.62%	325.37%	7.74%	0.66%
% March	42	7.00%	10.24%	349.91%	8.33%	0.67%
% April	42	6.03%	9.86%	339.11%	8.07%	0.78%
% May	42	7.40%	9.98%	355.05%	8.45%	0.63%
% June	42	7.31%	10.36%	354.92%	8.45%	0.61%
% July	42	6.80%	11.50%	362.14%	8.62%	0.84%
% August	42	7.40%	11.48%	373.35%	8.89%	0.79%
% September	42	6.86%	8.62%	334.82%	7.97%	0.43%
% October	42	6.86%	9.64%	338.90%	8.07%	0.60%
% November	42	5.63%	10.64%	338.84%	8.07%	0.86%
% December	42	7.08%	11.03%	361.24%	8.60%	0.78%
Valid N (listwise)	42					

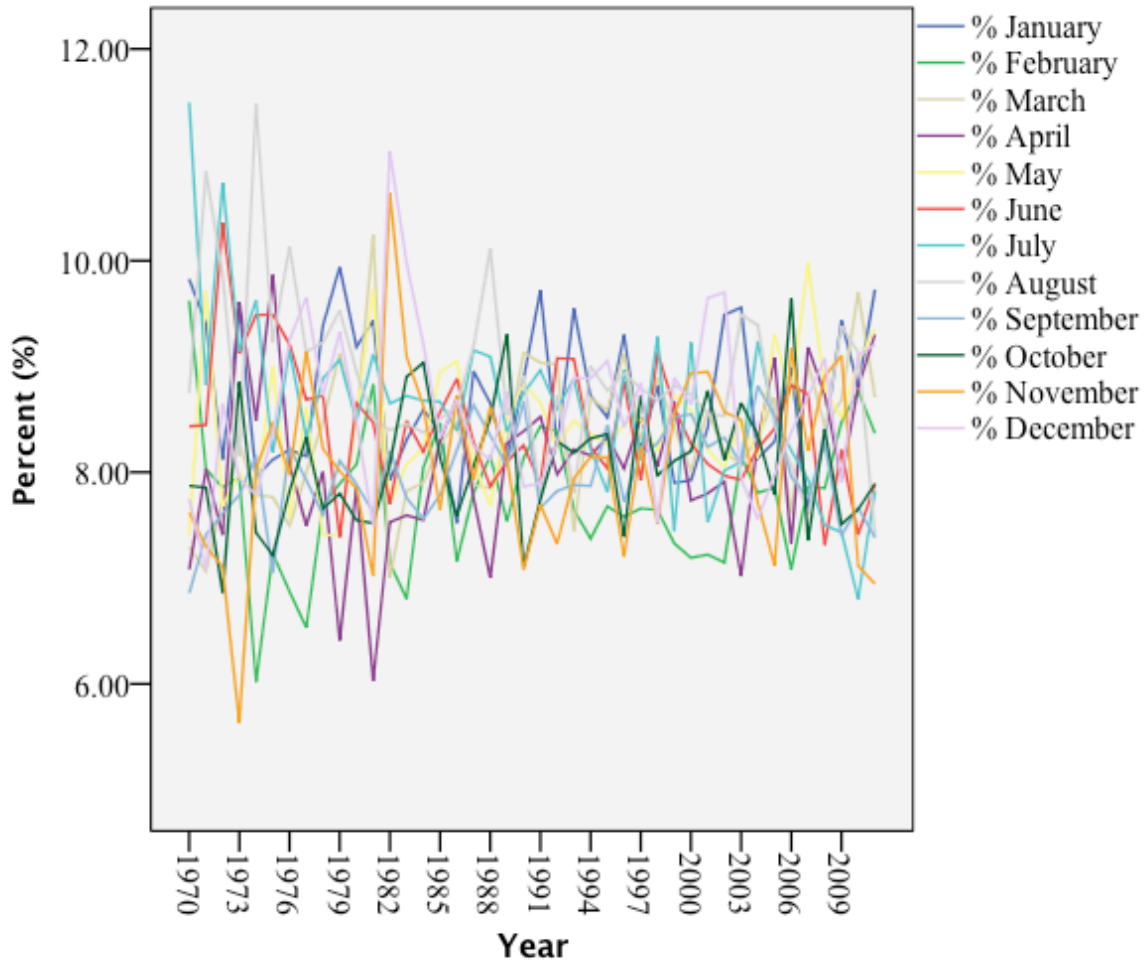


Figure 4.252 Multiple Line Chart for Month Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011)



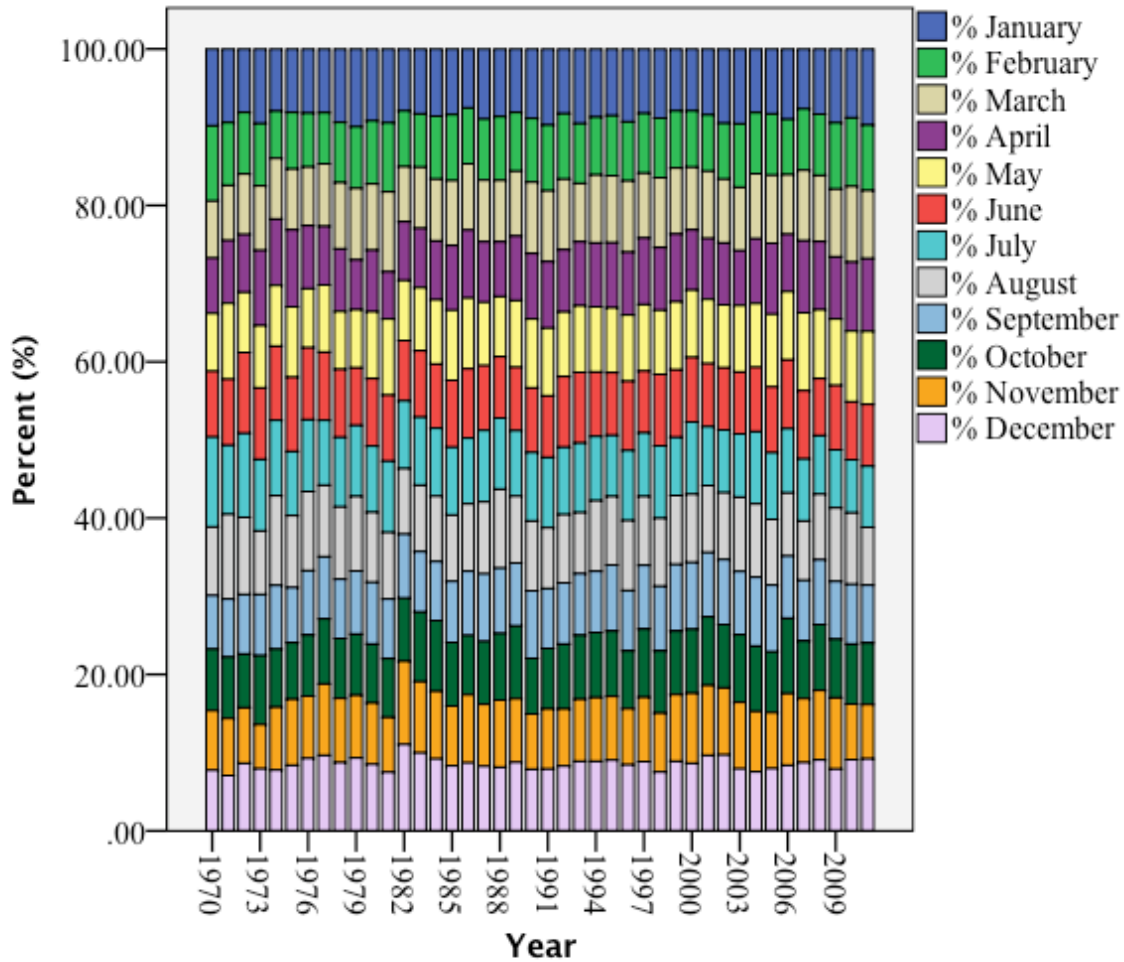


Figure 4.253 Stacked Bar Chart for Month Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011)

Examination of the descriptive statistical results for the month category frequencies of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call day frequency suggests that the month category frequencies have remained relatively statically consistent since throughout the forty-two (42) complete years of coding.

## Annual Total of Crisis Center Call Month Frequency and Season of Year

### *Descriptive Statistics for Annual Total of Crisis Center Call Month Frequency per Season Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. The archival data encompasses the years of 1969-2011. From the beginning, administrative personnel tabulated the VCLs by assigning a designation of a month category for each crisis center call. The month category was coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in month category frequencies of the annual total of crisis center call month category frequencies, the number reflects the absence of call frequency related to the month category rather than the absence of data for the month category.

The frequency totals of the month categories were grouped per season; January, February and March were grouped into the Season 1 category; April, May and June were grouped into the Season 2 category; July, August and September were grouped into the Season 3 category; October, November and December were grouped into the Season 4 category.

The archival data for the annual total of crisis center call season category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call season frequency were noted; reported annual total of crisis center call

season frequency was inconsistent with reported annual total of crisis center call frequency. No assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call season frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call season frequency.

A descriptive statistical analysis was conducted to evaluate the season 1 category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 158,041 for the season 1 category of the annual total of crisis center call month frequency with a mean of 1,254.29 and a standard deviation of 302.74. Descriptive statistical analysis reported a minimum frequency of 590 and a maximum frequency of 1,847 and a maximum frequency of 1,847 for the season 1 category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the season 2 category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 158,961 for the season 2 category of the annual total of crisis center call month frequency with a mean of 1,261.60 and a standard deviation of 286.41. Descriptive statistical analysis reported a minimum frequency of 499 and a maximum frequency of 1,787 for the season 2 category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the season 3 category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 163,593 for the season 3 category of the annual total of crisis center call month frequency with a mean of 1,298.36 and a standard deviation of 331.07. Descriptive statistical analysis reported a minimum frequency of 458 and a maximum frequency of 2,153 for the season 3 category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the season 4 category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 158,138 for the season 4 category of the annual total of crisis center call month frequency with a mean of 1,255.06 and a standard deviation of 312.26. Descriptive statistical analysis reported a minimum frequency of 479 and a maximum frequency of 1,888 for the season 4 category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the season frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 1,916,199 for the season category of the annual total of crisis center call season frequency with a mean of 15,207 and a standard deviation of 3,433.82. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 21,291 for the season frequency of the annual total of crisis center call month frequency. Sum of 1,916,199 for the season frequency of the annual total of crisis center call season frequency represents three (3) months of annual

total of crisis center call month frequency for each season category resulting 126 case numbers for the archival data (1970-2011).

Descriptive statistical analyses results for season category frequencies of annual total of crisis center call month frequency and annual total of crisis center call month frequency of encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.127. Providing a visual representation of the season category frequencies of the annual total of crisis center call month frequency case numbers would result in a misleading figure. Therefore, a visual representation is omitted.

Table 4.127  
 Descriptive Statistics for Season Category Frequencies of Annual Total of Crisis Center Call  
 Month Frequency and Annual Total of Crisis Center Call Month Frequency of archival data  
 (1970-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
Season 1	126	590	1,847	158,041	1,254.29	302.74
Season 2	126	499	1,787	158,961	1,261.60	286.41
Season 3	126	458	2,153	163,593	1,298.36	331.07
Season 4	126	479	1,888	158,138	1,255.06	312.26
Season Frequency	126	6,733	21,291	1,916,199	15,207.93	3,433.82
Valid N (listwise)	126					

*Descriptive Statistics for Season Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio of Annual Total of Crisis Center Call Month Frequency*

The season category frequencies of the annual total of crisis center call month frequency were transformed into a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the season 1 category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 1,041.65% for the season 1 category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.27% and a standard deviation of 0.77%. Descriptive statistical analysis reported a minimum frequency of 6.02% and a maximum frequency of 10.24% and for the season 1 category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the season 2 category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 1,049.08% for the season 2 category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.33% and a standard deviation of 0.69%. Descriptive statistical analysis reported a minimum frequency of 6.03% and a maximum frequency of 10.36% for the season 2 category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the season 3 category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 1,070.30% for the season 3 category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 8.49% and a standard deviation of 0.81%. Descriptive statistical analysis reported a minimum frequency of 6.80% and a maximum frequency of 11.50% for the category 3 category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the season 4 category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 1,038.97% for the season 4 category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call season month with a mean of 8.25% and a standard deviation of 0.78%. Descriptive statistical analysis reported a minimum frequency of 5.63% and a maximum frequency of 11.03% for the season 4 category of the annual total of crisis center call month frequency.

Descriptive statistical analyses results for season category frequencies of annual total of crisis center call month frequency as a ratio (%) of annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.128. Providing a visual representation of the season category frequencies of



the annual total of crisis center call month frequency case numbers would result in a misleading figure. Therefore, a visual representation is omitted.

Table 4.128  
 Descriptive Statistics for Season Category Frequencies of Annual Total of Crisis Center Call  
 Month Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Frequency of  
 archival data (1970-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
% Season 1	126	6.02%	10.24%	1,041.65	8.27%	0.77%
% Season 2	126	6.03%	10.36%	1,049.08	8.33%	0.69%
% Season 3	126	6.80%	11.50%	1,070.30	8.49%	0.81%
% Season 4	126	5.63%	11.03%	1,038.97	8.24%	0.79%
Valid N (listwise)	126					

Examination of the descriptive statistical results for the season category frequencies of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency suggests that the season category frequencies have remained relatively consistent since throughout the forty-two (42) complete years of coding.

## Annual Total of Crisis Center Call Shift Frequency and Shift

### *Descriptive Statistics for Annual Total of Crisis Center Call Shift Frequency per Shift Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. The archival data encompasses the years of 1969-2011. From 196 to 2002, administrative personnel did not tabulate the VCLs by assigning a designation of a shift category. Beginning in 2003, administrative personnel began to code VCLs by assigning a designation of 7:00 to 9:30 AM, 9:30 AM to 1:30 PM, 1:30 to 6:00 PM, 6:00 to 11:00 PM or 11 PM to 7AM shift category for each crisis center call. All statistical analysis for the shift categories of the annual total of crisis center call shift frequency encompasses nine (9) years of archival data (2003-2011).

The archival data for the annual total of crisis center call frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Nine (9) complete years were identified and used for statistical analysis (1977-2011). When zero (0) is reported in the shift frequency of the annual total of crisis center call shift frequency for the years 1969-2002, the number reflects the absence of data related to the shift category. When zero (0) is reported in the shift frequency of the annual total of crisis center call shift frequency for the years 2003-2011, the number reflects the absence of call frequency related to the shift category rather than the absence of data for the shift category.

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call shift frequency were noted; reported annual total of crisis center call shift frequency was inconsistent with reported annual total of crisis center call frequency. No

assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call shift frequency ensuring the annual total results accurately report the archival data. All statistical analysis is based on the annual total of crisis center call shift frequency.

A descriptive statistical analysis was conducted to evaluate the 7:00 to 9:30 AM shift category frequency of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). Results of the descriptive statistical analysis reported a sum of 12,055 for the 7:00 to 9:30 shift category of the annual total of crisis center call shift frequency with a mean of 1,339.44 and a standard deviation of 348.44. Descriptive statistical analysis reported a minimum frequency of 914 and a maximum frequency of 1,764 for the 7:00 to 9:30 shift category of the annual total of crisis center call shift frequency.

A descriptive statistical analysis was conducted to evaluate the 9:30 AM to 1:30 PM shift category frequency of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). Results of the descriptive statistical analysis reported a sum of 19,419 for the 9:30 AM to 1:30 PM shift category of the annual total of crisis center call shift frequency with a mean of 2,157.67 and a standard deviation of 394.51. Descriptive statistical analysis reported a minimum frequency of 1,591 and a maximum frequency of 2,745 for the 9:30 AM to 1:30 PM shift category of the annual total of crisis center call shift frequency.

A descriptive statistical analysis was conducted to evaluate the 1:30 to 6:00 PM shift category frequency of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). Results of the descriptive statistical analysis reported a sum of 23,473 for the 1:30 to 6:00 PM shift category of the annual total of crisis center call shift frequency with a mean of 2,608.11 and a standard deviation of 448.18. Descriptive statistical analysis reported a minimum frequency of 1,875 and a maximum frequency of 3,235 for the 1:30 to 6:00 PM shift category of the annual total of crisis center call shift frequency.

A descriptive statistical analysis was conducted to evaluate the 6:00 to 11:00 PM shift category frequency of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). Results of the descriptive statistical analysis reported a sum of 25,173 for the 6:00 to 11:00 PM shift category of the annual total of crisis center call shift frequency with a mean of 2,797.00 and a standard deviation of 599.44. Descriptive statistical analysis reported a minimum frequency of 1,958 and a maximum frequency of 3,610 for the 6:00 to 11:00 PM shift category of the annual total of crisis center call shift frequency.

A descriptive statistical analysis was conducted to evaluate the 11:00 PM to 7:00 AM shift category frequency of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). Results of the descriptive statistical analysis reported a sum of 10,629 for the 11:00 PM to 7:00 AM shift category of the annual total of crisis center call shift frequency with a mean of 1,181.00 and a standard deviation of 1,299.08. Descriptive statistical analysis reported a minimum frequency of 299 and a maximum frequency

of 3,500 and for the 11:00 PM to 7:00 AM shift category of the annual total of crisis center call shift frequency. Beginning in 2006, budgetary constraints eliminated the 11:00 PM to 7:00 AM shift for volunteers. Administrative staff arrive at the CONTACT of Chattanooga offices at 6:00 AM and accept crisis center calls until the 7:00 to 9:30 AM shift begins. Any reported frequency after 2006 reflect crisis center call shift frequency received between 6:00 to 7:00 AM.

A descriptive statistical analysis was conducted to evaluate the shift frequency of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). Results of the descriptive statistical analysis reported a sum of 90,749 for the shift category of the annual total of crisis center call shift frequency with a mean of 10,083.22 and a standard deviation of 2,724.82. Descriptive statistical analysis reported a minimum frequency of 6,733 and a maximum frequency of 14,463 and for the annual total of crisis center call shift frequency.

Descriptive statistical analyses results for the shift category frequencies of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011) are reported in Table 4.129. Figure 4.254 provides a visual representation for the shift category frequencies of the annual total of crisis center call shift frequency as a multiple line chart encompassing nine (9) complete years of the archival data (2003-2011). Figure 4.255 provides a visual representation for the shift category frequencies of the annual total of crisis center call shift frequency as a stacked bar chart encompassing nine (9) complete years of the archival data (2003-2011).

Table 4.129

Descriptive Statistics for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency and Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
7-9:30 AM	9	914	1,764	12,055	1,339.44	348.44
9:30-1:30 PM	9	1,591	2,745	19,419	2,157.67	394.51
1:30-6 PM	9	1,875	3,235	23,473	2,608.11	448.18
6-11 PM	9	1,958	3,610	25,173	2,797.00	599.44
11 PM-7 AM	9	299	3,500	10,629	1,181.00	1,299.08
Shift Frequency	9	6,733	14,463	90,749	10,083.22	2,724.82
Valid N (listwise)	9					

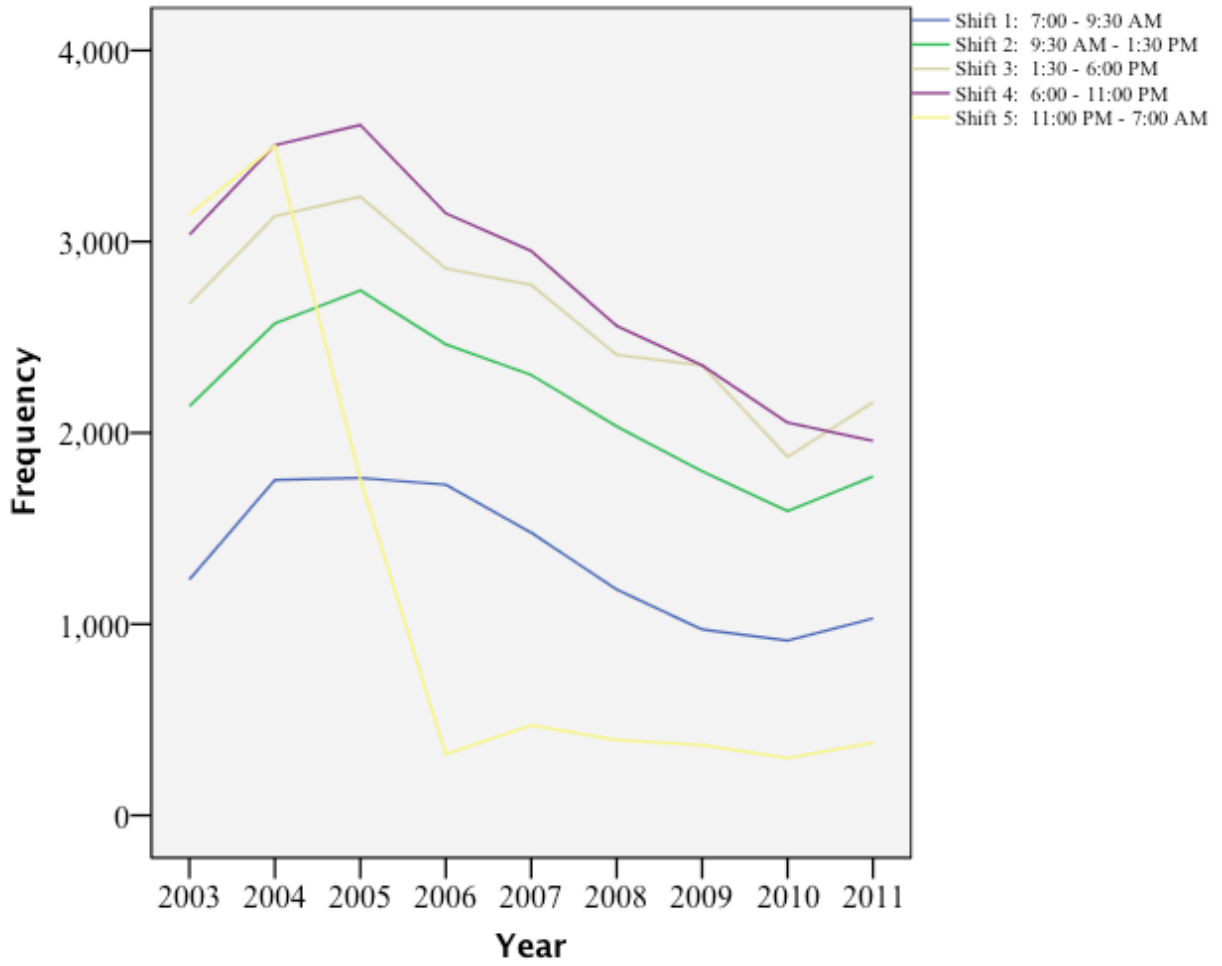


Figure 4.254 Multiple Line Chart for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011)



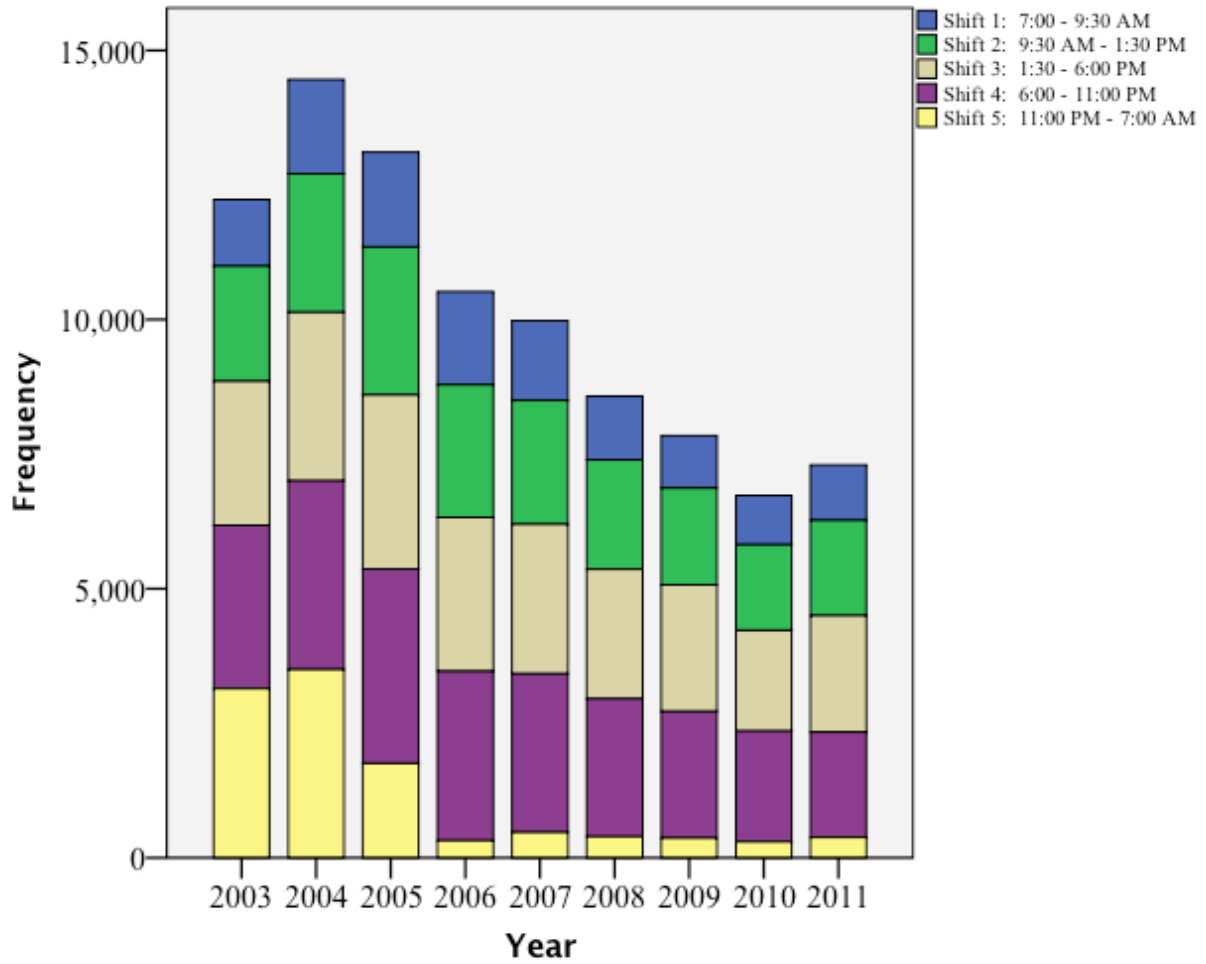


Figure 4.255 Stacked Bar Chart for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011)

*Descriptive Statistics for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency as Ratio of Annual Total of Crisis Center Call Shift Frequency*

The shift category frequencies of the annual total of crisis center call shift frequency were transformed into a ratio (%) of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). A descriptive statistical analysis was conducted to evaluate the 7:00 to 9:30 AM shift category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). The results of the descriptive statistical analysis reported a sum of 120.77% for the 7:00 to 9:30 AM shift category of the annual total of the crisis center call shift frequency as a ratio (%) of the annual total of crisis center call shift frequency with a mean of 13.42% and a standard deviation of 1.79%. Descriptive statistical analysis reported a minimum frequency of 10.08% and a maximum frequency of 16.44% for the 7:00 to 9:30 AM shift category of the annual total of crisis center call shift frequency.

A descriptive statistical analysis was conducted to evaluate the 9:30 AM to 1:30 PM shift category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). The results of the descriptive statistical analysis reported a sum of 197.28% for the 9:30 AM to 1:30 PM shift category of the annual total of the crisis center call shift frequency as a ratio (%) of the annual total of crisis center call shift frequency with a mean of 21.92% and a standard deviation of 2.60%. Descriptive statistical analysis reported a minimum frequency of 17.50% and a maximum frequency of 24.27% for the 9:30 AM to 1:30 PM shift category of the annual total of crisis center call shift frequency.

A descriptive statistical analysis was conducted to evaluate the 1:30 to 6:00 PM shift category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). The results of the descriptive statistical analysis reported a sum of 238.72% for the 1:30 to 6:00 PM shift category of the annual total of the crisis center call shift frequency as a ratio (%) of the annual total of crisis center call shift frequency with a mean of 26.52% and a standard deviation of 3.09%. Descriptive statistical analysis reported a minimum frequency of 21.66% and a maximum frequency of 30.00% for the 1:30 to 6:00 PM shift category of the annual total of crisis center call shift frequency.

A descriptive statistical analysis was conducted to evaluate the 6:00 to 11:00 PM shift category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). The results of the descriptive statistical analysis reported a sum of 253.26% for the 6:00 to 11:00 PM shift category of the annual total of the crisis center call shift frequency as a ratio (%) of the annual total of crisis center call shift frequency with a mean of 28.14% and a standard deviation of 2.39%. Descriptive statistical analysis reported a minimum frequency of 24.23% and a maximum frequency of 30.51% for the 6:00 to 11:00 PM shift category of the annual total of crisis center call shift frequency.

A descriptive statistical analysis was conducted to evaluate the 11:00 PM to 7:00 AM shift category frequency of the annual total of crisis center call frequency as a ratio (%) of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011). The results of the descriptive statistical analysis reported a sum of

89.97% for the 11:00 PM to 7:00 AM shift category of the annual total of the crisis center call shift frequency as a ratio (%) of the annual total of crisis center call shift frequency with a mean of 10.00% and a standard deviation of 8.99%. Descriptive statistical analysis reported a minimum frequency of 3.04% and a maximum frequency of 25.70% for the 11:00 PM to 7:00 AM shift category of the annual total of crisis center call shift frequency.

Descriptive statistical analyses results for the shift category frequencies of the annual total of crisis center call shift frequency as a ratio (%) of the annual total of crisis center call shift frequency encompassing nine (9) complete years of the archival data (2003-2011) are reported in Table 4.130. Figure 4.256 provides a visual representation for the shift category frequencies of the annual total of crisis center call shift frequency as a ratio (%) of the annual total of crisis center call shift frequency as a multiple line chart encompassing nine (9) complete years of the archival data (2003-2011). Figure 4.257 provides a visual representation for the shift category frequencies of the annual total of crisis center call shift frequency as a ratio (%) of the annual total of crisis center call shift frequency as a stacked bar chart encompassing nine (9) complete years of the archival data (2003-2011).

Table 4.130

Descriptive Statistics for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency as Ratio (%) of Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011)

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Standard Deviation
% 7-9:30 AM	9	10.08%	16.44%	120.77%	13.42%	1.79%
% 9:30-1:30 PM	9	17.50%	24.27%	197.28%	21.92%	2.60%
% 1:30-6 PM	9	21.66%	30.00%	238.72%	26.52%	3.09%
% 6-11 PM	9	24.34%	30.51%	253.26%	28.14%	2.39%
% 11 PM-7 AM	9	\$3.04	25.70%	89.97%	10.00%	8.99%
Valid N (listwise)	9					

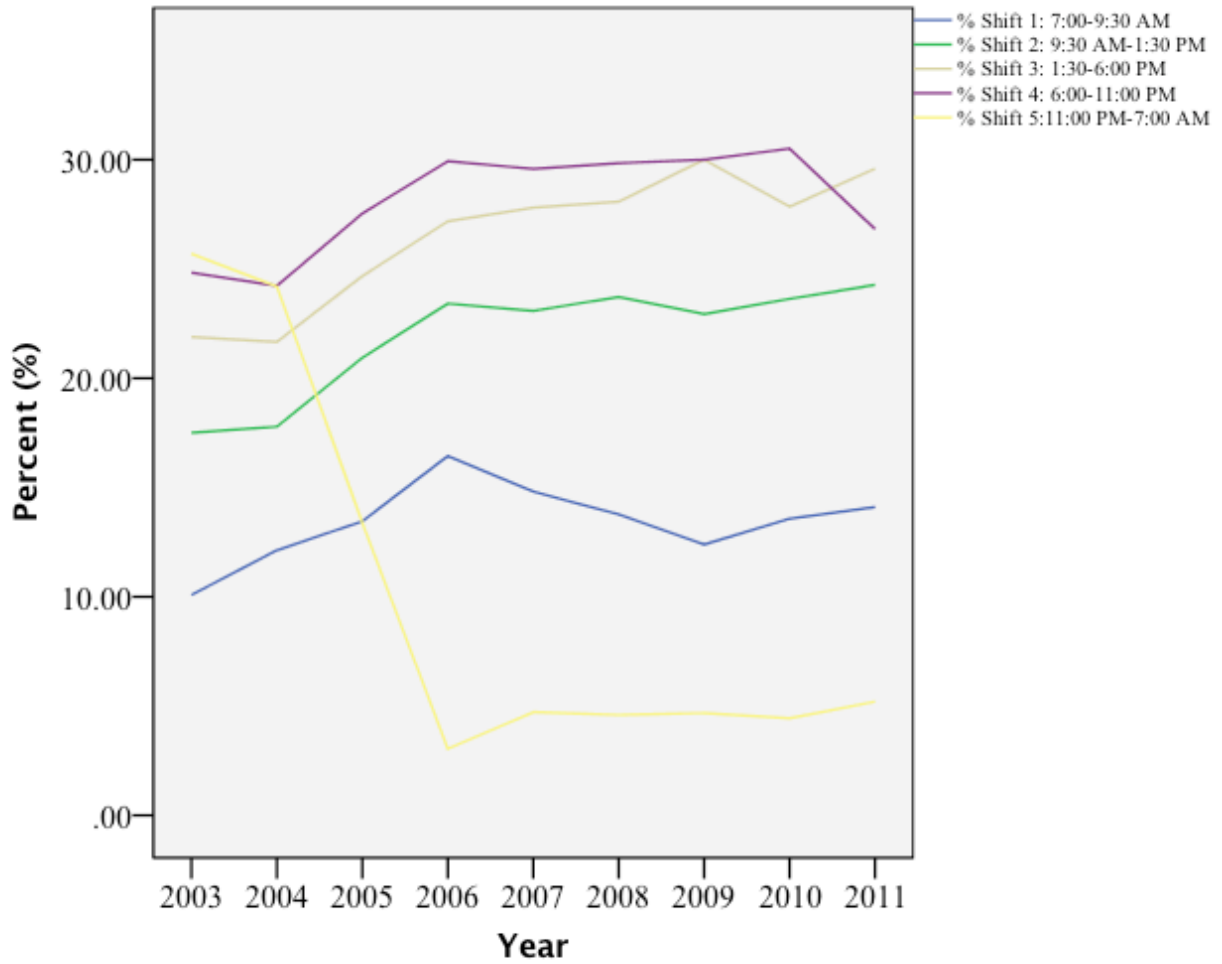


Figure 4.256 Multiple Line Chart for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency as Ratio (%) of Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011)

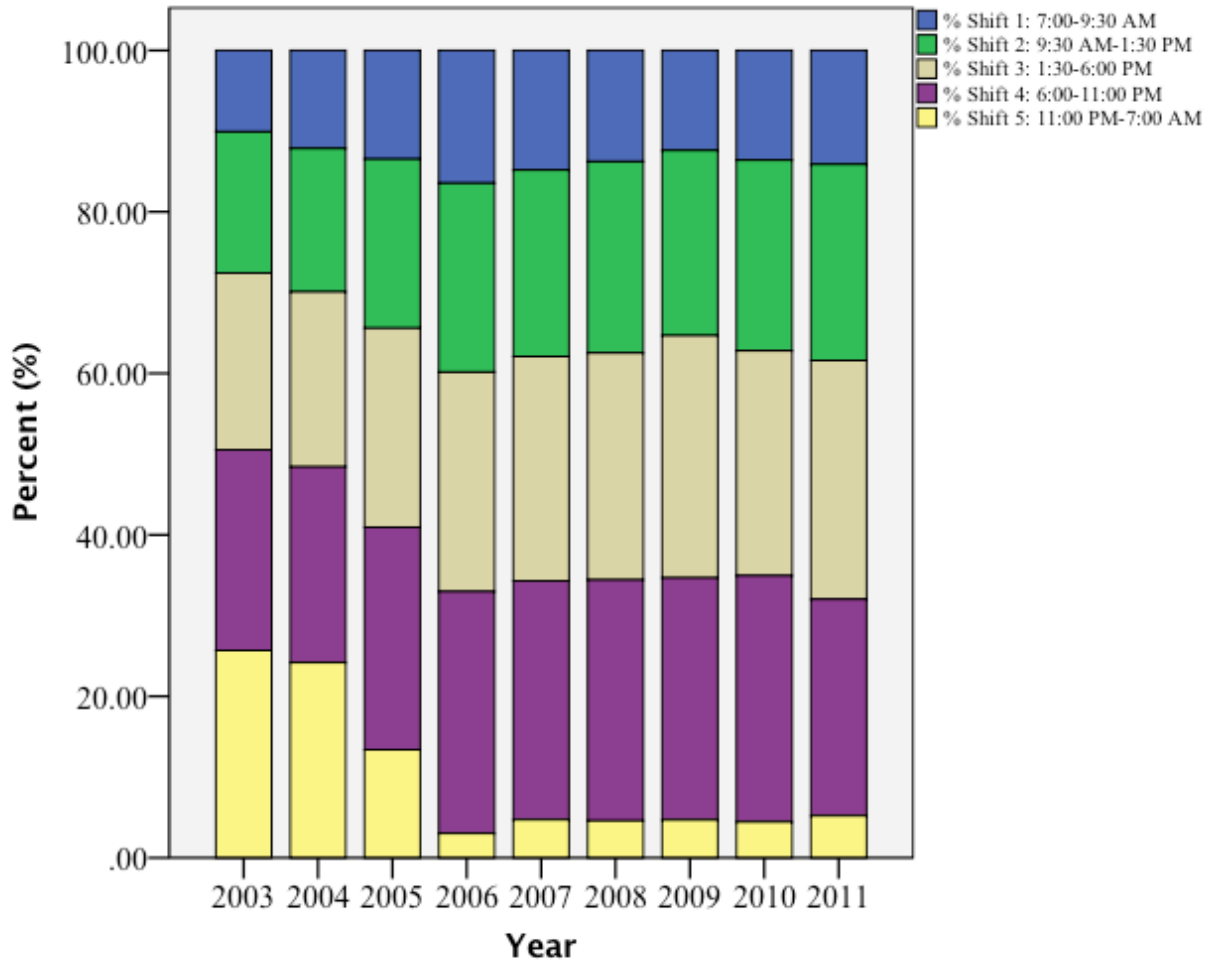


Figure 4.257 Stacked Bar Chart for Shift Category Frequencies of Annual Total of Crisis Center Call Shift Frequency as Ratio (%) of Annual Total of Crisis Center Call Shift Frequency of archival data (2003-2011)

While the archival data regarding crisis call category frequency when grouped according to shift frequency (time of call) is limited to nine (9) complete years of archival data, the scope is sufficiently salient to suggest some statistical descriptions regarding crisis center call frequency patterns with respect to time of day the call:

When considering shift 1 (7:00 to 9:30 am), it is important to note that this shift contains only 2-1/2 hours while other shifts contain 4 hours. If the shift 1 mean (13.42%) is transformed into a 4 hour frequency ( $m / 2.5 * 4$ ), the resultant mean (21.47%) is not statistically different from the shift 2 mean (21.92%), suggesting there is no statistically significant difference in the shift frequency between shift 1 and shift 2.

When considering shift 5 (11:00 pm to 7:00 am), it is important to note that this shift was eliminated in 2006 and any subsequent frequency represents crisis center calls received from 6:00 to 7:00 am by the administrative assistant prior to shift 1.

The annual total of crisis center call shift frequency when grouped according to shift category as a ratio of the annual total of crisis center call shift frequency have remained generally consistent since 2007 across all shifts. (n = 5; shift 1 SD = 0.89%; shift 2 SD = 0.54%; shift 3 SD = 1.05%; shift 4 SD = 1.45%; shift 5 SD = 0.29%)

While there exists more variation in the frequency for shift 3 (SD = 3.09%) than for shift 4 (2.39%) and descriptive statistical analysis reports a difference in the frequency between the mean of 28.14% for shift 4 (6:00 to 11:00 PM) and the mean of 26.52% for shift 3 (1:30 to 6:00 PM), the differences between these two means are not statistically significant.



## Annual Total of Crisis Center Call Month Category Frequencies and Temperature

### *Descriptive Statistics for Annual Total of Crisis Center Call Month Category Frequencies per Temperature Category*

CONTACT of Chattanooga began taking crisis center calls on September 8, 1969. From the beginning, administrative personnel tabulated the VCLs by designation of a month category for each crisis center call. The month categories were coded on VCLs throughout the forty-three (43) years of the archival data (1969-2011). When zero (0) is reported in the major category frequency of the annual total of crisis center call category frequency, the number reflects the absence of call frequency related to the month category rather than the absence of data for the month category.

The frequency totals of the month categories were grouped per temperature; January, February, March, October, November and December were grouped into the cold months category; April, May, June, July, August and September were grouped into the warm months category.

The archival data for the annual total of crisis center call category frequency encompasses forty-three (43) years (1969-2011). The archival data was evaluated for incomplete years ( $n \neq 12$ ). Inclusion of incomplete years in procedures for statistical analyses would report skewed results. Therefore, the year of 1969 is excluded from statistical analyses unless otherwise indicated. Forty-two (42) complete years were identified and used for statistical analysis (1970-2011).

In the tabulation of VCLs, some inconsistencies in the frequency totals for the annual total of crisis center call category frequency were noted; reported annual total of crisis center call month frequency was inconsistent with reported annual total of crisis center call frequency. No

assumptions were made as to the source of those inconsistencies. No corrections or alterations were made to the annual statistical reports to reconcile any data inconsistencies. All data contained within the annual statistical reports is represented in the longitudinal statistical evaluation on an “as is” basis. Spreadsheets were generated to verify annual total for crisis center call month category frequencies ensuring the annual total results accurately report the archival data. All statistical analysis for temperature category frequency is based on the annual total of crisis center call month frequencies.

A descriptive statistical analysis was conducted to evaluate the cold months category frequencies of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 316,179 for the cold months category of the annual total of crisis center call month category frequency with a mean of 7,528.07 and a standard deviation of 1,730.91. Descriptive statistical analysis reported a maximum frequency of 10,623 and a minimum frequency of 3,442 for the cold months category of the annual total of crisis center call month category frequencies.

A descriptive statistical analysis was conducted to evaluate the warm months category frequency of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 322,554 for the warm months category of the annual total of crisis center call month frequency with a mean of 7,679.86 and a standard deviation of 1,763.17. Descriptive statistical analysis reported a minimum frequency of 3,290 and a maximum frequency of 10,668 and for the warm months category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the annual total of crisis center call month category frequency encompassing forty-two (42) complete years of the archival data (1970-2011). Results of the descriptive statistical analysis reported a sum of 638,733 for the annual total of crisis center call month category with a mean of 15,207.93 and a standard deviation of 3,461.63. Descriptive statistical analysis reported a minimum frequency of 3,443 and a maximum frequency of 10,623 and for the cold months category of the annual total of crisis center call month frequency.

Descriptive statistical analyses results for the temperature category frequencies of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.131. Figure 4.258 provides a visual representation for the temperature category frequencies of the annual total of crisis center call month frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.259 provides a visual representation for the temperature category frequencies of the annual total of crisis center call month frequency as a stacked bar chart encompassing forty-two (42) complete years of the archival data (1970-2011).

Table 4.131  
 Descriptive Statistics for Temperature Category Frequencies of Annual Total of Crisis Center  
 Call Month Category Frequency and Annual Total of Crisis Center Call Month Category  
 Frequency of archival data (1970-2011)

Descriptive Statistics				
		Cold Months Frequency	Warm Months Frequency	Month Category Frequency
N	Valid	42	42	42
	Missing	0	0	0
Minimum		3,443	3,290	6,733
Maximum		10,623	10,668	21,291
Sum		316,179	322,554	638,733
Mean		7,528.07	7,679.86	15,207.93
Standard Deviation		1,730.91	1,763.17	3,461.63

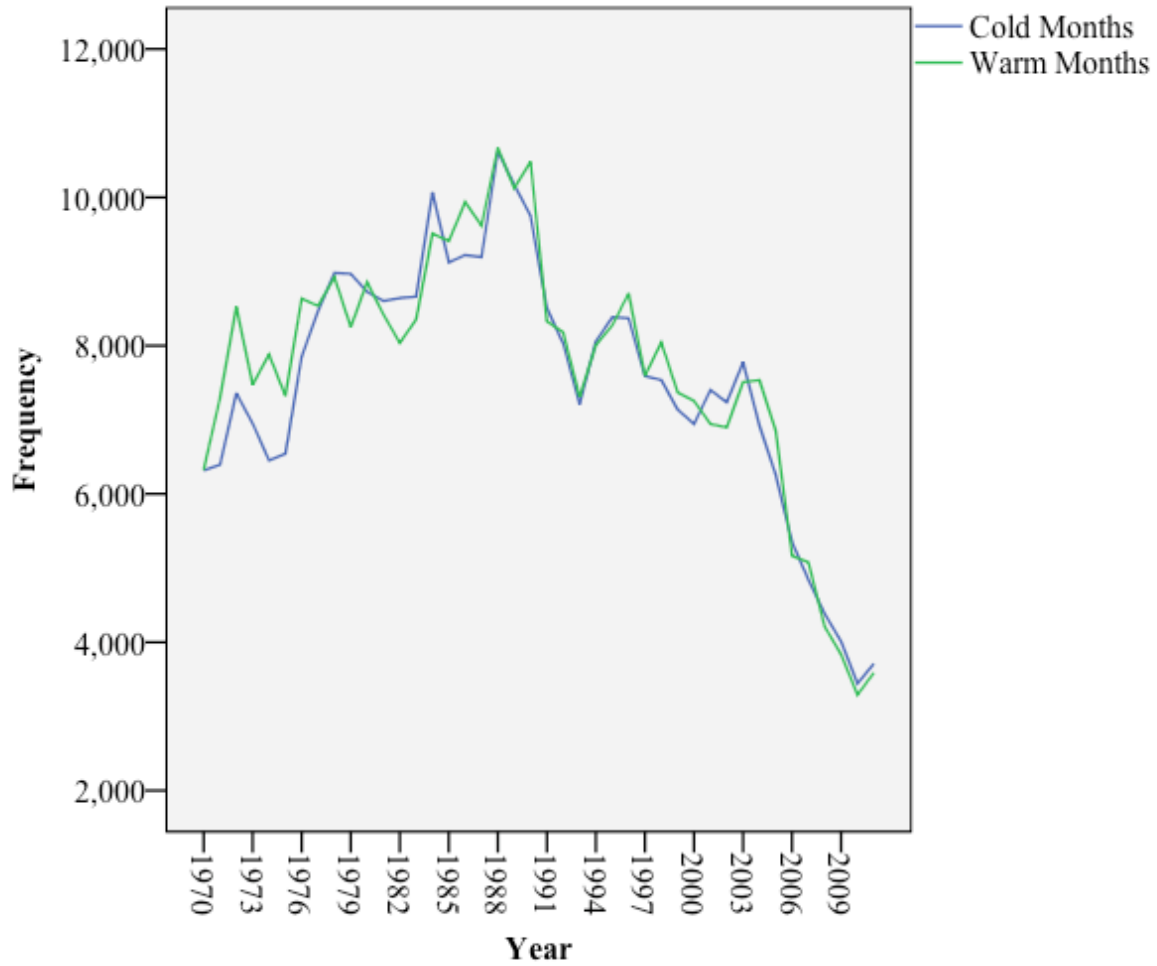


Figure 4.258 Multiple Line Chart for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Category Frequency of archival data (1970-2011)

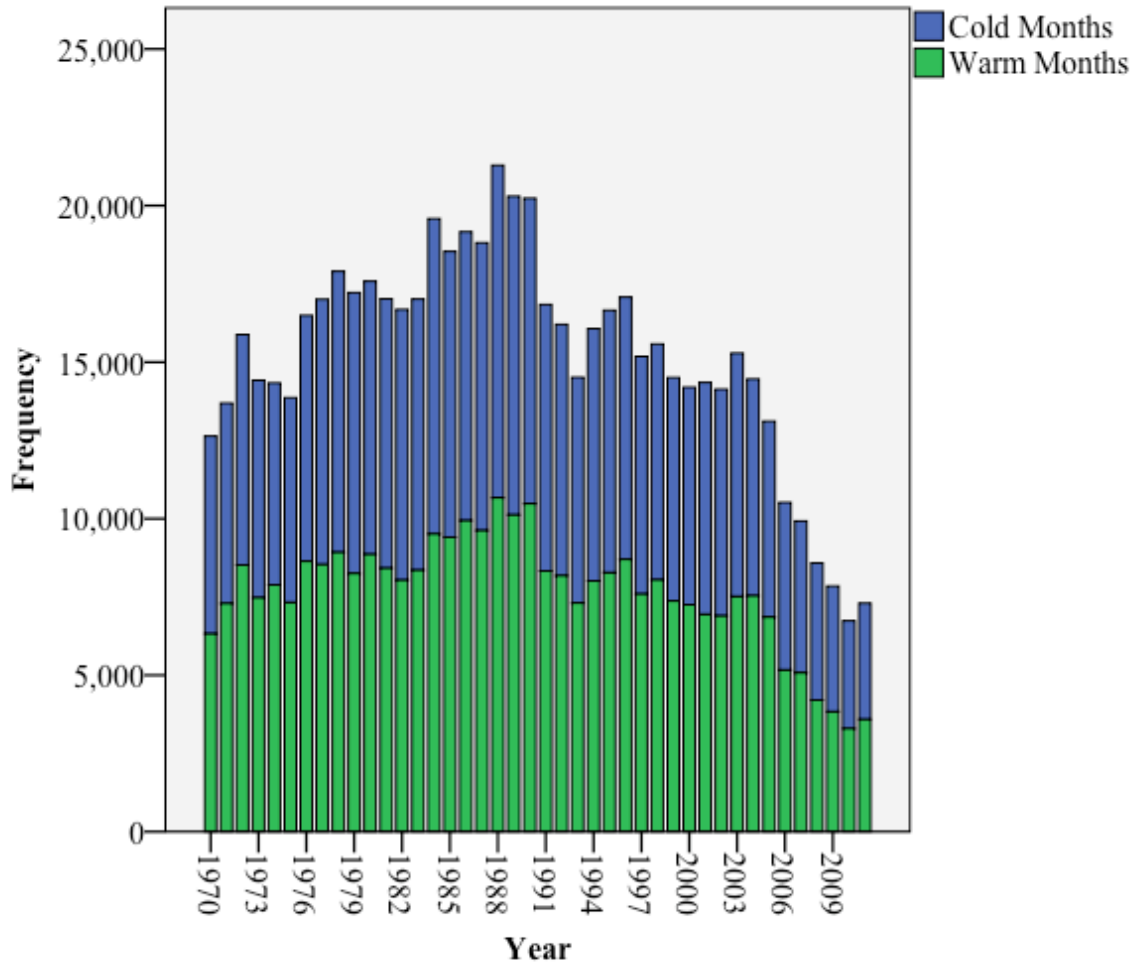


Figure 4.259 Stacked Bar Chart for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Category Frequency of archival data (1970-2011)

*Descriptive Statistics for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio of Annual Total of Crisis Center Call Month Frequency*

The temperature category frequencies of the annual total of crisis center call month frequency was transformed into a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). A descriptive statistical analysis was conducted to evaluate the cold months category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 2,080.62% for the cold months category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 49.54% and a standard deviation of 1.59%. Descriptive statistical analysis reported a minimum frequency of 45.01% and a maximum frequency of 52.09% for the cold months category of the annual total of crisis center call month frequency.

A descriptive statistical analysis was conducted to evaluate the warm months category frequency of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency encompassing forty-two (42) complete years of the archival data (1970-2011). The results of the descriptive statistical analysis reported a sum of 2,119.38% for the warm months category of the annual total of the crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency with a mean of 50.46% and a standard deviation of 1.59%. Descriptive statistical analysis reported a minimum frequency of 47.91% and a maximum frequency of 54.99% and for the warm months category of the annual total of crisis center call month frequency.

Descriptive statistical analyses results for the temperature category frequencies of the annual total of crisis center call month frequencies as a ratio (%) of the annual total of crisis center call month frequencies encompassing forty-two (42) complete years of the archival data (1970-2011) are reported in Table 4.132. Figure 4.260 provides a visual representation for the temperature category frequencies of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency as a multiple line chart encompassing forty-two (42) complete years of the archival data (1970-2011). Figure 4.261 provides a visual representation for the temperature category frequencies of the annual total of crisis center call month frequencies as a ratio (%) of the annual total of crisis center call month frequencies as a simple bar chart encompassing forty-two (42) complete years of the archival data (1970-2011).



Table 4.132

Descriptive Statistics for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011)

Descriptive Statistics			
		Cold Months Frequency as Ratio (%) of Month Category Frequency	Warm Months Frequency as Ratio (%) of Month Category Frequency
N	Valid	42	42
	Missing	0	0
Minimum		45.01%	47.91%
Maximum		52.09%	54.99%
Sum		2,080.62%	2,119.38%
Mean		49.54%	50.46%
Standard Deviation		1.59%	1.59%

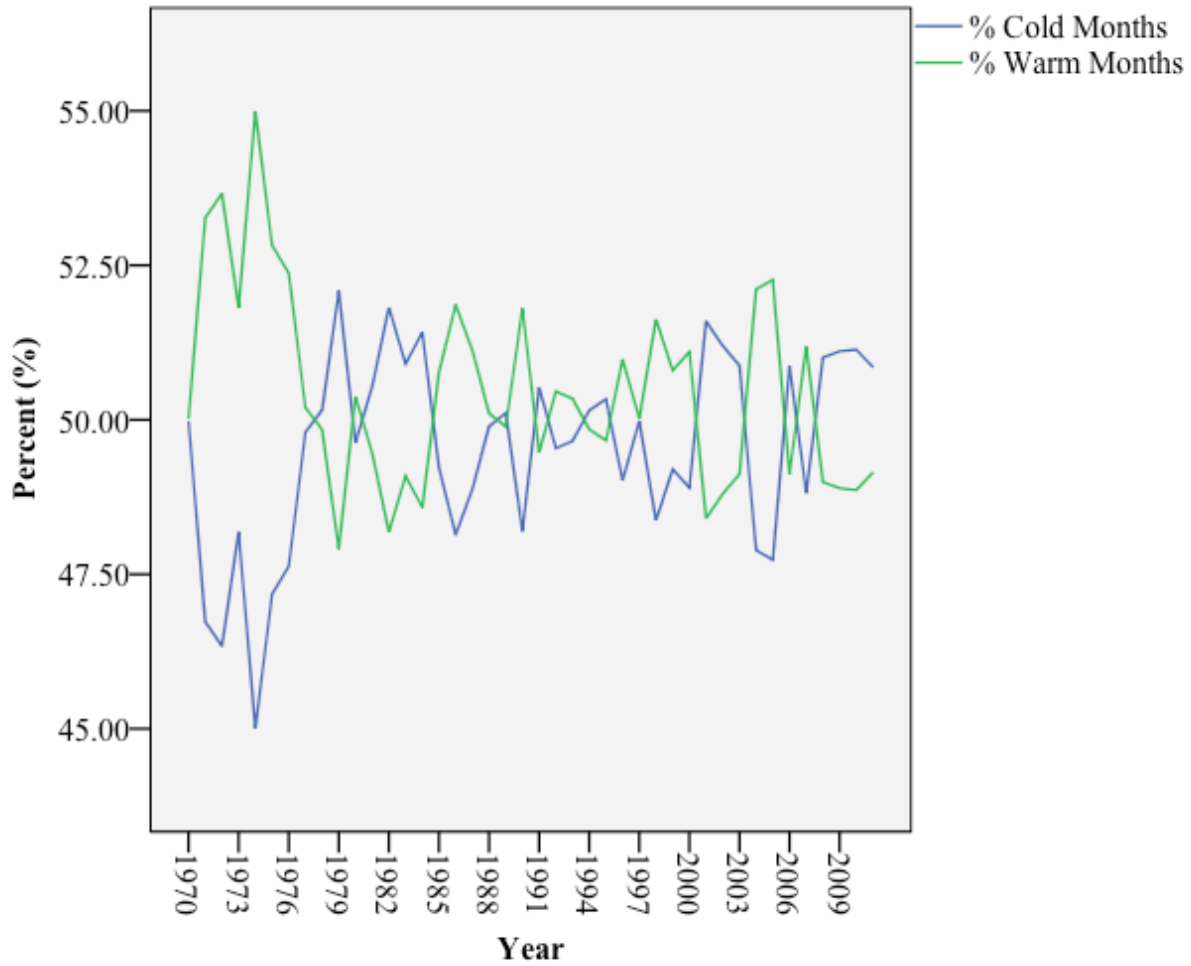


Figure 4.260 Multiple Line Chart for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Frequency of archival data (1970-2011)

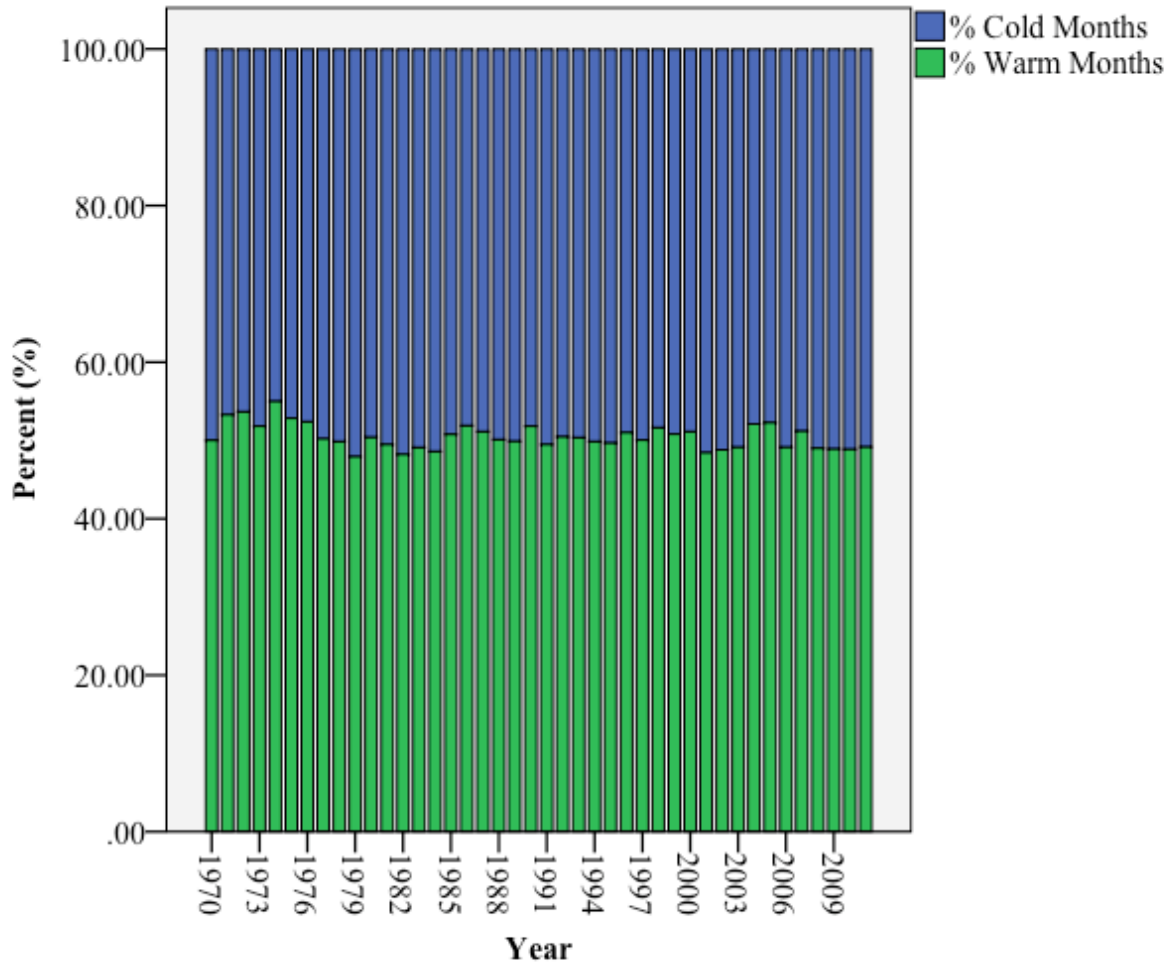


Figure 4.261 Stacked Bar Chart for Temperature Category Frequencies of Annual Total of Crisis Center Call Month Category Frequency as Ratio (%) of Annual Total of Crisis Center Call Month Category Frequency (1970-2011)

Examination of the descriptive statistical results for the temperature category frequencies of the annual total of crisis center call month frequency as a ratio (%) of the annual total of crisis center call month frequency suggests that the temperature category frequencies have remained relatively consistent since throughout the forty-two (42) complete years of coding.

## CHAPTER V: DISCUSSIONS

In Durkheim's seminal work, *On Suicide*, he stated, "The actions by which a man gives up living cover a range of different kinds whose moral and social implications are not all the same." (1897, p. 91) Durkheim's observation can be applied to the crisis intervention center caller as well; there exist an infinite array of possible reasons that underlie the moment in which an individual is compelled to telephone a crisis intervention center. The examination of archival data from a crisis call center can statistically describe the population served by the crisis call center, as well as provide some insight into the moral and social implications behind those possible reasons for the call. Recognizing the inherent statistical limitations in a data set containing only frequency distributions, the descriptive statistical analysis reveals suggestive interpretative complexities contained in the archival data.

Based upon the descriptive statistical analysis of the CONTACT of Chattanooga archival data, a statistical description of the current crisis center caller begins to emerge; the 2011 crisis center caller is likely to be:

- 72.34% likely to be aged between 36-64,
- 92.74% likely to be anonymous,
- 60.85% likely to be female, or 39.15% likely to be male, (demographic data for Hamilton County, TN reports the female population at 51.90% and male population at 48.10%) (US Census Bureau, 2010)

- 32.64% likely to be single, divorced, separated or widowed or 34.39% likely to be marital status unknown, (demographic data for Hamilton County, TN reports average household size at 2.40 persons) (US Census Bureau, 2010)
- 54.40% likely to be a repeat caller or 45.60% likely to be a first-time caller,
- 26.47% likely to be calling due to emotional/mental causes or 20.62% likely to be calling due to lonely causes, or 49.55% likely to be calling due to Major Group 1: Mental Health causes,
- not likely to be day specific,
- not likely to be month specific,
- not likely to be season specific,
- not likely to be temperature specific,
- 29.59% likely to call between 1:30 and 6:00 PM or 26.82% likely to call between 6:00 to 11:00 PM or 24.27% likely to call between 9:30 AM to 1:30 PM,
- likelihood of calling inversely related to population increases,
- likelihood of calling inversely related to unemployment increases.

While it is easy to assume from the statistical description of the 2011 crisis center caller that the caller is not likely to be experiencing an acute crisis episode, operationally defining acute crisis episodes and the related concepts is challenging and complex (Yeager & Roberts, 2003). To diagnose the emotional state of an individual in a few minutes of conversation is difficult at best, disastrous at worst. A volunteer's report of the emotional state of an individual is subject to the limitations of their expert knowledge and personal bias. Administrative personnel's coding of the volunteer's report of the emotional state of an individual is subject to the limitations of

their expert knowledge and personal bias. Each step is an important transfer of the information into the archival data based on a 15 minute telephone call that may or may not provide an accurate description of the individual's emotional state.

A volunteer cannot definitively ascertain the strength of the emotional threads that connect the crisis center caller to their family, friends, co-workers, and community within a fifteen (15) minute time period. It is impossible to know where on the continuum of the spectrum of crisis the individual exists; whether their coping mechanisms are pushed to the limit whereby the next "little thing" will push them over the edge. It is impossible to know whether that 15 minutes of conversation supports the individual sufficiently to facilitate an emotional state whereby their emotional connections to family, friends, coworkers and community are viewed as something to embrace rather than something to be destroyed, whether by harm to themselves or harm to an other.

To complicate matters further, distinct from a crisis episode is serious psychological distress (SPD). SPD is a non-specific category of distress characterized by a DSM-IV mood or anxiety disorder and a lesser degree of functional impairment than a serious mental illness. Wisconsin data from the 2007 Behavioral Risk Factor Survey indicate that adults with past-month SPD have a poor quality of life and poor physical health when compared to other adults. The differences in quality of life for the individual experiencing SPD include significantly lower levels of social support, life satisfaction and higher rates of chronic diseases (Wisconsin Department of Health Services, 2010).

While not a medical condition, an individual experiencing SPD may experience a poor quality of life, poor physical health, and the subsequent implications in their ability to create

meaningful and satisfying life. A person experiencing SPD may experience a diminished capacity to pursue their happiness without having a clear and distinct concept about the origin of their distress (Ridner, 2004). In that diminished capacity to pursue their happiness, they may be unable to create a meaningful and satisfying life contributing to a cycle that leaves an individual alienated, disenfranchised, and marginalized from their society of family, friends, coworkers, and community.

In 2005, The U.S. Department of Health and Human Services (DHHS) and their Substance Abuse and Mental Health Services Administration (SAMSHA) estimated that 24.6 million adults aged 18 or older in the United States experienced SPD. (DHHS, 2005) SAMSHA also reported that among the 24.6 million adults with SPD in 2005, 11.1 million (45.3 percent) received treatment for a mental health problem in the past year leaving 13.5 million (54.7 percent) adults in SPD without treatment. Among adults with SPD in the past year who did not receive treatment and reported an unmet need for treatment, cost or insurance issues were the most frequently reported reason for not obtaining treatment (53.5 percent). Among adults who cited other reasons for not receiving treatment (46.5 percent), statements included not feeling a need for treatment at the time or believing that the problem could be handled without treatment (32.3 percent), stigma associated with treatment (26.2 percent), not knowing where to go for services (21.8 percent), and not having time (16.6 percent).

Findings from the 2010 National Survey on Drug Use and Health (NSDUH) on past year mental illness and mental health problems in the United States reported:

1. An estimated 45.9 million (20%) adults aged 18 or older in the United States had any mental illness in the past year.

2. An estimated 11.4 million (5%) adults aged 18 or older in the United States had serious mental illness in the past year.
3. An estimated 8.7 million (3.8 %) adults aged 18 or older had serious thoughts of suicide in the past year.
4. An estimated 15.5 million (6.8%) adults aged 18 or older in the United States had at least one major depressive episode in the past year.

With a large segment of the population experiencing some type of mental health issue, whether those issues be crisis, serious psychological distress, or mental illness related, a volunteer's ability to operationally distinguish between the conceptual subtleties of these distinct categories becomes paramount to understanding and identifying the needs of the crisis center caller, as well as being able to provide the appropriate service to address the needs of the caller.



## CHAPTER VI: RECOMMENDATIONS

Of primary importance to a volunteer is being able to accurately identify the cause of distress for the individual calling the crisis center. Adopting and implementing a crisis assessment plan for each call would be helpful for the following reasons:

1. Identification:
  - a. Whether the caller is presenting a crisis event and, if so, what type of crisis and what stage of crisis,
  - b. Whether the caller is presenting serious psychological distress,
  - c. Whether the caller is presenting some type of mental illness and, if so, what type of mental illness,
  - d. Whether the caller is presenting a non-crisis event.
2. Coding:
  - a. Crisis and non-crisis calls,
  - b. Serious psychological distress calls,
  - c. Type of mental illness
  - d. Non-crisis event.
3. Training: Current volunteer training modules include basic classroom instruction in crisis call management, monthly in-service training and a library of prerecorded lectures that address specific topics such as domestic violence, substance abuse,

eating disorders, loss and grief, and human sexuality. Volunteer training should including modules on:

- a. Understanding and identifying the stages of crisis,
- b. Understanding and identifying serious psychological distress,
- c. Understanding and identifying factors that contribute to an individual who is alienated, disenfranchised, and marginalized from their society of family, friends, co-workers, and community.

Collecting and evaluating archival data can be a complicated process. When the category designation carries some definitional ambiguity, deciphering the meaning contained within the data becomes impossible and the potentially valuable data is rendered meaningless beyond descriptive statistical analysis. The current data collection method could provide invaluable information by implementing the following:

1. Evaluating current category designations would enhance the veracity of the data;
  - a. Establishing a definitive category descriptor for each category that can be used as an operational guide when coding the data (e.g. sexual: any call whose primary content is sexual in nature),
  - b. Eliminating categories with definitional ambiguity (e.g. emotional),
  - c. Combining similar categories (e.g. homosexuality and sexual),
  - d. Establishing sub-categories for broad general categories (e.g. type of mental illness categories for mental),
  - e. Establishing an operational guide for Major Group categories (e.g. basic necessities: food, clothing, shelter)

The computer's capacity for collecting and processing data can further enhance the value of any collected data. Adopting a computer based data collection system can streamline the VCL process, as well as the tabulation of the data contained in the VCL. By generating a unique entry for each crisis center call into a data based system, VCLs could generate additional information for a variety of purposes:

1. Volunteer generated data entry would create a database that could streamline the VCL tabulation process,
  - a. Unique data entries could be processed by a statistical program conserving valuable administrative efforts otherwise devoted to manually processing data,
  - b. Cross-tabulation of data entries would enhance the veracity of information output (e.g. % male who called because lonely; % male who called because mental, % male would called because out of work),
  - c. Additional socioeconomic data could be added to the database for enhanced statistical evaluation.
2. Ease of statistical processing could provide information in a more timely fashion,
  - a. Identifying call category trends would enable volunteer staff to adapt to the changing needs of the crisis center caller,
  - b. Identifying call category trends would enable volunteer staff to identify any areas of training needs,
  - c. Identifying call category trends would enable volunteer staff to identify social forces that might be having an impact upon the crisis center caller,

- d. Identifying call category trends would enable administrative staff to understand more fully the function the crisis call center serves within the Chattanooga community,
- e. Identifying call category trends would enable administrative staff to seek funding sources compatible with the function the crisis call center serves within the Chattanooga community.

Adopting and implementing a crisis assessment plan, evaluating and revising the coding system, and adopting a computer based data collection system would be an ambitious agenda for any organization. Within a small organization system such as CONTACT of Chattanooga, the agenda could appear overwhelming. With a clear plan for implementation, structured time line for accomplishing agenda goals, and an increased awareness about the function of the organization within the context of the community it serves, CONTACT of Chattanooga would be poised to established itself as a positive role model for the type of crisis call center that is not crisis specific and seeks to address the wide variety of issues that an individual faces across their life span. An additional benefit to adopting and implementing the suggested recommendations would be an increased statistical evaluative ability allowing researchers to examine the suggestive interpretative complexities contained in the current archival data and suggest possible future research.

## REFERENCES

- Baron, A., Klein, R. L., & Thurman, C. W. (1980). Student use of a university telephone counseling service: a 3-year overview. *Crisis Intervention, 11*, 54-59
- Berman, A. L. (1990). Cathy. *Suicide And Life-Threatening Behavior, 20*(1), 85-92.
- Bryant, R. A., & Harvey, A. G. (2000). Telephone crisis intervention skills: A simulated caller paradigm. *Crisis: The Journal Of Crisis Intervention And Suicide Prevention, 21*(2), 90-94. doi:10.1027//0227-5910.21.2.90
- Clark, S. C., & Rootman, I. (1974). Street level drug crisis intervention. *Drug Forum, 3*(3), 239-247.
- CONTACT of Chattanooga (1969-2011) Statistical report and summary of calls received at contact of Chattanooga. Available to the public upon request: *CONTACT of Chattanooga* 6221 Vance Road, Chattanooga, TN 37421
- CONTACT of Chattanooga (2012, April 26). Mission statement. *CONTACT of Chattanooga Web-Site*. Retrieved from: <http://www.callcontact.org/about/mission>
- Cullen, P. P., Ballard, C. G., Ing, R. P., & Mohan, R. N. (1991). Vulnerability, coping and crisis. *The European Journal Of Psychiatry, 5*(4), 210-215.
- Decker, S. E., & Naugle, A. E. (2009). Immediate intervention for sexual assault: A review with recommendations and implications for practitioners. *Journal Of Aggression, Maltreatment & Trauma, 18*(4), 419-441. doi:10.1080/10926770902901485
- Dowling, K. W. (2005). The effect of lunar phases on domestic violence incident rates. *The Forensic Examiner, 14*(4), 13-18.
- Durkheim, E. (1897). *On Suicide*. trans. Robin Buss. Penguin Classics (London: Penguin Books, Ltd., 2006).
- Ebert, B. (1976). A measure of confidentiality in crisis intervention centers. *Crisis Intervention, 7*(2), 69-76.

- Engs, R. C., & Kirk, R. H. (1974). The characteristics of volunteers in crisis intervention centers. *Public Health Reports, 89*(5), 459-464.
- Everstine, D. S., Bodin, A. M., & Everstine, L. (1977). Emergency psychology: A mobile service for police crisis calls. *Family Process, 16*(3), 281-292.  
doi:10.1111/j.1545-5300.1977.00281.x
- Fakhoury, W. H. K. (2002). Suicidal callers to a national hotline in the UK: A comparison of depressive and psychotic sufferers. *Archives of Suicide Research, 6*, 363-371.
- Franks, M., & Medforth, R. (2005). Young helpline callers and difference: Exploring gender, ethnicity and sexuality in helpline access and provision. *Child and Family Social Work, 10*, 77-85.
- Friedrich, M. H. (1977). Crisis intervention with adolescents: A social model in Vienna. *Psychiatria Clinica, 10*(1-3), 114-122.
- Gabennesch, H. (1988). When promises fail: A theory of temporal fluctuations in suicide. *Social Forces, 67*(1), 129-145. doi:10.2307/2579103
- Geller, J. A., & Walsh, J. C. (1977). A treatment model for the abused spouse. *Victimology, 2*(3-4), 627-632.
- Haycock, R. (1998, November). Voices in the night: Frequent callers to a crisis intervention center. *Dissertation Abstracts International, 59*,
- Haywood, C. H. (1977). The future role of crisis intervention centers: Theoretical base and principles of intervention: I. An overview of the ARK model for stress modulation and crisis intervention. *Crisis Intervention, 8*(2), 56-73.
- Ingram, S., Ringle, J. L., Hallstrom, K., Schill, D. E., Gohr, V. M., & Thompson, R. W. (2008). Coping with crisis across the lifespan: The role of a telephone hotline. *Journal Of Child And Family Studies, 17*(5), 663-674. doi:10.1007/s10826-007-9180-z
- Johnson, R. R., & Barry, J. R. (1978). A categorization system of crisis center telephone use: Patterns of interaction. *Journal Of Community Psychology, 6*(2), 130-138. doi: 10.1002/1520-6629(197804)6:2<130::AID-JCOP2290060205>3.0.CO;2-P
- Kranz, P. L. (1985). Crisis intervention: A new training approach to crisis intervention: A mentor training mode. *Crisis Intervention, 14*(4), 107-114.
- Leenaars, A. A., & Lester, D. (1995). Impact of suicide prevention centers on suicide in Canada. *Crisis: The Journal Of Crisis Intervention And Suicide Prevention, 16*(1), 39.

- Lester, D. (1996). Preventing suicide: What does this imply?. *Crisis: The Journal Of Crisis Intervention And Suicide Prevention*, 17(4), 189.
- Levy, R., & Brown, A. (1974). An analysis of calls to a drug-crisis intervention service. *Journal Of Psychedelic Drugs*, 6(2), 143-152. doi:10.1080/02791072.1974.10471823
- McCord, J. B., & Packwood, W. T. (1973). Crisis centers and hotlines: A survey. *Personnel & Guidance Journal*, 51(10), 723-728. doi:10.1002/j.2164-4918.1973.tb05325.x
- McGee, R. K., Richard, W. C., & Bercun, C. (1972). A survey of telephone answering services in suicide prevention and crisis intervention agencies. *Life-Threatening Behavior*, 2(1), 42-47.
- McGowen, R., & King, G. D. (1980). Expectations about effectiveness of telephone crisis intervention. *Psychological Reports*, 46(2), 640-642. doi:10.2466/pr0.1980.46.2.640
- McKenna, J. (1975). Chronically and acutely suicidal persons one month after contact with a crisis intervention centre. *The Canadian Psychiatric Association Journal / La Revue De L'association Des Psychiatres Du Canada*, 20(6), 451-454.
- Megargee, E. I. (2009). The California Psychological Inventory. In J. N. Butcher (Ed.) , Oxford handbook of personality assessment (pp. 323-335). New York, NY US: Oxford University Press.
- Motto, J. A. (1973). On standards for suicide prevention and crisis centers. *Life-Threatening Behavior*, 3(4), 251-260.
- Nelson, G. (1975). The role of anonymity in suicidal contacts with a crisis intervention centre. *The Canadian Psychiatric Association Journal / La Revue De L'association Des Psychiatres Du Canada*, 20(6), 455-459.
- Nelson, R. H. (1977). A new role for crisis centers. *Mh*, 61(2), 12-13.
- Noble, R. (1996). Temporal fluctuations in suicide calls to a crisis intervention service. *Suicide And Life-Threatening Behavior*, 26(4), 415-423.
- O'Donnell, M. M. (2012, August 9) "The basic crisis reaction: How our body and mind respond to traumatic stress." 25th Annual Convening of Crisis Intervention Personnel Chicago, IL., 20, 21, 22, April 2001. Retrieved from: <http://www.uic.edu/orgs/convening/IC.htm>
- Pardeck, J. T., & Nolden, W. L. (1985). An evaluation of a crisis intervention center for parents at risk. *Family Therapy*, 12(1), 25-33.

- Perri, B. (1972, June). The use of telephone therapy as a short-term crisis-intervention counseling technique in a community mental health center. *Dissertation Abstracts International*, 32, 6767.
- Potenza, M. N., Steinberg, M. A., McLaughlin, S. D., Wu, R., Rounsaville, B. J., and O'Malley, S. (2001). Gender-related differences in the characteristics of problem gamblers using a gambling helpline. *American Journal of Psychiatry*, 158, 1500-1505.
- Ridner, S. (2003) Psychological distress: Concept analysis *Journal of Advanced Nursing*, 45(5), 536-545.
- Roberts, A. R., & Camasso, M. J. (1994). Staff turnover at crisis intervention units and centers: A national survey. *Crisis Intervention & Time-Limited Treatment*, 1(1), 1-9.  
doi:10.1093/brief-treatment/1.1.1
- Roberts, A. R. (2000). *Crisis intervention handbook: assessment, treatment, and research*. (2<sup>nd</sup> ed.). New York, NY: Oxford University Press
- Roberts, A. R., & Ottens, A. J. (2005). The seven-stage crisis intervention model: A road map to goal attainment, problem solving, and crisis resolution. *Brief Treatment And Crisis Intervention*, 5(4), 329-339. doi:10.1093/brief-treatment/mhi030
- Scott, V., & Lester, D. (1998). Listening to silence. *Crisis: The Journal Of Crisis Intervention And Suicide Prevention*, 19(3), 105-108. doi:10.1027/0227-5910.19.3.105
- Substance Abuse and Mental Health Services Administration (2012, May 20), *Results from the 2005 national survey on drug use and health: National results*. (Office of Applied Studies, NSDUH Series H-30, DHHS Publication No.SMA 06-4194). Rockville, MD: Substance Abuse and Mental Health Services Administration, 2006  
Retrieved from: <http://www.oas.samhsa.gov/NSDUH/2k5NSDUH/2k5results.htm>
- Substance Abuse and Mental Health Services Administration (2012, May 20), *Results from the 2010 national survey on drug use and health: Summary of national findings*.NSDUH Series H-41, HHA Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011.  
Retrieved from: <http://www.samhsa.gov/data/NSDUH/2k10NSDUH/2k10Results.htm>
- Teare, J. F., Garrett, C. R., Coughlin, D. D., Shanahan, D. L., & Daly, D. L. (1995) America's children in crisis: Adolescents' requests for support from a national telephone hotline. *Journal of Applied Developmental Psychology*, 16, 21-33



- Tennessee Department of Labor and Workforce (2012, July 4) *The labor market report (January 2011 Data ) not seasonally adjusted 1981-2010*  
Retrieved from: [www.tn.gov/labor-wfd/lmr/pdf/2011/LMRJan2011.pdf](http://www.tn.gov/labor-wfd/lmr/pdf/2011/LMRJan2011.pdf)
- United States Department of Commerce: Census Bureau (2012, July 11) *Annual estimates of the population for counties: Hamilton County, TN (1970-2011) not seasonally adjusted*  
Retrieved from: <http://finance-data.com/series/TNHAMI5POP>
- United State Department of Labor: Bureau of Labor Statistics (2012, May 5). *Unemployment rate in Hamilton County, TN. (January 1, 1990 through March 1, 2012) not seasonally adjusted* Retrieved from:  
<http://www.research.stlouisfed.org/fred2/data/TNHAMI5URN.txt>
- United States Department of Commerce: Census Bureau (2012, July 11) *Annual estimates of the population for states: Tennessee (1900-2011) not seasonally adjusted*  
Retrieved from: <http://finance-data.com/series/TNPOP>
- United States Department of Labor: Bureau of Labor Statistics (2012, May 15) *Tennessee statewide and Hamilton County, TN: annual average number of unemployed persons. (1976 -2012) not seasonally adjusted* Retrieved from:  
<ftp://ftp.bls.gov/pub/time.series/la/la.data.50.Tennessee>
- Voracek, M., & Sonneck, G. (1999). Telephonic service utilization in a crisis intervention centre: Some findings, similar to temporal variation in suicides. *Archives Of Suicide Research*, 5(2), 125-139. doi:10.1023/A:1009684922042
- Webb, N. (1994). School based assessment and crisis intervention with kindergarten children following the New York World Trade Center bombing. *Crisis Intervention & Time-Limited Treatment*, 1(1), 47-59.
- Wisconsin Department of Health Services, (2012, May 10). Healthiest Wisconsin 2020. Focus area strategic team convened October 2009 through February 2010. Wisconsin Division of Public Health, U.S. Centers for Disease Control and Prevention. Retrieved from: [www.dhs.wisconsin.gov/hw2020/pdf/mentalhealth.pdf](http://www.dhs.wisconsin.gov/hw2020/pdf/mentalhealth.pdf)
- World Health Organization, (2012, September 29). Mental health: strengthening our response. *Fact Sheet Number 220*. (2010) Retrieved from:  
<http://www.who.int/mediacentre/factsheets/fs220/en/>
- Yeager, K. & Roberts, A., (2003) Differentiating among stress, acutes stress disorder, crisis episodes, trauma, and PTSD: Paradigm and treatment goals. *Brief Treatment and Crisis Intervention* 3, 3-25

## VITA

Susan Kosciolek Salerno was born in Detroit, Michigan to the parents of Eugene and Gloria Kosciolek. She was an only child; born into the Polish community of Hamtramck. Her parents relocated several times throughout her childhood; first to California and then to Chicago. She attended Glendbard East High School and graduated in 1971. She married Dr. David Salerno in 1986. In 1993, Dr. Salerno accepted a position with the Chattanooga Heart Institute and the family relocated to Chattanooga, Tennessee with their two children, Christina and Michael. They divorced in October of 2009. She completed her bachelors in Psychology at the University of Tennessee at Chattanooga in December 2010. She completed her masters in Research Psychology in December 2012. Susan is currently writing a book about her experiences while living amongst the indigenous populations in South America for five (5) months in 2011. Susan is a Court Appointed Special Advocate for the Hamilton County Juvenile Court as well as a crisis center call volunteer at CONTACT of Chattanooga. Susan has a great love of nature. She spends her spare time gardening and hiking.