

**A study of the work role in the context of change  
management practices in Catholic schools.**

Submitted by

Wayne Hellmuth BSc.

BScApplied (HMS Ed)

This thesis is presented as part of the requirements for the award of the degree of  
Masters of Education (Research)

Australian Catholic University

McAuley Campus

P.O.Box 456

VIRGINIA QLD 4014

School of Education

Principal Supervisor: Dr Jeffrey Dorman

Secondary Supervisor: Dr Pam Hanifin

January, 2010

## **STATEMENT OF SOURCES**

This thesis has not been previously submitted for the award for any degree or diploma in any other tertiary institution.

This thesis is written with knowledge of the University laws, and contains no material previously published or written by another person unless it is referenced in the thesis itself.

All research methods stated in this thesis have received the approval of the Australian Catholic University Ethics Committee. Permission to conduct the research in Brisbane Catholic Schools has been obtained by the Brisbane Catholic Education Archdiocese Ethics Committee.

Signature:.....

Date:.....

## **ABSTRACT**

The following paper provides insights into managing educational change through studying how wider educational change can affect individual roles, and reciprocally how role change can have an effect on wider organisational change. Specifically the results of this thesis describe what role characteristics lead to a positive work role identity, within the Catholic educational setting. This paper also provides insight on how multiple roles within a single work position can interact, thereby influencing one's overall negative or positive perceptions of this work position.

This thesis used an *ex-post facto* research design, implementing a single questionnaire to 1250 teachers across 141 schools within the Catholic Archdiocese of Brisbane. Of the surveys distributed there were a total of 204 respondents, with 41.1% being male and 58.5% being female. The distributed questionnaire tested how the role dimensions of Role Ambiguity, Role Salience, and Role Overload lead to Role Conflict and also Inter-role Conflict (conflict between two roles). These various role dimensions were tested for both the respondent's primary role, and a secondary role. These roles were self determined by the respondent as the more and less important roles to them respectively.

The results showed for the primary role, that Role Ambiguity, Role Overload and Role Salience is correlated to Role Conflict. This result was applicable to both the primary and secondary work role. When looking at the interaction between a primary role and a secondary role, the results indicated that a high level of Role Salience in the primary role was more likely to moderate the levels of Inter-role Conflict. These results were in contradiction to previous studies that state high Role Salience in one role is more likely to lead to Inter-role Conflict in

other roles. This result however was not bi-directional. A high Secondary Role Saliency did not have an effect on the conflict experienced between secondary role and other higher order roles.

Future Human Resource (HR) practices within the Catholic Education settings should carefully consider how individual roles change, (particularly in the context of social outcomes for the role holder), as a result of a wider organisational change. Further considerations include ensuring clear definitions of the role change both to the role holder and the interacting social / work groups. Ensuring adequate time resources for the role is also a major consideration. The most notable outcome of this study suggests that when introducing or changing new additional roles to a work position, HR practitioners should primarily consider the saliency of the primary role, before adding or changing additional work roles.

## **ACKNOWLEDGEMENTS**

I would like to formally thank Dr Jeffrey Dorman, and Dr Pam Hanifin for their support and assistance in the development of this thesis. The wise advice given throughout this thesis made the experience an enjoyable and rewarding one. I would also like to thank both Brisbane Catholic Education for their assistance with this study and also the Australian Catholic University for the research grant that assisted me with the costs of conducting this research.

## TABLE OF CONTENTS

STATEMENT OF SOURCES .....	II
ABSTRACT .....	III
ACKNOWLEDGEMENTS .....	V
TABLE OF CONTENTS .....	VI
LIST OF APPENDICES .....	XV
LIST OF FIGURES .....	XVI
LIST OF TABLES .....	XIX
CHAPTER 1 .....	1
1.1 INTRODUCTION.....	1
1.2 THE RESEARCH PROBLEM AND RESEARCH QUESTIONS.....	5
1.2.1 The Research Problem .....	5
1.2.2 The Research Questions.....	6
<i>Role Ambiguity Research Questions</i> .....	6
<i>Role Overload Research Questions</i> .....	7
<i>Role Conflict Research Questions</i> .....	7
<i>Role Saliency Research Questions</i> .....	7
<i>Inter-role Conflict Research Questions</i> .....	8
1.3 EDUCATIONAL RATIONALE FOR THE STUDY.....	8
1.3.1 Change Management in Schools .....	8
1.3.2 Significance of the Study to Catholic Schools.....	11
1.4 RESEARCH METHODOLOGY .....	13
1.4.1 Design of the Study .....	13
1.4.3 Research Setting .....	14
1.5 THE STRUCTURE OF THIS THESIS.....	14

CHAPTER 2 .....	16
LITERATURE REVIEW .....	16
2.1 INTRODUCTION.....	16
2.2 SOME ROLE ISSUES .....	16
2.2.1 The Importance of Roles.....	16
2.2.2 The Interaction of Multiple Roles .....	18
2.3 ROLE CONFLICT .....	20
2.4 ROLE SALIENCE .....	22
2.5 ROLE AMBIGUITY .....	24
2.6 ROLE OVERLOAD.....	27
CHAPTER 3 .....	30
METHODOLOGY.....	30
3.1 INTRODUCTION.....	30
3.2 THE RESEARCH DESIGN .....	30
3.2.1 The Overall Design of the Study .....	31
3.2.2 Framework of the Study.....	32
3.2.3 Data Collection Method.....	36
3.2.4 Data Collection Sites .....	37
3.2.5 Population .....	37
3.2.6 Sample.....	38
3.2.7 Role Combinations .....	39
3.2.8 Research Period.....	41
3.3 INSTRUMENTS .....	41
3.4 COMMENTS ON VALIDITY .....	41
3.4.1 Internal Validity.....	43

3.4.2 External Validity .....	47
3.5 CHAPTER SUMMARY .....	49
CHAPTER 4 .....	50
SELECTION AND VALIDATION OF INSTRUMENTS.....	50
4.1 INTRODUCTION.....	50
4.2 ROLE AMBIGUITY .....	51
4.2.1 History and development of the Role Ambiguity Scale and the Role Conflict Scale .....	51
4.2.2 Dimensions of Role Ambiguity Scale .....	53
4.2.3 Modifications made to Role Ambiguity Scale .....	54
4.2.4 Descriptive statistics for the Role Ambiguity Scale.....	55
4.3 ROLE CONFLICT SCALE.....	57
4.3.1 Dimensions of the Role Conflict Scale.....	58
4.3.2 Modifications made to Role Conflict Scale .....	58
4.3.3 Descriptive statistics for the Role Conflict Scale.....	60
4.4 ROLE OVERLOAD SCALE.....	62
4.4.1 History and development of the Role Overload Scale.....	62
4.4.2 Modifications made to the Role Overload Scale.....	64
4.4.3 Descriptive statistics for the Role Overload Scale .....	64
4.5 ROLE SALIENCE SCALE .....	65
4.5.1 History and development of the Role Salience Scale .....	66
4.5.2 Dimensions of the Life Role Salience Scale .....	68
4.5.3 Modifications made to the Life Role Salience Scale.....	69
4.5.4 Descriptive statistics for the Life Role Salience Scale .....	70
4.6 INTER-ROLE CONFLICT SCALE .....	72



4.6.1 History and development of the Inter-role Conflict Scale .....	72
4.6.2 Modifications made to the Inter-role Conflict scale .....	73
4.7 CHAPTER SUMMARY .....	76
CHAPTER 5 .....	78
RESULTS OF DATA ANALYSIS .....	78
5.1 INTRODUCTION .....	78
5.2 RESEARCH QUESTIONS ANSWERED IN THIS CHAPTER .....	79
5.2.1 Role Ambiguity research questions .....	79
5.2.2 Role Overload research questions .....	79
5.2.3 Role Conflict research questions .....	80
5.2.4 Role Salience research questions .....	80
5.2.5 Inter-role Conflict research questions .....	81
5.3 DATA ANALYSIS TECHNIQUES PERFORMED IN THIS STUDY .....	81
5.3.1 Pearson's $r$ correlation .....	83
5.3.2 $t$ -tests .....	83
5.3.3 Multivariate Analysis of Variance (MANOVA) .....	84
5.3.4 Multivariate Analysis of Variance (MANOVA) with recoded variables .....	84
5.4 DATA PREPARATION .....	84
5.5 RESEARCH QUESTIONS .....	85
5.5.2 Correlations mapped diagrammatically using existing research models .....	87
5.5.3 <i>Effect sizes</i> for correlations .....	88
5.6 ROLE AMBIGUITY RESEARCH QUESTIONS .....	89
RQ 5.6.1 – What is the relationship between Role Ambiguity and Role Conflict? .....	89
RQ 5.6.2 – To what extent is Inter-role Conflict dependent on Role Ambiguity? .....	89

RQ 5.6.3 – To what extent is Role Ambiguity dependent on Gender (A), Age (B), Years of Teaching Service (C), and School Level Focus (D)?.....	90
RQ 5.6.3.A – Gender and Role Ambiguity .....	90
RQ 5.6.3.B – Age and Role Ambiguity.....	91
RQ 5.6.3.C – Years of Service and Role Ambiguity .....	92
RQ 5.6.3.D – School Level Focus and Role Ambiguity. ....	92
RQ 5.6.4 - To what extent is the relationship between Primary Role Ambiguity and Primary Inter-role Conflict dependent on the level of Secondary Role Salience? .....	94
RQ 5.6.5 - To what extent is the relationship between Secondary Role Ambiguity and Secondary Inter-role Conflict dependent by the level of Primary Role Salience? .....	97
5.6.6 Summary of results for Role Ambiguity.....	97
5.7 ROLE OVERLOAD RESEARCH QUESTIONS .....	97
RQ 5.7.1 - What is the relationship between Role Overload and Role Conflict .....	97
RQ 5.7.2 – To what extent is Inter-role Conflict dependent on Role Overload? .....	98
RQ 5.7.3 – To what extent is Role Overload dependent on Gender(A), Age(B), Years of Teaching Service(C), and School Level Focus(D)?.....	98
RQ 5.7.3.A – Gender and Role Overload.....	98
RQ 5.7.3.B – Age and Role Overload .....	99
RQ 5.7.3.C – Year of Service and Role Overload .....	100
RQ 5.7.3.D – School Level Focus and Role Overload.....	100
RQ 5.7.4 – To what extent is the relationship between Primary Role Overload and Primary Inter-role Conflict dependent on the level of Secondary Role Salience? .....	102
RQ 5.7.5 – To what extent is the relationship between Secondary Role Overload and Secondary Inter-role Conflict dependent on the level of Primary Role Salience? .....	103
5.7.6 Summary of results for Role Overload.....	104

5.8 ROLE CONFLICT RESEARCH QUESTIONS.....	104
RQ 5.8.1 - What is the relationship between Role Conflict and Inter-role Conflict? .....	104
RQ 5.8.2 – To what extent is Role Conflict dependent on Gender (A), Age (B), Years of Teaching Service (C), and School Level Focus (D).....	104
RQ 5.8.2.A – Gender and Role Conflict.....	105
RQ 5.8.2.B – Age and Role Conflict.....	105
RQ 5.8.2.C – Years of Service and Role Conflict .....	106
RQ 5.8.2.D – School Level Focus and Role Conflict .....	107
RQ 5.8.3 – To what extent is the relationship between Primary Role Conflict and Primary Inter-role Conflict dependent on the level of Secondary Role Salience?.....	108
RQ 5.8.4 – To what extent is the relationship between Secondary Role Conflict and Secondary Inter-role Conflict dependent on the level of Primary Role Salience? .....	109
5.8.5 Summary of results for Role Conflict.....	110
5.9 ROLE SALIENCE RESEARCH .....	111
RQ 5.9.1 – What is the relationship between Role Salience and Role Conflict? .....	111
RQ 5.9.2 – What is the relationship between Role Salience and Inter-role Conflict?.....	111
RQ 5.9.3 - To what extent is Role Salience dependent on Gender (A), Age (B), Years of Teaching Service (C), and School Level Focus (D).....	111
RQ 5.9.3 A – Gender and Role Salience .....	111
RQ 5.9.3 B – Age and Role Salience .....	112
RQ 5.9.3 C – Years of Service and Role Salience .....	113
RQ 5.9.3 D – School Level Focus and Role Salience.....	114
RQ 5.9.4 – To what extent is Primary Role Salience related to Secondary Role Salience? .....	114
5.9.5 Summary of results for Role Salience .....	115

RQ 5.10.2 A – Gender and Inter-role Conflict .....	116
RQ 5.10.2.B – Age and Inter-role Conflict .....	116
RQ 5.10.2.C – Years of Service and Inter-role Conflict .....	117
RQ 5.10.2.D – School Level Focus and Inter-role Conflict .....	118
5.10.3 Summary of Inter-role Conflict Results.....	119
5.11 CHAPTER SUMMARY.....	119
CHAPTER 6.....	123
DISCUSSION.....	123
6.1 INTRODUCTION.....	123
6.2 ROLE AMBIGUITY .....	124
6.2.1 – Role Ambiguity and Role Identity.....	124
6.2.3 Role Ambiguity and Gender .....	125
6.2.5 Role Ambiguity and Years of Service .....	128
6.2.6 Role Ambiguity and School Level Focus .....	129
6.2.7 Relationship between Role Ambiguity and Inter-role Conflict .....	129
6.2.8 Relationship between Role Ambiguity and Inter-role Conflict with Role Saliency acting as a covariate.....	131
6.2.9 Summary of discussion points for Role Ambiguity .....	132
6.3 ROLE OVERLOAD.....	133
6.3.1 Role Overload and Role Conflict .....	133
6.3.2 Role Overload and Inter-role Conflict.....	133
6.3.3 Role Overload and Gender.....	134
6.3.4 Role Overload and Age.....	136
6.3.5 Role Overload and Years of Service .....	136
6.3.6 Role Overload and School Level Focus.....	136

6.3.7 Role Overload and Inter-role Conflict with Role Salience acting as a covariate....	137
6.3.8 Summary of discussion points for Role Overload.....	137
6.4 ROLE CONFLICT .....	138
6.4.1 Role Conflict and Inter-role Conflict.....	138
6.4.2 Role Conflict and Gender .....	138
6.4.3 Role Conflict and Age .....	139
6.4.4 Role Conflict and Years of Service .....	139
6.4.5 Role Conflict and School Level Focus .....	139
6.4.6 Relationship of Role Conflict and Inter-role Conflict with Role Salience acting as a covariate.....	139
6.4.7 Summary of discussion points for Role Conflict. ....	140
6.5 ROLE SALIENCE .....	140
6.5.1. Relationship between Primary Role Salience and Secondary Role Salience .....	140
6.5.2 Role Salience and Gender .....	141
6.5.3 Role Salience and Age .....	141
6.5.4 Role Salience and Years of Service.....	142
6.5.5 Role Salience and School Level Focus.....	142
6.5.6 Summary of discussion points for Role Salience .....	142
6.6 INTER-ROLE CONFLICT .....	143
6.6.1 Age and Inter-role Conflict .....	143
6.6.2 Gender and Inter-role Conflict .....	143
6.6.3 Years of Service and Inter-role Conflict.....	143
6.6.4 School Level Focus and Inter-role Conflict.....	144
6.6.5 Summary of discussion points for Inter-role Conflict .....	144
6.7 CHAPTER SUMMARY .....	144

CHAPTER 7 .....	148
CONCLUSION: SUMMARY, IMPLICATIONS RECOMMENDATIONS AND LIMITATIONS.....	148
7.1 INTRODUCTION.....	148
7.2 SUMMARY OF THE STUDY .....	148
7.3 IMPLICATIONS TO THE STUDY .....	152
7.3.1 Implications for Queensland Catholic Secondary Schools .....	152
7.3.2 Implications for Methodology in Role Development Research.....	155
7.3.3 Recommended Directions for Future Change Management Research.....	156
7.3.4 Recommended Directions for Role Development Research.....	158
7.4 SUMMARY OF RECOMMENDATIONS .....	159
7.5 LIMITATIONS TO THE STUDY .....	159
7.6 CONCLUDING REMARKS .....	161
REFERENCES .....	162
Appendix A – Survey Questionnaire .....	176
Appendix B – ACU Ethics Approval.....	182
Appendix C – Brisbane Catholic Education Ethics Approval.....	183
Appendix D – BCEC Reform Programs .....	184

**LIST OF APPENDICES**

Appendix A	Role Development Questionnaire .....	176
Appendix B	ACU Ethics Approval .....	182
Appendix C	BCEC Ethics Approval.....	183
Appendix D	BCEC Change Programs.....	184

## LIST OF FIGURES

Figure 3.1:	Carlson and Kacmar's (2000) research model.....	32
Figure 3.2:	Framework for the method of investigation for this thesis. ....	34
Figure 3.3:	Description of sample according to Age.....	38
Figure 3.4:	Description of sample according to Years of Service.....	39
Figure 5.1:	A visual representation of the Pearson's $r$ correlation for each of the constructs used in this study.....	87
Figure 5.2:	<i>Mean</i> scores - Gender Effect on Role Ambiguity.....	90
Figure 5.3:	<i>Mean</i> scores - Age Effect on Role Ambiguity.....	91
Figure 5.4:	<i>Mean</i> scores - Number of Years of Service main effect on Role Ambiguity.....	92
Figure 5.5:	<i>Mean</i> scores - School Level Focus main effect on Role Ambiguity.....	93
Figure 5.6:	The 'Visual Binning' process in SPSS.....	95
Figure 5.7:	Relationship between Primary Role Ambiguity and Inter-role Conflict (primary on secondary) with Secondary Role Salience acting as a covariate.....	95
Figure 5.8:	Relationship between Secondary Role Ambiguity and Inter-role Conflict (secondary on primary) with Primary Role Salience acting as a covariate.....	96
Figure 5.9:	Main effect of Gender on Role Overload in the primary and secondary role.....	99
Figure 5.10:	Main effect of Age on Role Overload in the primary and secondary role.....	99
Figure 5.11:	Main effect of the number of Years of Service on Role Overload in the primary and secondary role.....	100
Figure 5.12:	Main effect of School Level Focus on Role Overload in the primary and secondary role.....	101
Figure 5.13:	Relationship between Role Overload and Role Conflict for the	



	three Role Salience groups (i.e., low, middle and high role salience groups). This relationship is for the primary role.....	102
Figure 5.14:	Relationship between Role Ambiguity and Inter-role Conflict with Role Salience acting as a covariate. This relationship is for the secondary role.....	104
Figure 5.15:	Main effect of Gender on Role Conflict in the primary and secondary roles.....	105
Figure 5.16:	Main effect of Age on Role Conflict in the primary and secondary roles.....	106
Figure 5.17:	Main effect of the Number of Years of Service and Role Conflict in the primary and secondary roles.....	107
Figure 5.18:	Main effect of School Level Focus and Role Conflict in the primary and secondary roles.....	108
Figure 5.19:	Relationship between Role Conflict and Inter-role Conflict with Role Salience acting as a covariate. This relationship is for the primary role.....	109
Figure 5.20:	Relationship between Role Conflict and Inter-role Conflict with Role Salience acting as a covariate. This relationship is for the secondary role.....	110
Figure 5.21:	Main effect of Gender on Role Salience in the primary and secondary roles.....	112
Figure 5.22:	Main effect of Age on Role Salience in the primary and secondary roles.....	113
Figure 5.23:	Main effect of Years of Service on Role Salience in the primary and secondary roles.....	113
Figure 5.24:	Main effect of School Level Focus on Role Salience in the primary and secondary roles.....	114
Figure 5.25:	Relationship between Primary Role Salience and Secondary Role Salience and their effect on Inter-role Conflict.....	115
Figure 5.26:	Main effect of Gender on Inter-role Conflict in the primary and secondary roles.....	116
Figure 5.27:	Main effect of Age on Inter-role Conflict in the primary and	117

	secondary roles.....	
Figure 5.28:	Main effect of Years of Service on Inter-role Conflict in the primary and secondary roles.....	118
Figure 5.29	Main effect of School Level Focus on Inter-role Conflict in the primary and secondary roles.....	119

## LIST OF TABLES

Table 3.1	Cross Tabulation of primary and secondary role combinations indicated for this study.....	40
Table 3.2	Summary of scales and their dimensions.....	42
Table 4.1	Summary of the Role Ambiguity Scale.....	54
Table 4.2	Changes to the wording of items in the Role Ambiguity Scale..	56
Table 4.3	Descriptive statistics for Role Ambiguity scale used in study...	57
Table 4.4	Summary of the Role Conflict Scales and Sub-Scales.....	59
Table 4.5	Changes to the wording of items in the Role Conflict Scale.....	60
Table 4.6	Descriptive statistics for Role Conflict Scale.....	61
Table 4.7	Summary of the Role Overload Scale.....	64
Table 4.8	Changes to the wording of items in the Role Overload Scale....	64
Table 4.9	Descriptive statistics for Role Overload Scale.....	65
Table 4.10	Summary of Life Role Salience Scale.....	69
Table 4.11	Changes to the wording of items to the Life Role Salience Scale.....	70
Table 4.12	Descriptive statistics for the Life Role Salience Scale.....	71
Table 4.13	Changes to the wording of items to the Inter-role Conflict Scale .....	74
Table 4.14	Summary of the Inter-role Conflict Scales and Sub-Scales.....	75
Table 4.15	Descriptive statistics for Inter-role Conflict Scale.....	76
Table 5.1	Data analysis techniques for each research question categorised by role construct.....	82

Table 5.2	Pearson's r correlation for each of the role development questionnaire scales.....	86
Table 5.3	<i>Ordered Effect Size, Means and Standard Deviations</i> for correlations studied in Figure 5.1.....	88
Table 5.4	<i>Tukey HSD – Role Ambiguity on School Level Focus</i> .....	94
Table 5.5	<i>Games-Howell Test – Role Overload on School Level Focus</i> ...	102
Table 5.6	<i>Tukey HSD – Years of Service on Role Conflict</i> .....	107
Table 5.7	<i>Games-Howell Test - Role Conflict on School Level Focus</i> ....	108

## CHAPTER 1

### AN OVERVIEW OF THE STUDY

This chapter has five main sections. In the first section of this chapter the teaching role as a 'multiple role profession' is discussed. This section also presents discussion about five constructs that influence a stakeholder's satisfaction with a role. These constructs include role salience, role conflict, inter-role conflict, role ambiguity and role overload. The research problem and questions are stated in the second section of this chapter. In the third section, the educational rationale for the study is discussed. The research methodology is introduced in the fourth section and the outline of the thesis is the final section.

#### 1.1 INTRODUCTION

Teaching can be characterised as a multiple role profession (Rosenblatt, 2001). The characteristics and parameters of these roles within the education profession are not constant. Multiple roles mean that stakeholders have a corresponding number of identities (Reitzes & Mutran, 1994), and it has been strongly theorised that these identities exist in a hierarchy of importance. Whether a role sits at the top of the hierarchy or at the bottom of this self-constructed hierarchy has been found to be correlated to the particular combinations of the constructs role salience, role conflict, inter-role conflict, role ambiguity and role overload (Biggs & Brough, 2005; Carlson & Kacmar, 2000). In the following five paragraphs a brief definition and background to these constructs is provided. The first of these constructs addressed is role salience.

The importance of a role in the *identity hierarchy*, from a social perspective, is referred to as Role Salience (Carlson & Kacmar, 2000). The term salience, which has been extensively used in identity and structural role theory, suggests that the promotion of one identity must be at the

expense of another. As role salience is defined as how well a stakeholder will subjectively perceive the fit of a particular identity / role within the social setting and the ease with which this role can be played out, particular identities / roles are played in favour and at the expense of other identities in a given situation (Stryker & Serpe, 1994). However, authors such as Parasuraman and Greenhaus (2002) and Seiber (1974) state that roles do not always need to be in conflict, but in fact may be played out simultaneously with multiple roles being complementary to the overall identity of the stakeholder.

Role salience in this study is examined to determine its correlation with role ambiguity, role overload, role conflict and inter-role conflict. Role salience is also used as a covariate in this study when examining the relationship between other variables in this study (e.g., how is the relationship between role ambiguity and role conflict affected by differing levels of role salience?) A definition for the construct role conflict is provided in the next part of this section.

Role conflict in this study is defined according to the definition provided by Rizzo, House and Lirtzman (1970). According to these authors, role conflict can occur between the focal person's internal standards or values and defined role behaviour. Role conflict can occur as a result of differences between the time, resources, or capabilities of the focal person and defined role behaviour. Conflicting expectations and organisational demands in the form of incompatible policies, incompatible standards of evaluation and conflicting requests also lead to role conflict. The final dimension of role conflict can be defined as conflict between two roles (inter-role conflict). Role conflict has been previously found to be correlated to role salience, role ambiguity, role overload and inter-role conflict (Ameata, Cross, Clarke & Bobby, 1986; Beauregard, 2006; Bedian & Armenakis, 1981; Biggs & Brough, 2005; Boyar, Maertz, Pearson & Keough, 2003; Clarke, 2001; Elloy & Smith, 2004; Foley & Hang-Yue, 2005; Frone & Rice, 1987; Herst, 2003; Higgins & Duxbury, 1992; King & King, 1990; Madsen, 2003; Perrewe &

Hochwarter, 2001; Rizzo, House and Lirtzman, 1970). The construct of inter-role conflict is introduced in the next part of this section.

Inter-role conflict is a construct that measures how one role impinges on a stakeholder's commitment to an already existing role, or roles (Elloy & Smith, 2004). There is much contradictory research on whether role accumulation or role incompatibility leads to the phenomenon of inter-role conflict. Role accumulation leads to inter-role conflict when a stakeholder accumulates too many roles, and therefore the usual benefits from holding multiple roles can not be attained (Shelton, 2006; Wiley, 1991). Role incompatibility leads to inter-role conflict when two roles held by a stakeholder are incompatible through differing role values (Rizzo, House & Lirtzman, 1970; Frone & Rice, 1987). Authors such as Beauregard (2006), Biggs and Brough (2005), Carlson and Kacmar (2000), Doress-Worter (1994), and Gove and Zeiss (1987) have studied a number of variables that influence inter-role conflict. These variables include role ambiguity, role conflict, role overload and role salience. These variables have been studied to determine whether particular combinations of these variables valence inter-role conflict (i.e., lead to either a greater level of inter-role conflict or to a lesser level of inter-role conflict). Of these variables, role ambiguity and role conflict have been most consistently and directly related to inter-role conflict (Bedian & Armenakis, 1981; Carlson & Kacmar, 2000; Rizzo, House & Lirtzman, 1970; Tubre & Collins, 2000). Role ambiguity is defined in the next part of this section.

Role ambiguity was originally defined by Rizzo et al. (1970) as a twofold phenomenon. Role ambiguity was firstly defined as the degree to which a stakeholder is uncertain about their role performance. This arises when there is more than one logically defensible understanding of a role definition. This role performance is evaluated by other stakeholders, who interact interdependently with the specific role holder. The second aspect of role ambiguity therefore,

relates to the clarity of feedback from significant others who serve to guide these role behaviours. When the expectations of a role are different from the reality of that role (i.e., ambiguous), the phenomenon of role conflict arises. The variables of role overload and role salience (measured by value of the role and the commitment to a role) may also compound the level of role conflict experienced within a role (Rizzo et al., 1970).

The final construct used in this study is role overload. Whether or not the process is conscious, stakeholders continually monitor role demands both within and across their multiple roles. Role holders will place some arbitrary limit to the time the role holder is willing to allocate to each role within a work position (Sieber, 1974). An evaluation of whether these role demands are excessive is based on the importance the stakeholder places on the role and whether time spent in one role, causes conflict in other life or work domain roles. The phenomenon of role overload occurs when an imbalance between the time spent in a role and the perceived importance / value of the role exists (Rizzo et al., 1970).

The research reported in this thesis investigated the various relationships between role conflict, role overload, role salience, role ambiguity and inter-role conflict. The purpose of this was to propose combinations of role variables that lead to the least amount of role conflict experienced by stakeholders. Furthermore, the study sought to highlight those combinations of role variables that would lead to a minimal amount of inter-role conflict between two roles. These two roles may be regarded as the combination of a primary role and any secondary role. As the term salience suggests, an individual will have roles and identities that are more important than other roles and identities. Therefore, for this research the primary role is defined as the more salient of the two identified roles. The secondary role is defined as the less salient role of the two identified roles e.g., Head of Department role (primary role) and Teaching role (secondary role).



In order to determine the outcome of the research questions stated in the literature review section of this thesis, surveys were distributed to a sample of teaching staff within Queensland Catholic schools. A majority of teaching staff in these schools currently hold multiple roles within their work position. Unlike most other professions, these specific roles are labelled (e.g., sports coordinator, learning support teacher etc.). Also, unlike many other school types, Catholic schools have many pastoral care roles. Catholic schools, therefore, offer an ideal environment for the study of inter-role conflict.

## **1.2 THE RESEARCH PROBLEM AND RESEARCH QUESTIONS**

### **1.2.1 The Research Problem**

Education and educational institutions change constantly, which means that there is a constant redefining of an individual stakeholder's role. Roles define social identity, social integration and opportunities for the individual. Therefore, from the subjective point of view, the study of role change within the change management field is important for the welfare of individual educators and the system in which educators work. It is unlikely that programs designed to bring about change in schools will be successful unless the key units of change (role change) can be fully understood.

The purpose of this study was to gain a greater understanding and make recommendations of improved change management principles. The specific focus of this study was to examine how to reduce role conflict and inter-role conflict and study the most appropriate method for adding/changing roles to existing roles. This study of the antecedents to inter-role conflict helps develop an understanding of the dynamics and the relationships between each of the antecedents to role conflict and therefore inter-role conflict. This new understanding should

lead to better implementation of the change process for individuals and better change management practices in Catholic Schools.

This study was limited to the relationships between each of the antecedents to role conflict and inter-role conflict, and will not consider other variables that may affect the level of inter-role conflict. An example of another variable that may affect the level of inter-role conflict experienced is the ability of a stakeholder to be able to psychologically separate roles and role domains. Settles, Sellers, and Damas (2002) conducted research on the psychological separation of roles. In this research, they found that inter-role conflict could be reduced if the stakeholder was able to 'psychologically' segment and compartmentalise roles. Stakeholders who perceived that they had fewer roles for the same workload compared to their colleagues actually experienced less inter-role conflict. Although this interesting research could have a bearing the results of this research, psychological compartmentalisation was not considered in the present study.

### **1.2.2 The Research Questions**

A total of 19 research questions were formulated for this research. As noted below, these items could be grouped as five role ambiguity questions, five role overload questions, four role salience questions, four role conflict questions and one inter-role conflict question.

#### *Role Ambiguity Research Questions*

**RQ 1** - What is the relationship between role ambiguity and role conflict?

**RQ 2** - To what extent is inter-role conflict dependent on role ambiguity?

**RQ 3** - To what extent is role ambiguity dependent on gender (**A**), age (**B**), years of teaching service (**C**), and school-level focus (**D**).

**RQ 4** - To what extent is the relationship between primary role ambiguity and inter-role (primary on secondary) conflict dependent on the level of secondary role salience?

**RQ 5** - To what extent is the relationship between secondary role ambiguity and inter-role (secondary on primary) conflict dependent on the level of primary role salience?

*Role Overload Research Questions*

**RQ 6** - What is the relationship between role overload and role conflict?

**RQ 7** - To what extent is inter-role conflict dependent on role overload?

**RQ 8** - To what extent is role overload dependent on gender (**A**), age (**B**), years of teaching service (**C**), and school-level focus (**D**).

**RQ 9** - To what extent is the relationship between primary role overload and inter-role (primary on secondary) conflict dependent on the level of secondary role salience?

**RQ 10** - To what extent is the relationship between secondary role overload and secondary inter-role (secondary on primary) conflict dependent on the level of primary role salience?

*Role Conflict Research Questions*

**RQ 11** - What is the relationship between role conflict and inter-role conflict?

**RQ 12** - To what extent is role conflict dependent on gender (**A**), age (**B**), years of teaching service (**C**), and school-level focus (**D**).

**RQ 13** - To what extent is the relationship between primary role conflict and inter-role (primary on secondary) conflict dependent on the level of secondary role salience?

**RQ 14** - To what extent is the relationship between secondary Role Conflict and Secondary Inter-role (secondary on primary) Conflict dependent on the level of primary role salience?

*Role Salience Research Questions*

**RQ 15** - What is the relationship between role salience and role conflict?

**RQ 16** - What is the relationship between role salience and inter-role conflict?

**RQ 17** - To what extent is role salience dependent on gender (**A**), age (**B**), years of teaching service (**C**), and school-level focus (**D**).

**RQ 18** - To what extent is primary role salience related to secondary role salience?

*Inter-role Conflict Research Questions*

**RQ 19** - To what extent is inter-role conflict dependent on gender (**A**), age (**B**), years of teaching service (**C**), and school-level focus (**D**).

In the following section, the educational rationale for the study is discussed. This discussion contains the two considerations of current change management practices, and the significance of the study for Catholic schools.

## **1.3 EDUCATIONAL RATIONALE FOR THE STUDY**

### **1.3.1 Change Management in Schools**

Change within schools is ubiquitous (Fullan, 1993) and increasingly the pressure to change the schools' existing internal practices comes from forces external to the school. External forces such as parents and communities, government policy, funding and the need to develop corporate connections, societal trends, and technology make the phenomenon of change within schools complex and quite unpredictable (Carr, 2000; Pettigrew, Ferlie & McKee, 1992; Scott, 1999). To add to the complexity of the change phenomenon, the protagonists for change within a school can also arise as a result of specific stakeholder characteristics in the school environment. The needs of students; the social, cultural and political climate of the organisation; and stakeholder immobilisation can also add to the difficulty of understanding the complexity of the change process (Carr, 1999).

These catalytic forces for change cannot be managed through non-methodical processes.

Integral to the future success of a school is the way that these internal and external forces are utilised for the advantage of the school (Fullan, 2000). If the purpose of change within schools is to improve the quality of teaching and teaching programs, then change should be seen as a

‘welcome’ process. Fullan (2001) emphasises that a major obstacle to school reform is that schools and teachers are overloaded with programs and policies that they are expected to develop, trial and/or implement.

Given the saturation of projects and programs in which educators are required to partake in, formal change management strategies are not only required to ensure ‘return on investment’ (ROI) for these initiatives, but also to carefully manage the workloads and demands that are placed on teachers and educational support personnel (Daniels, 2003). Educational change programs are often poorly managed and result in failure of the change process and, ultimately, the educational program (Scott, 1999). When commenting on the implementation of federally funded education projects Rand (cited in McLaughlin, 1990) notes that very few projects have been successfully implemented (18%) and the success rates for continuing projects were even less frequently successful. Elmore (1995) states that there are very few educational examples where the majority of teachers are engaging in teaching practices shaped by educational reform.

There are many educational losses as a result of poor change management processes. These educational losses encompass both economic and psychological losses. Economically, the losses result from the ineffective use of limited resources. From the change management perspective, the ineffective delivery of teaching programs and the unproductive use of these limited resources equates to a lack of engagement by educators with new policies and programs. Psychologically, teachers then carry the emotional burden of their experiences in failed change programs, and lose enthusiasm for future change or educational initiatives. A lack of student engagement with the educational programs also is often a reflection of poorly planned and executed educational initiatives (Scott, 1999).

Given the clear need for effective change management strategies, existing literature on change management, irrespective of the profession, contains little empirical evidence. Even less empirical research has been conducted to identify the reason for desired or targeted change and how to influence these changes (Guimaraes & Armstrong, 1998). Change management theory is largely retrospective case study based and contains many assumptions and superficial analyses. Most of these assumptions are unchallenged personal opinions and experience weighs heavily in the change management discipline (Todnem, 2005). In the educational setting very little change management research has been conducted and applied and, like most other vocational disciplines, most of the literature is retrospective case study based.

If effective knowledge and experience in change management is available in the organisation, the utilisation of this effective change management and knowledge is unlikely. This is largely because the need for change within schools is often not recognised and, if it is, school leaders are unlikely to be able to compel or support the change. Muncey and McQuillan (1991) noted in their research that even though it was well understood that American schools needed to be fundamentally changed, most teachers and the related community did not identify the need or desire to change. Even in schools where key performance indicators (e.g., low literacy rates) showed the need for transformational change, there was no mandate or provision for action within these schools. If the need for change is recognised at the school community level, there is little understanding of how to effectively implement these changes.

Previous change management literature has predominantly portrayed organisational change as an organisational process with the key question being; *How are the objective and subjective resources of the organisation mobilised to successfully achieve change?* Early change management literature tended to focus on isolating those organisational variables that correlated with successful organisational change. Having laid this foundation, current change

management literature has predominantly emphasised the organising processes in change management. Some authors have modelled this organising process, incorporating those organisational variables that were found to correlate well with successful change. This *organising process* is exemplified by populist change management models such as Kotter and Cohen's (2005) eight step methodology to change. Problematic to this line of research is that, even though most of this research has found that many variables were related to the subjective processes, these subjective processes were studied from the organisational perspective. Chia (2000) states that there must be an ontological shift to a more subjective view of change (i.e., how do individuals personally view and commit to change?) That is, collecting and analysing perceptual data from individuals directly involved in change processes are vital. Aligning with this view, role research offers opportunities for the 'change' researcher to study change from this subjective perspective.

### **1.3.2 Significance of the Study to Catholic Schools**

An underlying theme of literature on change in schools is that reform within schools is problematic because of the volume of ongoing change programs. Currently there have been significant changes in both Australian Federal and State legislation which affect the way that schools operate. Federally targeted funding is now often conditional on specific changes in schools (Everett, Director, Furtado, & Vickers, 2008). Incorporating these *conditional* requirements into education requires schools, in conjunction with administering Catholic education offices, to identify projects and initiatives that need to be undertaken in order to comply with funding conditions. At the time of submission of this thesis, this research identified 33 separate projects being undertaken by Brisbane Catholic Education. A list of these projects can be found in Appendix 4 of this thesis. Given the volume of educational and I.T. based programs, it can be assumed that within Catholic Education there would be a significant

number of new roles to support these additional programs as well as a significant number of changes to existing roles.

As the change programs that are currently undertaken by Brisbane Catholic Education occur simultaneously, individuals must undertake many new and varied roles or make changes to their existing roles, to ensure the success of change programs. Therefore, inter-role conflict is a significant area of study to ensure that the commitment levels of teachers across a number of roles within the educational setting are maintained, and that a balance of roles is assured for stakeholders in the educational setting.

The focus of this section was to provide a rationale for this study of roles in Catholic schools. An overview of the wider change management framework was provided as well as how research in the area of role development fits into this wider change management framework. Also provided in this section is support for the significance of this study to schools and Catholic education.



## **1.4 RESEARCH METHODOLOGY**

In this section, the research methodology of this study is stated. It encompasses the design of the study, the quantitative data collection methods and the research setting.

### **1.4.1 Design of the Study**

The design of this study was guided by the nature of the research problem. In many educational research studies it is not possible to study cause and effect relationships through the control and manipulation of variables in a true experimental design. When the ability to control variables is limited, unrealistic, impractical or unethical, an ex-post facto research design is a more desirable research methodology over the true experimental research design (Neuman, 1999).

An ex-post facto research design was chosen for this study because it was considered unrealistic to manipulate variables. Ex-post facto designs have both advantages and disadvantages over an experimental design. Its main advantage is that it does not introduce treatment bias or artificiality into the research. One disadvantage of this method is that the researcher cannot be sure that the subjects are randomised. Another disadvantage is that no cause and effect relationship between the variables can be established. More information about the ex-post facto design in the context of this study is provided in Chapter 3 of this thesis.

### **1.4.2 Data Collection Methods**

A single survey to collect information on the research questions was used in this study. This survey contained six separate scales assembled in a single questionnaire. Information about this questionnaire, including justification of the scales and their validation, can be found in Chapter 4.

### **1.4.3 Research Setting**

This study was conducted in schools administered by Brisbane Catholic Education. Surveys were distributed to all schools. More information about the method of dissemination to these schools can be found in Section 3.2.3.

## **1.5 THE STRUCTURE OF THIS THESIS**

Apart from this introductory chapter which provided an overview of the study, this thesis has six chapters. Chapter 2 is a review of salient literature for this study. It includes a definition of the term *role* and a discussion of the significance of roles to change management studies. A definition of five constructs that have been previously found to be correlated to the role is provided in this chapter. In this chapter literature presented provides the basis for discussing the findings of this study.

In Chapter 3 of this study the research methodology is introduced. There are three main sections of this chapter. In this first section the framework for this study using the *multiple process model* as a starting point is discussed. In the second section, the procedures of the study including data collection methods, data collection sites, the sample, and research period are discussed. The survey questionnaire, containing scales to assess role ambiguity, role overload, role conflict, role salience and inter-role conflict, is introduced. Finally, issues concerning the validity of the study's design are discussed.

Reports for the validation of the instrument are provided in Chapter 4. Each of the five scales of this study (viz. role conflict, role ambiguity, role overload, role salience and inter-role conflict), are discussed in terms of their historical development and suitability for this study. For each scale introduced in this chapter, modifications to items are reported. Validation data are provided based on the data collected in the present study.

The results of this study are presented in Chapter 5. This chapter contains the data analysis techniques for each of the research questions stated in this thesis. These data analysis techniques include correlational analyses (using Pearson's  $r$ ) to study the relationships among the primary and secondary roles. A series of  $t$ -tests were used to examine gender differences for each of the constructs presented. Multivariate analysis of variance (MANOVA) was used to examine the effects of age, years of teaching service, and school level focus on the role constructs. Graphs are used to illustrate the findings of these analyses.

The results of the data analysis by considering the findings in the light of previous, relevant studies in role development and change management are discussed in Chapter 6. That is, the discussions in this chapter present the findings of each research question and contextualise these findings by making comparisons with the outcomes of similar studies.

In the final chapter of this thesis a summary of the study is presented. In this chapter, each of the previous chapters are summarised, and the implications of this study for Queensland Catholic schools and the field of change management research are discussed. The limitations of this study are also briefly discussed.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

A review of the existing literature relevant to this study is presented in this chapter. Other than this introduction, this chapter is divided into five main sections. In the first section of this chapter a definition of the term role from the *Roles as Resource* perspective is presented. From this perspective, the purpose of roles in social interaction and social behaviour is grounded. The constructs of role conflict and inter-role conflict are the basis for the second section. As part of the introduction to these two constructs, two views on why inter-role conflict occurs are proposed. Those holding the first view claims that role accumulation (i.e., adding extra additional roles) will always lead to inter-role conflict. Advocates of the second view hold that additional roles do not always have to lead to inter-role conflict, but in fact can add additional social benefits to the role holder. Those that hold the second view believe that role conflict occurs as a result of conflicting values across multiple roles. Sections 2.3 to 2.6 address current research and its conclusions in the areas of role conflict, role salience, role ambiguity, and role overload respectively. In the final section of this chapter a summary of the chapter is provided and this provides a platform for the study's methodology discussed in Chapter 3.

#### **2.2 SOME ROLE ISSUES**

##### **2.2.1 The Importance of Roles**

Roles are the building blocks of social structure. They define the relationship between the individual agency and the collective structure (Callero, 1994). Although several authors have discussed the function of roles from interactionist and structural perspectives (Turner, 1985), and a social network perspective (Boorman & White, 1976), the author of this study prefers the

'Roles as a Resource' perspective to define roles. This definition encompasses a more integrated approach that includes all three aforementioned perspectives (Callero, 1994).

From the Roles as a Resource perspective, roles are employed by individuals for two purposes: firstly to allow the human agency to be facilitated and expressed through the use of these roles (Baker & Faulkner, 1989), and secondly as tools to establish them within a social structure.

Roles allow stakeholders' access to resources in the form of social, cultural, and material capital. Without roles, these resources would not be available (Callero, 1994).

While recognising that roles act as a conduit for the human agency, there has been debate in the literature on whether behaviour within roles is determined by roles, or whether roles themselves are a resource that allows and facilitates human agency. It has been put forward by Mitchell, Agle and Wood (1997), that for behaviour to be successfully 'played out' and reinforced within social groups, there must be three critical attributes attached to the particular behaviour. These attributes are empowerment, legitimacy and urgency. It is suggested that all of these three attributes must be present in order for particular role behaviours, or sets of role behaviours, to be reinforced within the social group or organisation. Rowley and Moldoveanu (2003) state that stakeholders who are empowered in a role can influence the social group, but will not necessarily have the will to do so unless the role behaviour is considered to be urgent and legitimate. Stakeholders whose roles have legitimacy, but who are not empowered to act, will not be motivated to do so. Further to this, a stakeholder whose role behaviours are urgent, but not seen as legitimate or important, will be seen as an annoying stakeholder. In structural role theory, roles are defined as a set of normative behaviours defined by the organisation, and anticipated by the role holder (Baker & Faulkner, 1991). Established roles therefore facilitates human agency because established roles legitimises behaviour, makes the behaviours urgent, and empowers the stakeholders to act.

As a result of the 'role' facilitating human agency, roles give clarity and authority to role related behaviours. As a consequence of this, behaviours and therefore the identity associated with the role are reinforced and accepted by the social group. Roles therefore can be seen as tools for establishing the stakeholder as part of the social group. If roles provide clarity to role behaviours, role ambiguity should have an antagonistic effect (i.e., it does not legitimise role behaviours in the social group or organisation). Role ambiguity has the potential to be disempowering for the role holder, and can therefore potentially lead to role conflict and also to inter-role conflict. Factors such as role overload and role ambiguity can affect the ability of the stakeholder to facilitate the human agency through the role.

An explanation in this section of the importance of the role in allowing the human agency is forwarded. This explanation highlights roles as a vehicle to facilitate action and self expression and also as tools to establish oneself within a social structure. However, educators rarely hold a single role within their work position. A discussion on how multiple roles can potentially interact, to either have a potentially negative or positive outcome for the stakeholder is provided in the next section.

### **2.2.2 The Interaction of Multiple Roles**

The term role strain (now referred to as role conflict) was first introduced by Merton (1957). Merton proposed that role conflict was primarily caused when there were differing expectations with regard to behaviour between multiple roles. Soon after Merton (1957) proposed that role conflict was caused by incompatible role values, Goode (1960) proposed that multiple roles caused role conflict because of role overload, and that role accumulation was the primary cause of role conflict. Building on Merton's (1957) and Goode's (1960) research, Snoek (1966) stated that these authors neglected to question subjects on the possible benefits of holding multiple roles. Research on inter-role conflict since this era has lead to

many inconsistent conclusions, but evidence exists that inter-role conflict is related to both role value inconsistencies and role accumulation.

Turner (1968) for example, showed that job satisfaction did not necessarily relate to the number of roles held, and Seiber (1974) proposed the notion that role accumulation was not negatively related to job satisfaction, and that additional roles could bring further 'job privileges, better job security, increased level of resources, and enrichment in terms of personality and ego gratification' (Seiber, p. 569). Current research still supports this notion that role conflict can be caused through role overload, but most research has shown that role conflict is strongest when there are conflicting role values. For example Biggs and Brough (2005) when researching the relationship between salience levels and work-family conflict found an emerging pattern in inter-role conflict research for work and family roles. This emerging pattern was that role stress was more likely when the behaviour expected for a specific role departed from the usual sets of behaviours expected by a stakeholder at that age and for that gender. Thoits (1983) also originally found that an increased number of roles correlated to a decreased distress level, and (1986 and 1992) she argued that it was specific role combinations that influenced psychological stress. To support these findings Menaghan (1989) also found that role stress was not related to number of roles that a stakeholder acted in, but rather role stress was related to specific role combinations.

More recently, research on inter-role conflict in the work-family context has studied specific variables that lead to inter-role conflict (Biggs & Brough, 2005; Boyar, Maertz, Pearson & Keough, 2003). These studies primarily focus on conflict between the two separate domains of the work and family. The work and family roles are often referred to as domains because they are seen as two very distinct non-overlapping roles (Carlson, Kacmar & Stepina, 1995). This line of inquiry is referred to as 'work-life' balance in the literature (Clark, 2001). The premise

of this line of inquiry is that stakeholders can experience high levels of satisfaction in both the work and family domains given that the role characteristics of role ambiguity, role overload, role salience, role conflict, and inter-role conflict are carefully considered and managed.

In this section an introduction to the concept of the role from the 'Roles as a Resource' perspective has been provided. From this perspective the importance of the role and its relationship with the stakeholder's identity within the social group is stated. It has been shown in this section that the positive or negative identity that is derived through the role can be valanced by role factors such as role conflict, inter-role conflict, role salience, role ambiguity, role overload. In the following sections a discussion on the previous literature grouped by the constructs of role conflict, role salience, role ambiguity, and role overload is forwarded. The focus of each of these sections will be to examine the relationship between the construct with inter-role conflict.

## **2.3 ROLE CONFLICT**

In the following section an introduction and discussion on research literature on role conflict is provided. The literature highlighted in this section will examine the relationship between role salience and role conflict, role overload and role conflict, and role ambiguity and role conflict. Most of the previous research on role conflict and inter-role conflict has used scales from Rizzo, House and Lirtzman (1970). Within these scales inter-role conflict is seen as a dimension of role conflict. Historically, therefore, research pertaining to role conflict is also relevant to inter-role conflict (see Rizzo et al., 1970). More recently as interest in the topic of inter-role conflict has increased, a greater number of scales that measure inter-role conflict have been developed. Hence, in this section literature examining the relationship between role conflict and inter-role conflict is briefly highlighted.



Role theory maintains that stakeholders occupy roles because roles provide the necessary conduit for obtaining the cultural, social and material resources and rewards that lead to ego gratification (Hogg & Vaughn, 2002). Each role and additional roles that are taken on are evaluated by the stakeholder in terms of whether the role will provide the necessary role benefits and role certainty. If the outcome of this evaluation is perceived as negative, then the phenomenon of role conflict arises (Burke & Reitzes, 1981). Role conflict is defined by Rizzo et al. (1970) as occurring through one of six ways. Role conflict can occur when there is conflict between the focal person's internal standards or values and the defined role behaviour, conflict between the time, resources, or capabilities of the focal person and the defined role behaviour, conflicting expectations and organisational demands in the form of incompatible policies, incompatible standards of evaluation and conflicting requests. The final dimension of role conflict is conflict between two roles (inter-role conflict).

It has been clearly established that role overload, role salience, and role ambiguity are correlated to role conflict and that role conflict is related to inter-role conflict (Ameata, Cross, Clarke & Bobby, 1986; Beauregard, 2006; Bedian & Armenakis, 1981; Biggs & Brough, 2005; Boyar, Maertz, Pearson & Keough, 2003; Clarke, 2001; Elloy & Smith, 2004; Foley & Hang-Yue, 2005; Frone & Rice, 1987; Herst, 2003; Higgins & Duxbury, 1992; King & King, 1990; Madsen, 2003; Perrewé & Hochwarter, 2001; Rizzo et al., 1970). Although research establishes that role ambiguity, role overload, and role salience are clearly related to role conflict, research determining the relationship between role ambiguity, role overload and role salience with inter-role conflict is less established (Tubre & Collins, 2000; Netemeyer et al., 1990).

Inter-role conflict has been found to be related to job satisfaction and a propensity to leave the organisation (Kosmas, Romano, Tanewski, Karofsky, Millen & Yilmaz, 2003; Lui, Ngo, &

Tsang, 2001). As a result of the significance of inter-role conflict in organisational and change management research, the relationship between role conflict and inter-role conflict has also been well researched. Chiu, Man, and Thayer (1998) and Kemery, Bedian and Armenakis (1985), for example, found that in the area of work-family conflict both work conflict and family conflict were significantly related to inter-role conflict.

Building upon this overview of role conflict and inter-role conflict research, the next section provides an introduction to role salience, and *Social Identity Theory*.

## **2.4 ROLE SALIENCE**

In this section an examination of the construct of role salience within the framework of Social Identity Theory is conducted. Referenced in this section are previous studies of role salience and discussion of the relationships between role salience and inter-role conflict are provided.

Since the early research era of Goode (1960) and Merton (1957), research in the field of Social Identity Theory has ‘paved the way’ for a greater depth of research in the area of inter-role conflict. Social Identity, first conceived by Tajfel and Turner (1979), is described as “the motivating force of people’s desire to obtain and maintain a measurably positive self-concept through membership in groups” (Mullin & Hogg, p 91). Burke (1969), Burke and Harrod (2002), Stryker (2000), and Burke and Stets (1999) have since furthered the work of Tajfel and Turner (1979) forming the foundations of Social Identity Theory (SIT), and Identity Control Theory (ICT). SIT and ICT are both theories that explain the interaction of the individual with the group. They are very subtle in their differences and are often now collectively referred to as Social Identity Theory. Of relevance from this body of work has been the coining of the term *identity salience* which pertains to the notion that multiple roles for a stakeholder, leads to a corresponding number of identities (Stryker, 1968). These multiple identities have a self-

constructed level of importance and are hierarchical. The level at which a particular identity sits in this hierarchy is based on intrinsic and extrinsic gratification, and therefore is related to the likelihood that the identity will play itself out in a particular situation (Stryker, 1980).

Social Identity Theory has implications for inter-role conflict, because the more salient a role is, in a stakeholder's hierarchy, the more likely it is the stakeholder will contribute his / her own personal resources to that role (Stryker & Serpe, 1994). This has implications in multiple role conflict research because the more salient a role is in the hierarchy, the more likely that a stakeholder will experience conflict between multiple roles (Carlson & Kacmar, 2000).

Recently there has been a plethora of research that centres on inter-role conflict in the specific area of work-family conflict (WFC), but not all of this research has considered the variable of salience (Amatea, 1986). Much of this work has assumed that all roles are equally important to the individual stakeholder. This work has been strongly criticised by Perrewe and Hochwater (2001). Biggs and Brough (2005) further this notion by stating "Role salience is a valid proposition, which has been largely overlooked in the majority of published WFC investigations" (p31).

Research on the relationship between number of roles and life satisfaction has found that multiple roles offer greater benefits to the individual stakeholder. Gove and Zeiss (1987) concluded that typically the greater the number of roles occupied, the greater the likelihood that adults were satisfied with work, marital, and parental roles. Doress-Worter (1994) concluded that women with multiple roles reported better physical and psychological health than women with fewer roles. However, when salience is considered, research suggests that a high level of commitment to one particular role correlates highly with inter-role conflict. Beauregard (2006) reinforces this view by concluding that role domains have a significant impact on inter-role conflict. Biggs and Brough (2005) found that role salience predicted bi-

directional conflict (inter-role conflict) in role domains and concluded that work salience predicted work to family conflict and family salience predicted family to work conflict (inter-role conflict is full duplex in its directionality, meaning that any role can cause conflict on any other role).

The difficulty with Biggs and Brough's (2005) research and other studies in the field of WFC is that role overload and role conflict are not considered across both role domains. For example, if the family domain has high salience and the work domain has low salience and high conflict, it would be logical to conclude that the higher the salience in the family domain, the greater the inter-role conflict. This would be similar if the work domain had high salience and the family domain had high conflict.

An introduction to the construct of role salience had been provided in this section and discussion on two dialectical views on role accumulation has been provided. One view proposed that when a stakeholder holds multiple roles, high salient roles will lead to conflict with other roles. The other view presented in this section is that high role salience does not need to necessarily lead to inter-role conflict. A discussion on the construct of role ambiguity and its relationship to inter-role conflict is conducted in Section 2.4.

## **2.5 ROLE AMBIGUITY**

Roles in teaching are formal and informal, paid and unpaid, and many roles are expected from teachers that are ambiguous (e.g., literacy and numeracy coordinator). As these types of ambiguous roles within schools are new and transient by nature, they are usually not very well defined. The interactive behaviours expected in these ambiguous roles will not necessarily be understood by the social group, and therefore the reciprocal nature of social interaction will be strained, leaving few points of social integration in this role. Often too, because these new

transient roles are seen as an 'add on', resources for the programs are low and provide few material rewards and little material control in this role. In other words, such secondary 'add on' roles do not provide the cultural, social and material resources that roles, by definition, should contain.

Because roles are also the conduit for the interaction between the individual and the social group, the behaviours needed by the role holder to successfully fulfil the role may not be given legitimacy by the social group. Transient or new roles such as a Literacy and Numeracy Coordinator would obviously be seen as important within a school, but it is often heard that the concentrated curriculum, particularly in the secondary years, does not allow for dedicated time to literacy and numeracy. Therefore, roles that do not predefine social behaviours, expected reciprocal social behaviours, and do not give behaviour urgency, legitimacy and empowerment are seen as ambiguous from the role holder's perspective. Role ambiguity therefore is defined twofold. Role ambiguity is defined as the lack of clarity of specific tasks and behaviours of a role, and it is also defined as the non-favourable behaviours from others that emanate from acting in that role (Ameata et. al., 1986).

Previous research on role ambiguity has found that role ambiguity is directly correlated to role conflict (Bedian & Armenakis, 1981; Jones, 2005; Rizzo et al. 1970; Tubre & Collins, 2000) and inter-role conflict (Karlson & Kacmar, 2000). The relationship between role ambiguity and role conflict / inter-role conflict has been replicated across several professions (Kemery et. al., 1985). As such, it can be reasonably hypothesised for this study that role ambiguity will be positively correlated to role conflict, and inter-role conflict.

When role salience is factored into the relationship between role ambiguity and inter-role conflict, researchers have found that inter-role conflict is greater when role salience in a

particular role domain is high. Carlson and Kacmar (2000) for example, found that family role ambiguity on inter-role conflict (family interference on work conflict) and family role conflict is higher for those with higher work centrality. Given that an ambiguous role is added to already existing salient roles, inter-role conflict will arise because the secondary role will be perceived to detract from the stakeholder's ability to capitalise on and utilise the role benefits of salient roles. However, not all studies that have examined the relationship between role ambiguity and inter-role conflict have found these predicted results.

For example, Boyar, Carr, Mosely & Carson (2003), in their research found relationships between role conflict and inter-role conflict, role overload and inter-role conflict, but failed to find the relationship between role ambiguity and inter-role conflict. This non-significant relationship between role ambiguity and inter-role conflict was only one way in its directionality. A possible explanation of this study is that role salience was not considered as a covariate in this relationship (e.g., the level of role salience in the primary role is important in determining, whether role ambiguity in a secondary role will lead to secondary inter-role conflict). If role salience in a role is high and an individual has ambiguity in a second role, then it is proposed that this will lead to inter-role conflict. As a highly salient role will have strongly established cultural and social connections, and material rewards and resources, a secondary ambiguous role will facilitate the perception that the secondary role will limit the opportunities to derive the benefits that are gained from occupying the primary role.

An in depth view of the some of the research examining the relationship between role ambiguity and role conflict / inter-role conflict, had been provided in this section. In the next section of this thesis a discussion on the literature examining the correlation between role overload and inter-role conflict is presented.

## 2.6 ROLE OVERLOAD

The teaching profession in the last decade has seen an exponential growth in regulatory and statutory requirements. These requirements span a multitude of areas within teaching including curriculum, vocational education, reporting, work place health and safety, school registration requirements etc. These increased professional demands (exemplified through an increased number of work roles), combined with environmental factors such as increased urbanisation (longer commutes), has meant that teachers experience greater work time demands than ever before. Despite acute public awareness and concern for increased time demands, few researchers have explicitly studied the effects of role overload and whether role overload is related to work conflict in the field of education. Fewer researchers still, have looked at whether role overload in one role domain causes inter-role conflict in another domain.

Reitzes and Mutran (1994) suggest the greater the number of roles that are held by an individual, the greater the chances of obtaining and gaining social and material rewards. Roles provide individuals with role privileges, status security, personal enrichment, and ego gratification. There must be a point, however, at which the addition of another secondary role attached to a particular organisational position will reduce the total number of benefits associated with a particular position (i.e., too many roles, limit the ability of the stakeholder to attain the role benefits that are offered in a new role). For example, in teaching, taking on the additional role as a sport coach may increase the opportunities to form relationships with a number of new students, parents and other teaching colleagues. Taking on the role as the debating coach in parallel, however, may reduce the total amount of time that the teacher has available to form meaningful relationships with students, parents and colleagues, and therefore reduces the overall number of social rewards associated with the multiple roles. The overall rewards for both roles therefore, are probably reduced. The consequences of taking on the second role may also increase as the performance across all other roles may begin to drop,

exposing the individual to further negative consequences and therefore creating psychological stress.

In the research area of WFC, researchers such as (Frone Yardley & Markel 1997; Major, Klein & Erhart, 2003; Wallace, 1997) have shown that role overload is related to role conflict and inter-role conflict. Carlson, Kacmar, and Stepina (1995) found that work time demands were related to inter-role conflict when identity salience (identity interaction) was factored. Stryker and Serpe (1994) in a comparable study on role overload established that both centrality and salience of a role predict one's commitment to a role and the time spent in a role.

Carlson, Kacmar and Stepina (1995) when studying the inter-relationship between role overload, role salience and role conflict used t-tests to look at the balance between role overload and role identity, and whether this balance had an effect on role conflict. The results showed that if a role holder spent more time in a role than their identity required then role conflict was reduced. However, if less time was spent in a role than the role identity required, role conflict was higher.

Given these results, role overload would only be related to role conflict and inter-role conflict if role salience was low. Predictions about the relationship between role overload and role conflict, given Carlson, Kacmar and Stepina's (1995) results, can only be made in the context of role salience. An example of this is that Carlson, Kacmar and Stepina (1995) concluded in their study that work time demands and family time demands were not related to inter-role conflict, when role salience was not factored in.

This chapter started with an introduction to the concept of the role. The 'role' was described from the *role as a resource* perspective, with roles being the conduit for social behaviour.



Having grounded the concept of the 'role' using Social Identity Theory and Identity Control Theory, the constructs of 'role conflict' and 'inter-role conflict' were introduced. Possible correlates to role conflict and inter-role conflict were stated by making reference to previous literature. Previous literature and the research outcomes for this literature were also discussed for role salience, role ambiguity, and role overload.

For this research the varying relationships between the variables of role ambiguity, role salience, role overload, and role conflict (Carlson & Kacmar's, 2000) are utilised in this study, in order to maintain research construct consistency. The relationships between these variables are replicated for multiple roles within a single work position. This is unlike previous multiple role studies that have focused on roles that exist in separate physical domains (i.e., work and family). This researcher seeks to investigate the interplay of roles that are held within a single work position. In the next chapter of this thesis the methodology for this thesis is stated.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 INTRODUCTION**

The purpose of this chapter is to discuss the methodology used in this study of teacher roles in Catholic schools. This study accepts the principle espoused by Howe and Eisenhart (1999) that research questions should drive research methodology and data collection methods and not vice-versa. Accordingly, the questions stated in Section 1.2 of this thesis dictated the methodology and data collection methods for this study. In addition to these central methodological elements, threats to the internal and external validity of the research design are discussed. Apart from this introductory section, there are five main sections to this chapter. The overall research design of the study, its theoretical framework, data collection methods, data collection sites, and the sample are described in Section 3.2. The instrumentation of the study is introduced in Section 3.3. In this section, scales to assess the various role constructs (viz. role conflict, role salience, role ambiguity, and role overload) are reported. The threats to the internal and external validity of the present study are presented in Section 3.4. Finally, the main points of the present chapter are highlighted in Section 3.5. Collectively, these sections provide a comprehensive review of the study's methodology and provide a platform for the selection and validation of instruments which are the key purposes of Chapter 4 of this thesis.

#### **3.2 THE RESEARCH DESIGN**

This study's research design and theoretical framework is described in this section. Also described are the practical aspects of the methodology including data collection methods, data collection sites, the sample and population.

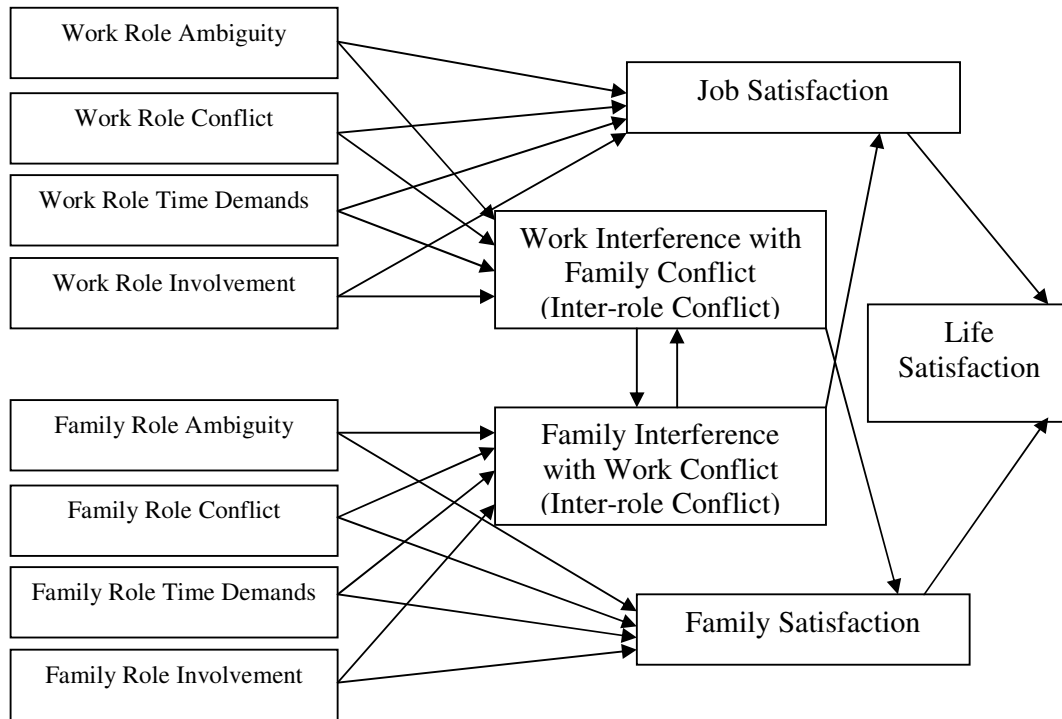
### 3.2.1 The Overall Design of the Study

An ex post facto design, which is one of several well-established quantitative experimental design methods, was used to study the possible causes of role conflict and inter-role conflict. Role conflict and inter-role conflict are defined in Section 2.3 of this thesis. Also known as correlational research or causal comparative design, ex post facto research usually involves a single administration of a questionnaire. Subsequent analyses investigate associations among variables with correlational techniques or comparison of groups according to a particular distinguishing characteristic e.g., gender. There is a strong tradition of employing a positivistic paradigm in role research and the present study is located within this tradition.

While a true experimental design would have been theoretically optimal, it was not employed. This was because several of the research questions would have required manipulation of the independent variable. Furthermore, in role development research, the ex post facto design was logistically a more practical design for collecting data than an experimental method. The main problem with an experimental method is establishing both a control and an experimental group. This would have been particularly difficult at the organisational level. The access and timing of research within the school environment is also difficult. This problem would have been exacerbated in a geographically dispersed organisation such as Brisbane Catholic Education which has 141 schools. Another factor to consider is that the average response return rate within educational research is traditionally low. With both pre and post tests, it may have been difficult to get a satisfactory number of participants, especially given the current climate within schools. An ex post facto design, therefore, was a logical choice for this role development study.

### 3.2.2 Framework of the Study

The research design for this study embraces the theoretical framework used by Carlson and Kacmar's (2000) study (See Figure 3.1).



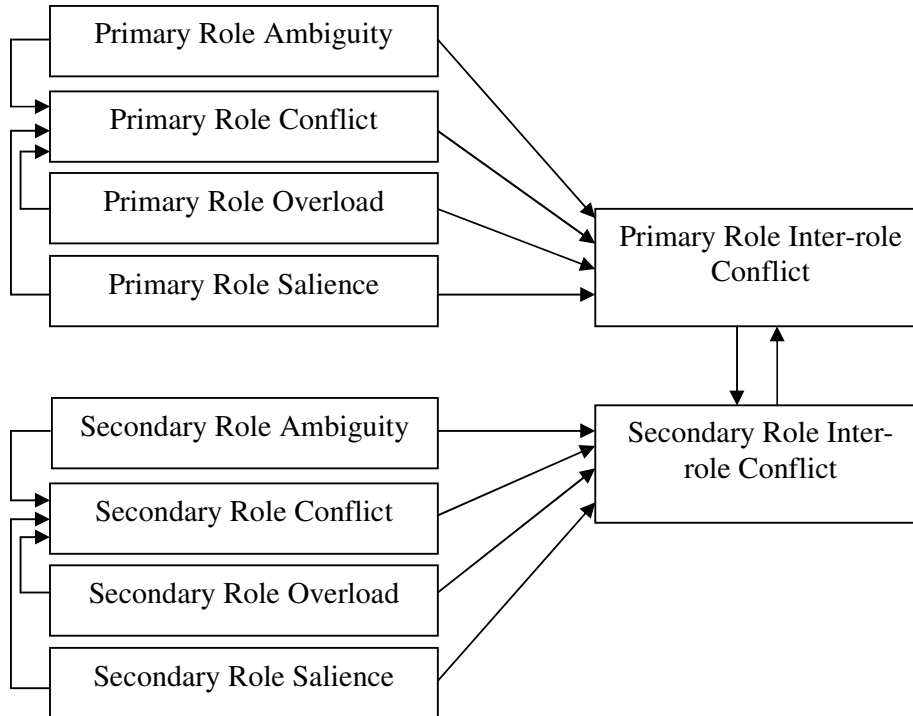
**Figure 3.1 – Carlson and Kacmar's (2000) research model.**

This framework is based on similar frameworks found in the research area of WFC. Within WFC research it has been established that life roles interact with each other in some way. The focus of much previous research has been to determine the interaction between two different roles within separate physical role domains (i.e., the work and family roles). These two separate roles are highlighted in Figure 3.1. The work role is represented by the top half of the diagram, the family role by the bottom half. Researchers such as Kanter (1977), Korman and Korman (1980), and more recently, Carlson and Kacmar (2000) have established a common framework where these two role domains can be studied in an integrative manner. This model is called the 'multiple process model'. While the relationships in this evolving model are still

unclear, a better understanding of the interaction between roles and role domains is hoped for through the use of this model (Carlson & Kacmar; Frone, Russel, & Cooper, 1992; Greenhaus, Collins, Singh, & Parasuraman, 1997). The multiple process model developed within these studies is characterised by the reality that a stakeholder may experience some degree of role conflict. This role conflict leads to conflict between roles (inter-role conflict). Carlson and Kacmar's model (See Figure 3.1) suggests that established antecedents to inter-role conflict include role conflict, role ambiguity, role time demands and work involvement. The correlations between inter-role conflict and family, work, and life satisfaction are not covered in the scope of this study, but present in Carlson and Kacmar's (2000) model.

Based on the multiple process model used in Carlson and Kacmar's (2000) study, a framework for the present study was developed (See Figure 3.2). Highlighted in this figure is the separation of primary role and secondary roles. In Carlson and Kacmar's model (2000) these two roles, referred to as role domains, are represented as work and family roles. The roles in Figure 3.2 differ not only in their type, but also in their physical locality. Examined in this study are two work roles in a single physical domain (i.e., two roles in the workplace), whereas Carlson and Kacmar's WFC examined two roles in two separate physical domains. Highlighted in Figure 3.2 are the two separate role domains within the single work life domain.

The primary work role is the role that is considered the more important role at work. The secondary work role is the role that is considered the less important role at work. It is theorised that each work role will affect the other work role (Inter-role Conflict), and this effect is bi-directional as shown in Figure 3.2.



**Figure 3.2 - Framework for the method of investigation for this thesis.**

There are two further variations between the Carlson and Kacmar (2000) model and the model implemented for this study. Measured in this study is life role value using the role salience variable rather than the role involvement variable. Further information is provided in Section 3.3.5 on the choice of the role salience as the measure of life role value.

The final change to the Carlson and Kacmar (2000) multiple process model is the use of the role overload construct rather than the role time involvement construct. Justification for the use of this construct over the use of role time demands can be found in section 3.3.6

For the remainder of this thesis, the constructs adopted will be referred to rather than those constructs used in Carlson and Kacmar's (2000) work i.e., role ambiguity, role overload rather than role time demands, role salience rather than role involvement, role conflict, and inter-role conflict.

When referring to the framework used in this study (see Figure 3.2) both the primary and the secondary roles have four antecedents (role ambiguity, role conflict, role overload, and role salience) to inter-role conflict. The relationships between these antecedents and inter-role conflict have been well researched (Boyar, Maertz, Pearson & Keough, 2003; Elloy & Smith, 2004; Frone, Russel & Cooper, 1992; Kopelman, Greenhaus, & Connolly, 1983; Netemeyer, Johnson & Burton, 1990; Ngo, & Lui, 2005), and therefore will extend the depth of understanding of the relationship between these antecedents and inter-role conflict.

As well as role ambiguity, role overload, and role salience being correlated to inter-role conflict, it has been shown that these variables are also correlated to role conflict (Bedian & Armenakis, 1981; Jones, 2005; Rizzo et.al. (1970); Tubre & Collins, 2000). Although this relationship has been well researched, Carlson and Kacmar's (2000) model does not focus on the relationships between role ambiguity, role salience, role overload and role conflict, as part of the scope of their study. The present study, however, did examine these relationships.

The relationship between role conflict and inter-role conflict has also been clearly established. As the level of role conflict increases within a role, the level of inter-role conflict between roles has been found (Netemeyer et.al., 1990; Tubre & Collins, 2000). This relationship studied by Carlson and Kacmar (2000) is also the focus of this study.

The final major focus of this study is the effect of role salience as a covariate. Role salience may also be considered as a covariate with role ambiguity, role conflict and role overload in their relationship with inter-role conflict. Carlson and Kacmar (2000) proposed that the greater the role salience the more likely stakeholders want to spend time in a role. Wanting to spend greater time in one role and having competing demands in another role would lead to conflict between two roles. Role salience therefore, as an example, acts as a covariate in the

relationship between role overload and inter-role conflict. The effect that role salience has as a covariate is also examined as part of this study. The effect of role salience as a covariate was not studied as part of the Carlson and Kacmar's (2000) study.

In this section the 'multiple process model' was presented. The 'multiple process model' was illustrated using Carlson and Kacmar's (2000) example. Building upon and extending Carlson and Kacmar's (2000) work, the main key areas of examination for this study have been identified. These key areas include establishing those relationships between role ambiguity, role salience, role overload with role conflict; establishing relationships between role ambiguity, role salience, role overload and inter-role conflict; establishing the relationship between role conflict and inter-role conflict; and examining the relationship between role ambiguity, role overload, role conflict with inter-role conflict with role salience acting as a covariate. Building upon this theoretical background, the following section describes the data collection methods used for this study.

### **3.2.3 Data Collection Method**

A survey instrument containing 50 questions employing a Likert response format was developed for this study. Further information about the structure and content of this survey can be found in Sections 4.2 - 4.6 of this thesis. A copy of the final survey can be found in Appendix 1. Sets of surveys were posted to each school principal who distributed the individual surveys on behalf of the researcher. Principals were assisted by an information letter in targeting respondents for the survey. Enclosed with each of the surveys and participant's information letter was a reply-paid envelope for return of the completed survey. Returned surveys were stored as mandated by the ethics committee.



### **3.2.4 Data Collection Sites**

Surveys were distributed to 162 schools in the Brisbane Catholic Education Archdiocese. The Archdiocese of Brisbane spans the geographical area of south-east Queensland that is bordered by Childers (North), Kingaroy (West), and the Gold Coast (South). Schools that were surveyed included both 'not religious ordered administered' and 'religious ordered administered' schools. Fifteen surveys were sent to each of the 44 secondary school and five surveys were sent to each of the 118 primary schools.

### **3.2.5 Population**

The surveys for this research were distributed to approximately 1250. The population was characterised as staff members of schools within the Brisbane Catholic Archdiocese who held more than one labelled role within their work position. Initially the information letter sent to the Principals directed them to distribute the survey to those staff that held Positions of Added Responsibility (PARs). If surplus surveys existed from the initial distribution to those staff with PARs, Principals could then distribute the surveys to those staff members who held multiple roles, but were not officially recognised for this role through a formal remuneration or organisational structure. The source of data could have come from any one of the following subsets of the population of school staff within Brisbane Catholic Education: Principals, Deputy Principals, Assistant Principals, School Leaders including Year Level Coordinators and Heads of Departments, Classroom teachers, Administration Officers, School Officers, and various other roles held within Catholic Education. Accordingly, the sampling procedure employed in the study was a type of cluster sampling. As the sample in each school was purposefully chosen according to the above criteria, the form of sampling in this study could be described as purposeful cluster sampling.

### 3.2.6 Sample

Of the 1250 surveys distributed in this study a total of 204 surveys were returned. Of these 204 respondents, 41.1% were male and 58.5% were female. Only a small percentage (.04%) did not specify their gender. Descriptions of the respondents according to age and years of service are shown in Figures 3.3 and 3.4 respectively. As shown in Figure 3.3, the age distribution for the sample of respondents was skewed with a majority of the respondents between the ages of 41 and 55. The highest number of respondents fell in the 41-45 years age category. Similarly, Figure 3.4 shows skewness in the population with most respondents having completed at least 16 years of teaching service. The highest number of respondents for years of service completed was in the 26-30 'Years of Service' category.

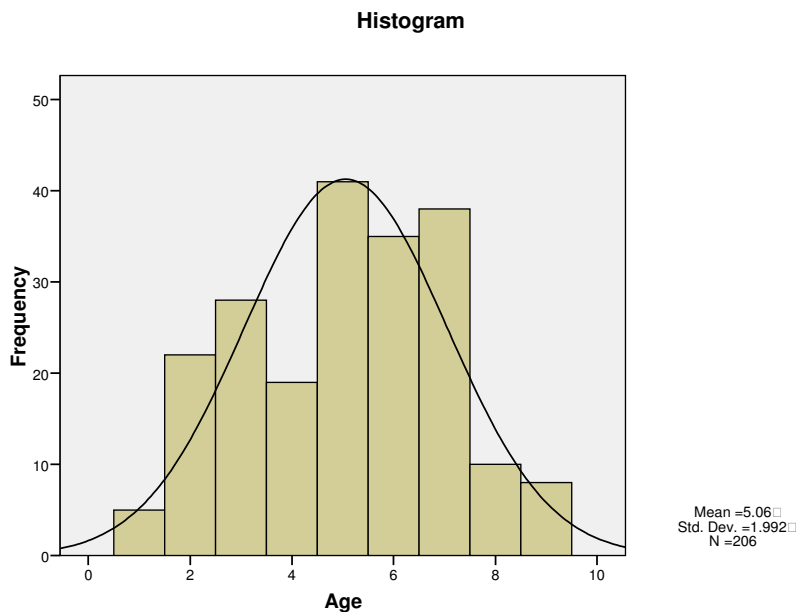


Figure 3.3 – Description of sample according to age

**Key – Age in years**

(1)20-25, (2)26-30, (3)31-35, (4)36-40, (5)41-45, (6)46-50, (7)51-55, (8)56-60, (9) >60

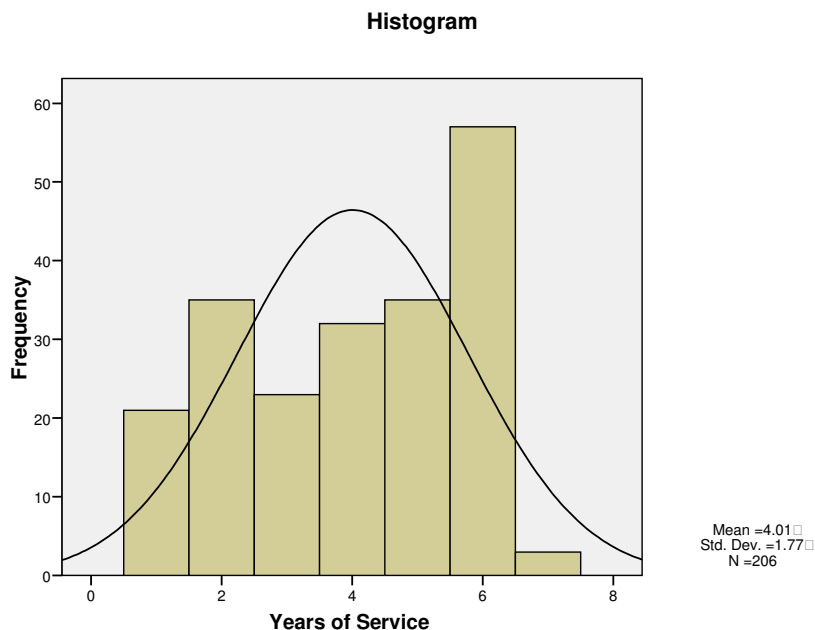


Figure 3.4 – Description of Sample according to ‘Years of Service’

*Key – Years of Service*

(1)0-5, (2)6-10, (3)11-15, (4)16-20, (5)21-25, (6)26-30, (7) >30

Shown in Table 3.1 is a cross-tabulation of the various combinations of primary and secondary roles from the sample. Numbers in bold italics provide the key for the secondary role (i.e., the Head of Department role found in the primary role column has the number “6” marked beside it). The secondary roles are represented by the ‘horizontal number rule’. The number “6” in this horizontal number rule also represents a Head of Department role. The ‘Literacy Coordinator’ (10) role and the ‘Counsellor’ (14) role are not represented in the cross tabulation as a primary role but are represented in this sample as secondary roles.

Significant combinations include the Head of Department – Teaching combination (represented as  $n(11-18)$ ). This means that the Head of Department role in this combination was represented 11 times as the primary role (as indicated by the horizontal rule) and 18 times as the secondary role (as indicated by the vertical rule) with a total of 29 respondents identifying this role combination). Other significant role combinations shown in Table 3.1 include: HOD/Sports

Coach – n(12, 0), Year Coordinator/ Teaching combination – n(10, 12), Subject Coordinator/Teaching – n(3, 10), APRE/ Teaching – n(11, 1), Sports Coach/Teaching – n(1,18), Not identified/Teaching – n(9,16), Voc Ed Coordinator/Teaching – n(2,2), APA/Teaching – n(0,2), DP/Teaching – n(0,2), Sports Coordinator/Sport Coach – n(0,2), Librarian/Teacher – n(0,4), Not identified/Sports Coach, n(0,4), Other/Teacher – n(0,4).

The significance of this tabulation will become prominent in the discussion section of this thesis. Not only is role accumulation considered a key aspect of inter-role conflict research, but incompatible role combinations are also important in explaining possible conflict between roles. Although this study does not include role combinations and the total number of life roles as part of its scope, particular role combinations may be useful when discussing the results presented in Chapter 5.

**TABLE 3.1**

*Cross Tabulation of Primary and Secondary Role Combinations Indicated for this Study.*

Primary Role	Secondary Role													Total
	5	6	7	8	9	10	11	12	14	15	17	18	25	
Principal	1	0	0	1	0	0	0	0	0	0	0	0	0	1
DP, Head of College	2	0	0	2	0	0	0	1	0	0	1	0	0	4
APA	4	0	0	2	0	1	0	0	0	0	2	0	0	8
APRE	5	0	1	11	0	0	1	0	0	0	0	0	4	17
Head of Department	6	0	0	11	0	1	0	0	0	0	12	0	0	28
Classroom Teacher	7	1	18	0	12	10	1	2	2	0	18	0	1	81
Year Coordinator	8	0	0	10	0	0	0	0	0	0	2	0	1	14
Subject Coordinator	9	0	0	3	0	0	0	0	0	0	1	0	0	4
Voc. Ed. Coordinator	11	0	0	2	0	0	0	0	0	0	0	0	0	2
Sports Coordinator	12	0	0	0	0	0	0	0	0	0	2	0	1	3
Sports Coach	15	0	0	1	0	0	0	0	0	0	0	0	0	1
Teacher Aide	17	0	0	0	0	0	0	0	0	0	0	0	0	1
Special Needs Teacher	18	0	0	0	0	1	1	0	0	0	0	0	0	2
Librarian	19	0	0	4	0	1	0	0	0	0	1	0	0	7
Other	25	0	0	9	0	1	0	0	0	1	4	1	0	16
<b>Total</b>		1	19	56	12	15	3	3	2	1	43	1	3	189

*Note: 10-Literacy Coordinator, 14-Counsellor*

### **3.2.8 Research Period**

Data were collected during the months of March - May, 2008 (i.e., mid first term, to the start of the second term). The researcher discerned that disseminating the survey in the fourth week of term and closing the survey in the second week of the following term would result in a higher survey return rate. This time period avoided the end of semester marking and reporting time for teachers.

## **3.3 INSTRUMENTS**

The five scales employed for this study are introduced in this section. Each scale assessed role ambiguity, role conflict, role overload, role salience, and inter-role conflict. More detailed information on reasons for the selection of these scales and their validation are discussed in Chapter 4. The participants in the survey were asked to respond to each item of the questionnaire twice, once for the primary role and once for the secondary role. This was true for all scales. Table 3.2 provides the details of the number of items in each of the scales and the dimensions that are measured as part of each of the scales.

## **3.4 COMMENTS ON VALIDITY**

In this section definitions from Campbell and Stanley (1963) are used to discuss threats to the internal and external validity of this study. Internal validity refers to the extent to which one can accurately state that the treatment of the independent variable produced an observed effect in the dependent variable. External validity refers to the ability to generalise the results of a study to a larger population. It is essential that the research inherently contains both forms of validity, with the understanding that strong validity of one form can compromise the strength of validity of the other (Campbell & Stanley, 1963). Without at least an acceptable level of

**Table 3.2***Summary of Scales and Dimension of Scales*

<b>Scale Name</b>	<b>Author</b>	<b>No of Items</b>	<b>Dimensions Measured</b>
Role Ambiguity Scale	Rizzo, House and Lirtzman (1970)	12	Clarity of the expected behaviours in a role Predictability of behaviours of others
Role Conflict Scale	Rizzo, House and Lirtzman (1970)	11	Conflict between the focal persons internal standards or values and the defined role behaviour Conflict between time, resources, or capabilities of the focal person and the defined role behaviour Conflicting expectations and organisational demands in the form of: Incompatible policies Conflicting expectations and organisational demands in the form of: Conflicting requests Conflicting expectations and organisational demands in the form of: Incompatible standards of evaluation
Role Overload Scale	Pettigrew and Wolf (1982).	8	
Life Role Saliency Scale	Ameata et.al (1986)	20	Role Reward Value Role Commitment
Inter-role Conflict Scale	Rizzo, House and Lirtzman (1970)	3	

internal validity, research cannot have any substantive external value. Research without acceptable internal validity is fundamentally flawed. Additionally, a highly controlled experiment may bear little resemblance to the real world and thus have limited external validity. This section is divided into two subsections: internal and external validity. Within each of these subsections, threats to validity are discussed.

### 3.4.1 Internal Validity

Internal validity is defined as the degree to which conclusions drawn about the relationships within a study are likely to be true, and free from bias (Glass & Stanley, 1970). Internal validity can be improved by delimiting the research problem through tightly controlling variables. However, as noted above, tight controls may limit the ability to generalise the research findings.

There are three categories in which a study can have internal threats to its validity (Creswell, 2005). The first category relates to the participants in the study and their experiences in the study. The internal threats that fall under this category include *History, Maturation, Regression, Selection, Mortality and Interactions with Selection*. The second category of internal threats is related to the treatments used in a study. As there was not a treatment applied in this study, this category of internal threats will not be discussed in this section. The final category of internal threats relates to the procedures of the study. *Testing and Instrumentation* are internal threats to validity that fall within this category.

Internal threats, therefore, potentially identified for this study include: *History, Maturation, Regression, Selection, Mortality, Interactions with Selection, Testing and Instrumentation*.

As the research methodology adopted for this study meant that only a single survey was completed by randomly selected participants at a single point in time, the threats of *History, Maturation, Regression, Selection and Interactions with Selection* were not considered to be significant to the outcomes of this research. These five internal threats will firstly be discussed in the next three paragraphs, before discussing the internal threats that were considered relevant to this study.

When an experimental methodology is used as the research methodology, there is a specific period of time between applications of the pre-test and post-test instrumentation. This period of time can produce internal threats of history and maturation. Events or experiences of survey participants during the time period between the pre-test and the post-test (that are not linked to the research but can have an effect on the independent variable) are collectively known as a *history* internal threat to validity (Creswell, 2005). Similar to this is the internal threat is the threat of *maturation*. This threat is characterised when survey participants develop or change during the experimental period i.e., become wiser, stronger, or more experienced (Creswell, 2005). As mentioned, these threats were not considered to be significant to this study. Not only can internal threats to validity arise as a result of the period of time between the applications of the instruments, however, but internal threats can arise as a result of improper sampling techniques.

Those threats to the internal validity that arise as a result of improper sampling techniques include *Regression* and *Selection*. The *Regression* threat occurs when researchers choose participants based on some extreme score. As a result, these participants' scores are likely to regress towards the mean after the treatment period (Creswell, 2005). The other internal threat based on the improper selection of participants is the threat of *Selection*. This occurs when participants are selected based on some characteristic which would make them more susceptible to the treatment (Creswell, 2005). These two threats to the study were minimised in this study by using a cluster sampling technique as part of the methodology.

The final threat to internal validity that was not considered to have an effect on the outcomes of this study was the *Interactions with Selection* threat. This threat occurs when a combination of the above threats interact with each other. As the above threats were not considered to be a



factor in this study, the *Interactions with Selection* was also not considered to be an internal threat.

The final two threats in relating to participants in the study and their experiences include the internal validity threats of *Selection* and *Mortality*. These threats to internal validity were considered to be threats to this study. These threats are discussed in detail in the next two sections.

### *Selection*

The selection threat refers to the fact that in some ways the individuals selected for the study may be biased as a result of the selection process itself. As the selection process for this study, to some extent, was outside the control of researcher, this threat may have been prevalent for this study. This was because the procedure for the dissemination of surveys (See Section 3.2.3) sought the cooperation of Principals to distribute the surveys on behalf of the researcher. Principals were instructed to distribute the surveys to those participants who held multiple roles, both formal and informal, with 15 surveys per secondary school and five surveys per primary school distributed. Within this purposeful cluster sampling, it is difficult to ascertain exactly who, in fact, did receive the questionnaires. Principals may have distributed surveys to those 'affable' teachers who may be more likely to respond thereby removing a specific group from the survey (i.e., those employees who were experiencing greater conflict in roles at the time of the survey).

### *Mortality*

The structure of the survey required that the respondents answer the same question twice (i.e., for primary and secondary roles). There were a number of responses where the items for the secondary role went unanswered. Such responses may be due to the fact that they did not have a secondary role and should not have received the questionnaire from the principal (see Section

3.4.2), a lack of time to read the survey instructions properly, or a lack of commitment to answering the survey correctly. If lack of time was the reason, then there may be inaccuracies in the results on the role overload scale. Differences between the primary and secondary scale scores might also be due to a lack of commitment to the survey and not the actual primary and secondary roles. In the present survey design, this potential threat is difficult to control.

The third category of internal threats to validity relates to the procedures of the study. The identified threats in this category include testing, and instrumentation.

#### *Repeated Testing*

This threat occurs when a test is administered more than once. The results of the repeated test are somehow influenced by the initial test administration. Although the survey was administered only once, there may have been some threat to internal validity through repeated use of items. The survey for this study, asked the same question of the respondent twice: once for the primary role and once for the secondary role (See Appendix 1). Returned paper surveys showed some alterations to respondents' initial responses to the items for both the primary role and secondary role. It may be that once an item was answered for the primary role, and the respondent thought about secondary role, that the respondent went back to the primary role or to the secondary role, and moderated their responses. Potentially, this moderating of responses could be due to repeated testing within the one administration of the questionnaire.

#### *Instrumentation*

This threat arises when there is a change to the instrument between the pre-test and post-test. An example of this threat includes a change to the scoring procedures of an instrument. As this study did not have a pre-test and post-test as part of this methodology, this threat to internal validity was not considered a potential threat.

To summarise the internal threats to this research, three possible threats are identified. These threats were possible selection of groups through the selection process, moderated answers to the survey through the process of repeated testing and experimental mortality where the response rate for the secondary role was significantly less than the response rates for the primary role questions. The next section of this chapter will examine the possible threats to the external validity of this study.

### **3.4.2 External Validity**

External validity addresses the question of generalisability. Can the research finding of this study be applied to a larger population of school personnel? There are a number of factors that can jeopardise external validity. The following external validity threats are discussed:

*Inadequate Preoperational Explication of Constructs, Mono-operation bias, Mono-method bias, Hawthorne Effect.*

#### *Inadequate Preoperational Explication of Constructs*

This external validity factor refers to the quality of the constructs that measure what we believe we are measuring. If the constructs are not well defined then it is unlikely that the findings of the research can be meaningful to a wider audience. Although careful consideration has been given to the constructs employed for this study, debate in the literature still exists within this area of research on the most appropriate instruments and even the most appropriate construct to measure certain behaviours (Kopelman, Greyhaus, Connolly, 1983). For example, role overload has also been called role time demands and role pressures (see Section 3.3.1). While there is some possible threat to this study as a result of inadequate operationalising of variables this has been minimised by employing established scales to assess constructs.

### *Mono-operation bias*

This external validity threat refers to the fact that there is only one operationalization of a construct and therefore it under-represents the construct of interest and measures irrelevant constructs. Within this study only one set of measures is used to measure each of the constructs of role overload, role ambiguity, role salience, role conflict and inter-role conflict. This study did discern that the measures used in this study were valid and reliable measures of each of the constructs. This threat, however, is still considered to have some threat to the external validity of this study.

### *Mono-method bias*

This threat refers to the fact that only a single method of gaining data on a construct was employed in the study. As such there was no method triangulation (Creswell, 2005). As this study employed a survey method only, a bias that potentially threatens the external validity of the study can exist.

### *Hawthorne Effect*

This effect refers to the inclination that subjects can respond differently if they are aware that they are participating in a study. As the method of data collection was a survey, this participation was self-evident. To minimise possible Hawthorne effects, subjects were informed that the survey responses were confidential and anonymous, and that there were no right or wrong answers. The information letter to all participants indicated that responses would be aggregated so that their individual response would be studied as part of a group response.

Discussed in this section were the external threats to validity, to this research. Four possible external threats to validity are identified: *Inadequate Preoperational Explication of constructs*, *Mono-operation bias*, *Mono-method bias* and *Hawthorne Effect*. Relevancy of these threats to

this study was discussed in detail. The next section provides a summary of information presented in this chapter.

### **3.5 CHAPTER SUMMARY**

A comprehensive review of the research methodology adopted for this study was presented in this chapter. The ex post facto research design was introduced in Section 3.2, and in this section this research design was justified against the traditional experimental model. The ex post facto research design was also positioned within the strong positivistic research tradition in this field of research. Carlson and Kacmar's (2000) *multiple process model* was introduced and explained in detail (See Figure 3.1). A revision of how this model was used as the framework for this study was stated (see Figure 3.2). Differences and similarities between this research design and Carlson and Kacmar's (2000) multiple process model were discussed. In this section the specific data collection method, data collection sites, and sample used for this study was also stated. Instrumentation for this study was stated in Section 3.3. Scales to assess the five key constructs (viz. role ambiguity, role conflict, inter-role conflict, role overload, and role salience) were described. Finally, potential threats to internal and external validity of this study were discussed in Section 3.4.

The next chapter of this thesis builds upon the methodology described here. Further detail of the scales used in this study as well as validation data obtained from the use of these scales is also provided. As such, the present chapter and Chapter 4 provide a strong foundation for the collection and reporting of results of this study in Chapter 5.

## **CHAPTER 4**

### **SELECTION AND VALIDATION OF INSTRUMENTS**

#### **4.1 INTRODUCTION**

In this introduction the justification of the use of the various scales used to measure the constructs of role ambiguity, role overload, role salience, role conflict, and inter-role conflict are forwarded. These scales / questionnaires were reviewed to identify the most suitable scale, for each construct within this study. For each of the constructs above, the history of the development of the scales and the viability of the chosen scale against other scales is discussed. The modifications to these scales, and the descriptive statistics for each of the scales including the Cronbach  $\alpha$  measure, is also discussed.

To be consistent with previous research in the area of inter-role conflict, survey instruments using a Likert scale were used to collect data for this study. It should be noted that much of the research on inter-role conflict has been focused in the WFC area, and therefore the scales introduced in this section contain items that reflect these two potentially conflicting life role domains existing in separate physical domains (e.g., the work and family domain). The survey for this study was modified to reflect two separate role domains within a single physical domain (i.e., a single work position).

Apart from this introduction, this chapter has a section for each of the constructs used in this study: role ambiguity (see Section 4.2), role conflict (see Section 4.3), role overload (see Section 4.4), role salience (see Section 4.5), and inter-role conflict (see Section 4.6). Each section has three parts. These parts describe the history and development of the scales and,

therefore, the justification for the use of these scales in this study. The history and development subsections for role ambiguity and role conflict have been combined. Each section also contains a description of the dimensions of each construct, and example survey questions for each of the constructs. The modifications to survey items are discussed. Finally, each section contains description statistics for each of the scales used in this study. The description statistics include the Cronbach  $\alpha$  coefficient, scale *mean*, *standard deviation*, *minimum*, *maximum*, and *skewness*. As each of the instruments in the scale was applied twice, once for the primary role and once for the secondary role, these statistics are provided twice, once for the primary role and once for the secondary role. The following section pertains to the first of the constructs used within this study: Role Ambiguity.

## **4.2 ROLE AMBIGUITY**

The role ambiguity scales and role conflict scales in previous literature have been described almost synonymously. The two scales have a well researched correlation and the development of two scales has occurred simultaneously. The following section, therefore, will contain information about the history of the development of role conflict scale as well as the role ambiguity scale.

### **4.2.1 History and development of the Role Conflict Scale and the Role Ambiguity Scale**

Kahn (1964) originally developed the role ambiguity / role conflict scale for the purpose of studying the correlation between role ambiguity and role conflict. Since their inception, these scales have lain the foundation for the development and further evolution of scales on role development. Kahn's scales have been scrutinised by several researchers. Pettigrew and Wolf (1982), when validating measures of teacher stress in education, determined that the concepts contained within Kahn's (1964) role ambiguity and role conflict scales were a reliable and valid multivariate assessment of teacher role stress. Rizzo, House and Lirtzman (1970) incorporated the concepts introduced by Kahn (1964) and since then nearly all research

performed using role conflict and role ambiguity variables have used Rizzo et al.'s scales including Carlson and Kacmar (2000); Elloy and Smith (2003); Kemery, Bedeian, Armenakis, (1985); Koustelios, Theodorakis, and Hassandra (2004). For example Elloy and Smith (2003) used the role ambiguity and role conflict scales as reported by Rizzo et al. (1970) finding a Cronbach  $\alpha$  reliability for the Role Ambiguity scale of .81. Koustelios et al. (2004) using a seven-point Likert scale, reduced the role ambiguity scale to six items, and reported a Cronbach  $\alpha$  for this scale of .85.

The measurement properties of the scales developed by Rizzo, House and Lirtzman (1970) have been a source of debate in role development literature. The main criticism of these scales was initiated by Tracey and Johnson (1981). Their view was that the role ambiguity and role conflict constructs in these scales was confounded. This was in part because of the negatively worded items within the questionnaire. In response to this argument House, Schuler, and Levanoni (1983) tested a new set of scales to assess the construct validity of role ambiguity and role conflict. Their conclusions recommended the retention of the original scales because of the high correlations found between their original and revised constructs. Since this time, these scales have been further scrutinised. Research has been dedicated to studying the discriminant validity of the role ambiguity and role conflict constructs (see Bedian & Armenakis, 1981; Kelloway & Barling, 1990; King & King, 1990; McGee, Ferguson, & Seers, 1989). The purpose of these studies was to determine if role ambiguity is distinguished from role conflict. The most recent research on the validity of role ambiguity and role conflict scales was reported by Smith, Tisak and Schmieder (1993) who tested these scales to determine whether role ambiguity and role conflict were separate constructs, free of contamination by method variance. Their findings showed discriminant validity for both the role ambiguity and role conflict scales.



As a result of the heavy scrutiny of these two scales and their continued use in the role development research area, this research study supports the continued use of the Rizzo et al. (1970) scales, with minor changes to the wording of the items in the scales. The changes to the wording of items in this study reflect the use of primary and secondary roles rather than work and family roles (See Table 4.2 for more detailed information on these changes). In the following section the various dimensions contained within the role ambiguity scale are discussed.

#### **4.2.2 Dimensions of Role Ambiguity Scale**

The dimensions inherent in the construct of role ambiguity are introduced in this section.

As noted in Section 2.4.1 role ambiguity is defined as a two part social process (Stryker, 2000). Because this construct is rooted within Social Identity Theory, role ambiguity is defined within this social context. Role ambiguity therefore is defined as both the level of role clarity / ambiguity, and also as the predictability of another stakeholder's action as a result of one acting out their defined role. Because the definition of role ambiguity is twofold in its definition, the construct is seen to have two dimensions. Each of these dimensions is measurable through the use of a scale or subscale. The two subscales of role ambiguity (i.e., role clarity and behaviour predictability) make up the overall scale that measures role ambiguity. Rizzo et al.'s (1970) role ambiguity scale therefore measures the clarity of the expected behaviours in a role and the predictability of the responses to one's behaviour in a role. Table 4.1 shows the use of the two subscales and the overall role ambiguity scale. In this table the number of items, sample items and the item numbers are listed for the two role ambiguity subscales (measuring dimensions) and the role ambiguity scale.

**TABLE 4.1***Summary of the Role Ambiguity Scale (N = 207)*

Scale / Subscale Name	Scale Description	Items per Scale	Sample Items	Questionnaire Numbers
Role Ambiguity (RA)	Measures the perceived ambiguity that is experienced within a role	11	I have to 'feel my way' in performing my duties.	5,6,7, 8, 9,10,11,12,13,14,15
Role Ambiguity – Behaviour Predictability (RA – 1)	Predictability of another's behaviour	3	I feel certain of how I will be evaluated for a promotion.	5,6,7
Role Ambiguity – Role Clarity (RA – 2)	Clarity of role	8	I know what my responsibilities are in this role.	8,9,10,11,12,13,14,15

A justification for the use of the role ambiguity construct, through describing the history of this scale, has been made in this section. In this history the ongoing development of the scale, as a result of peer review, was discussed. This section has also stated the dimensions of the role ambiguity scales, and the number of items making up this scale. The next section of this thesis will describe the modifications that were made to the role ambiguity scale to suit the purposes of this study and how these changes differ from the original scale developed by Rizzo et al. (1990).

#### **4.2.3 Modifications made to Role Ambiguity Scale**

Within this section the modifications that have been made to the role ambiguity scale are discussed. These changes include minor wording changes to each of the items Rizzo, House and Lirtzman's (1970) scale. To reflect two roles within a single work position, minor changes to the wording of the items in this scale were required. The scale continues to reflect the two constructs inherent within role ambiguity (i.e., the predictability of the outcomes or responses

to one's behaviour, and the existence or clarity of behavioural requirements). Changes that were made to each of the items of the role ambiguity questionnaire are shown in Table 4.2. In order to validate the changes to these items, an analysis was performed on the scales to justify their inclusion in this study. In the next section of this chapter, therefore, the descriptive statistics for the modified role ambiguity scale is reported. The internal consistency reliability (Cronbach  $\alpha$ ) for the overall scale and the two subscales is discussed. Finally, in this section the descriptive statistics for the role ambiguity scale and subscales are discussed. This chapter concludes with a discussion of the implications of using the Cronbach  $\alpha$  for this study.

#### **4.2.4 Descriptive statistics for the Role Ambiguity Scale**

The internal consistency reliability of the role ambiguity scale was .90 (see Table 4.3). The primary role ambiguity scale had an internal consistency reliability of .85 and the secondary role ambiguity scale had an internal consistency reliability of .87 (see Table 4.3 for more details of these results). A Cronbach  $\alpha$  of .60 was considered the threshold value for internal consistency reliability for this study. That is, a scale could not be deemed a valid measure of its construct, if the Cronbach  $\alpha$  was less than .60 and any scale with a Cronbach  $\alpha$  of less than .60 was not included in this study for further analysis.

Subscales measuring the various dimensions of role ambiguity that had a Cronbach  $\alpha$  less than .60 were role ambiguity (behaviour predictability) for the both the primary and secondary roles. Table 4.3 shows the descriptive statistics for role ambiguity scale and its dimensions. All constructs in this study have dimensions except for inter-role conflict, and role overload. This table also shows that the skewness measure for all role ambiguity scales were significant ( $p < .05$ ).

**TABLE 4.2***Changes to the Wording of Items in the Role Ambiguity Scale (Rizzo, House and Lirtzman, 1970)*

<b>Item #</b>	<b>Original wording of the item</b>	<b>Item used in this survey</b>
4	I am corrected or rewarded when I really don't expect it.	I am corrected or rewarded when I really don't expect it in this role.
5	I feel certain how I will be evaluated for a raise or promotion.	I feel certain of how I will be evaluated for a promotion.
6	I am told how well I am doing my job.	I am told how well I am doing in this role.
7	I do not know if my work will be acceptable to my boss.	I do not know if my work, in this role, will be acceptable to my line manager.
8	I have clear, planned goals and objectives for my job.	I have clear, planned goals and objectives for this role.
9	I experience a lack of policies and guidelines to help me.	I experience a lack of policies and guidelines to help me in this role.
10	I know what my responsibilities are.	I know what my responsibilities are in this role.
11	I have to 'feel my way' in performing my duties.	I have to 'feel my way' in performing my duties in this role.
12	I know exactly what is expected of me.	I know exactly what is expected of me in this role.
13	I am uncertain as to how my job is linked.	I am uncertain as to how my role is linked to the school plan.
14	The explanations are clear of what has to be done.	The explanations are clear of what has to be done in this role.
15	I have to work under vague directives or orders.	I have to work under vague directives or orders in this role.

**TABLE 4.3***Descriptive Statistics for Role Ambiguity Scale used in Study.*

Scale Name	Cronbach $\alpha$ Coefficient	Scale Mean	Standard Deviation	Minimum	Maximum	Skewness
RA	.90 (O)	2.42	0.59	1.09	4.45	0.67**
	.85 (P)	2.34	0.65	1.00	4.45	0.64**
	.87 (S)	2.49	0.69	1.09	4.82	0.69**
RA – Behaviour Predictability	.76 (O)	2.79	0.72	1.17	4.83	0.45**
	.55 (P)*	2.77	0.81	1.00	4.67	0.34**
	.59 (S)*	2.82	0.75	1.00	5.00	0.37**
RA – Role Clarity	.88 (O)	2.26	0.62	1.00	4.50	0.66**
	.87 (P)	2.16	0.72	1.00	4.50	0.75**
	.87 (S)	2.34	0.76	1.00	4.75	0.64**

**Key:** O = Overall measure, P = Primary role measure, S = Secondary role measure

\* Cronbach  $\alpha$  less than .60, \*\* Skewness  $t > 1.96$  ( $p < .05$ )

Information on the role ambiguity scale was provided in this section. Justification for the inclusion of this scale is made and information on the modifications made to this scale and the differences to the original scale are stated. The descriptive statistics for this scale further justified the use of the modified scale. The content of the next section of this thesis follows the same format as this section, however, the history and development section for role conflict is omitted as it has already been discussed above.

### **4.3 ROLE CONFLICT SCALE**

As the history and development of the role conflict scale was combined with the history and development of the role ambiguity scale in the previous section, the first part of this section contains a description of the dimensions of the construct role conflict. In the second part of this section the description statistics for the role conflict scale used in this study are reported. These description statistics include the Cronbach  $\alpha$  coefficient, scale *mean*, *standard deviation*,

*minimum, maximum, and skewness*. As for the role ambiguity scale, these statistics are provided twice, for each of the scales, once for the primary role and once for secondary role.

#### **4.3.1 Dimensions of the Role Conflict Scale**

When originally researching role conflict Kahn et al. (1964) defined the dimensions of role conflict as Person-Role Conflict, Inter-role Conflict, Intersender Conflict, and Intrasender Conflict. These concepts have since been elaborated on by Rizzo, House and Lirtzman (1970). The Rizzo et al. (1970) conflict scale consists of six dimensions and are characterised as conflict between the focal person's internal standards or values and the defined role behaviour, conflict between the time, resources, or capabilities of the focal person and the defined role behaviour, conflicting expectations and organisational demands in the form of incompatible policies, incompatible standards of evaluation and conflicting requests. The final dimension of role conflict is conflict between two roles (inter-role conflict). This dimension has been treated as a separate construct for the purposes of this study. Items for the remaining five dimensions of role conflict are shown in Table 4.4.

#### **4.3.2 Modifications made to Role Conflict Scales**

In this section the two modifications that were made to the role conflict scales are described. The first modification is similar to the changes, in item wording, made to the role ambiguity scale (see Section 4.2.3). The second modification is described as the omission of items from the scale that measure the dimension of inter-role conflict. Similar to Section 4.2.3 the wording of items of the role conflict scale have been modified to reflect two roles in a single work domain as opposed to the two roles of work and family (i.e., two physically separate domains). Table 4.5 shows the modifications that have been made to each of the items of the role conflict scale.

**TABLE 4.4***Summary of the Role Conflict Scales and Sub-Scales*

<b>Scale Name</b>	<b>Scale Description</b>	<b>Items per Scale</b>	<b>Sample item</b>	<b>Item Number</b>
Role Conflict (RC)	Measures the amount of conflict that the stakeholder perceives they experience within a role	11	I perform tasks that are too easy or not sufficiently challenging.	16,17,18,19, 20,21,22,23, 24, 25,26
Role Conflict – Internal Standards and defined role behaviour)	Conflict between the focal <b>persons internal standards or values</b> and the defined role behaviour	4	I have to do things that should be done differently.	16,17,18,19
Role Conflict – Resources and defined role behaviour	Conflict <b>between time, resources, or capabilities</b> of the focal person and the defined role behaviour	3	I have enough time to complete my work in this role	20,21,22
Role Conflict – Incompatible policies	Conflicting expectations and organisational demands in the form of: <b>Incompatible policies</b>	2	I work under incompatible policies and guidelines in this role.	23,24
Role Conflict – Conflicting requests	Conflicting expectations and organisational demands in the form of: <b>Conflicting requests</b>	1	I receive incompatible requests from two or more people in this role.	25
Role Conflict – Incompatible standards of evaluation	Conflicting expectations and organisational demands in the form of: <b>Incompatible standards of evaluation</b>	1	I do things that are accepted by one person and not accepted by others in this role.	26

The second modification to this scale is the deletion of items from the role conflict scale that assess inter-role conflict. Inter-role conflict and role conflict for the purposes of this study were

treated as separate constructs and therefore had separate scales. Further information on the inter-role conflict scale can be found in Section 4.5.

**TABLE 4.5**

*Changes to the Wording of Items in the Role Conflict Scale (Rizzo, House and Lirtzman, 1970)*

Item #	Original Wording of the Item	Item used in this survey
16	I perform tasks that are too easy or boring.	I perform tasks that are too easy or are not sufficiently challenging.
17	I have to do things that should be done differently.	I have to do things that should be done differently in this role.
18	I work on unnecessary things.	I work on unnecessary things in this role.
19	I perform work that suits my values.	I perform work that suits my values in this role.
20	I have enough time to complete my work.	I have enough time to complete my work in this role.
21	I receive an assignment without the manpower to complete it.	I receive tasks without the resources to complete it.
22	I receive assignments that are within my training and capability.	I receive tasks that are not within my training and capability in this role.
24	I have to buck a rule or policy in order to carry out an assignment.	I have to 'bend' a rule or policy in order to carry out a task in this role.
25	I receive incompatible requests from two or more people.	I receive incompatible requests from two or more people in this role.
26	I do things that are apt to be accepted by one person and not accepted by others.	I do things that are accepted by one person and not accepted by others in this role.

### 4.3.3 Descriptive statistics for the Role Conflict Scale

The Cronbach  $\alpha$  for the role conflict scale and subscales is discussed in this section. The implications of a Cronbach  $\alpha$  value less than .60 for those scales that measured the dimensions of role conflict are highlighted. The Cronbach  $\alpha$  was above .60 for all scales except role conflict – resources and defined role behaviour (See Table 4.6 for further detail). In this section of this chapter the reasoning for the selection of the role conflict scale (Rizzo et. al., 1970) was presented. The validation data from this study, for this scale, has been presented. In the next



section of this chapter a review of the selection and validation of the role overload scale is conducted.

**TABLE 4.6**

*Descriptive Statistics for Role Conflict Scale (N= 207)*

Scale Name	Cronbach $\alpha$ Coefficient	Scale Mean	Standard Deviation	Minimum	Maximum	Skewness
RC	.90 (O)	2.72	0.62	1.27	4.91	0.41**
	.83 (P)	2.74	0.67	1.09	4.91	0.28
	.84 (S)	2.67	0.70	1.27	4.91	0.37**
Role Conflict – Internal Standards and defined role behaviour)	.83 (O)	2.47	0.73	1.00	5.00	0.54**
	.71 (P)	2.48	0.79	1.00	5.00	0.56**
	.74 (S)	2.45	0.82	1.00	5.00	0.39**
Role Conflict – Resources and defined role behaviour	.71 (O)	3.02	0.74	1.00	5.00	0.12
	.54 (P)*	3.04	0.81	1.00	5.00	0.05
	.57 (S)*	3.00	0.86	1.00	5.00	0.27
Role Conflict – Incompatible policies	.79 (O)	2.54	0.83	1.00	5.00	0.62**
	.63 (P)	2.56	0.91	1.00	5.00	0.62**
	.53 (S)	2.50	0.86	1.00	5.00	0.59**
Role Conflict – Conflicting requests	.64 (O)	2.80	0.99	1.00	5.00	0.33
Role Conflict – Incompatible standards of evaluation	.66 (O)	3.04	1.02	1.00	5.00	-0.18

**Key:** O = Overall measure, P = Primary role measure, S = Secondary role measure

\*Cronbach  $\alpha$  less than .60, \*\* Skewness  $t > 1.96$  ( $p < .05$ )

#### **4.4 ROLE OVERLOAD SCALE**

This section of the thesis contains information describing the selection and use of the role overload scale. This section has three parts. The first part of this section contains a validation for the selection and use of the unidimensional role overload scale. This section also contains a discussion of the history and development of the role overload scale. The second part of this section contains discussion on the modifications that were made to this scale. The final section contains a report on the descriptive statistics of the role overload scale.

##### **4.4.1 History and development of the Role Overload Scale**

Given that a stakeholder holds multiple roles within a single work position, there must be some arbitrary limit to the time that the role holder is willing to allocate to each role within this work position. Although this time allocation may not be formal or even in the consciousness of the role holder, the role holder continually monitors role demands across their multiple roles. An evaluation of whether these role demands are excessive is based on the importance the stakeholder places on the role and whether time spent in one role, causes conflict in other life or work domain roles. Role time demands in the literature have also been referred to as role overload (Carlson & Kacmar, 2000) and also role demands (Beehr, Walsh, & Taber, 1976; Karasek, 1979). These terms have been used in previous literature interchangeably, and are similar, in that they measure 'the feelings a role holder will experience as a result of excessive demands'. The construct of role overload is used in this thesis. Beehr, Walsh, and Taber (1976) and Karasek (1979) performed most of the early work in defining and conceptualising the phenomenon of role overload. In its earliest theory role overload was based on the notion that excessive role demands always lead to negative reactions by the role holder. This conceptualisation of role overload has since been adopted and incorporated in the majority of studies on inter-role conflict. For example, Pettegrew and Wolf (1982) and Carlson and Kacmar (2000), use the role overload scale to reflect the negative aspects of role demand (e.g.,

I feel that my job interferes with my family life. I feel constant pressure from others to improve the quality of my work).

For the most part, Karasek's (1979) concept of role overload has not been challenged.

Recently, however, authors such as Boyar, Carr, Mosely, & Carson, (2007) believe that this concept is too narrowly focused, and that previous scales on role overload only capture one end of the demand spectrum. They suggest that role overload does not have to be associated with negative feelings, but in fact some role holders may perceive work overload as either having no effect, or an actual positive effect, in their work or family roles. Boyar et al. also suggest that the high demands of a role may contribute to the uniqueness of the role and therefore to the identity of the role holder.

Prior to Boyar et al.'s (2007) research, Yang, Chen, Choi and Zou (2000) has argued that even though work overload may reinforce role identity, work overload is still defined as pressures arising from excessive workloads. Yang et al. therefore measures role overload by assuming individuals will identify demand with the negative aspects of the role, regardless of the reinforcement direction or role identity.

In light of these arguments, for this research, role overload will be measured using questions about the 'pressures' experienced by the role holder arising from excessive work loads. If a stakeholder experiences these excessive role demands as positive, then opportunity to reflect this attitude can be realised by marking the appropriate response on the Likert scale. The role overload scale to be used for this study is adapted from Pettigrew and Wolf's (1982) role overload scale. This scale was originally adapted from Beehr, Walsh, and Taber's (1976) role demand scale. This scale consists of 4 items, and each of these items reflects excessive role demands. A summary of the role overload scale and its items can be found in Table 4.7.

**TABLE 4.7***Summary of the Role Overload Scale*

Scale Name	Scale Description	Items per Scale	Sample item and item numbers
Role Overload (RO)	Perceived time and overload within a role	4	I feel constant pressure from others to improve the outcomes in this role  34,35,36,37

This table shows the unidimensional nature of role overload (i.e., it does not contain any dimensions).

#### 4.4.2 Modifications made to the Role Overload Scale

Sections 4.2.3 and 4.3.3 reflect the modifications made to the wording of the role overload Scale. This wording reflects two roles in a single work domain as opposed to the two roles of work and family, existing in two physically separate domains. Table 4.8 shows the modifications that have been made to each of the items of the role overload scale.

**TABLE 4.8***Changes to the Wording of Items in the Role Overload Scale*

Item #	Original Wording of the Item	New Wording of Item
40	I feel constant pressure from others to improve the quality of my work.	I feel constant pressure from others to improve the outcomes in this role.
41	I find that I have extra work beyond what should normally be expected of me.	I find that I have extra work beyond what should normally be expected of me, in order to meet the demands of this role.
42	The criteria of performance for my job are too high.	The criterion of performance for this role is too unrealistic.
43	I am given too much responsibility without adequate authority to carry it out.	I am given too much responsibility without adequate authority in this role.

#### 4.4.3 Descriptive statistics for the Role Overload Scale

The Cronbach  $\alpha$  measure for the role overload scale is reported in this section.

The Cronbach  $\alpha$  coefficient scores show that all of the scales used to measure role overload had a Cronbach  $\alpha$  measure greater than .60. See table 4.9 for a summary of these descriptive statistics.

**TABLE 4.9**

*Descriptive Statistics for Role Overload Scale*

Scale Name	Cronbach $\alpha$ Coefficient	Scale Mean	Standard Deviation	Minimum Statistic	Maximum Statistic	Skewness Statistic
RO	.84 (O)	3.00	0.79	1.00	5.00	0.07
	.82 (P)	3.15	0.93	1.00	5.00	0.07
	.84 (S)	2.87	0.93	1.00	5.00	0.28

**Key:** O = Overall measure, P = Primary role measure, S = Secondary role measure

Table 4.9 shows the internal reliability testing of this scale was considered high, irrespective of whether data analysed were for the overall, primary or secondary roles, with all scales having a Cronbach  $\alpha$  greater than .80. In the next section of this chapter the selection of the role salience scale chosen for this study is validated.

#### **4.5 ROLE SALIENCE SCALE**

Role salience is defined as the importance of a role to an individual. This importance is determined by one's commitment to that role (attitudes), and their participation and knowledge about that role (Matzeder & Krieschok, 1995). Role salience is an important variable in role development studies, as it reportedly acts a covariate in the relationship between role ambiguity, role overload and role conflict (Biggs & Brough, 2005; Reitzes & Mutran, 1994). This section has four parts. In the first part of the section, the use of the Life Role Salience Scale (LRSS) (Amatea, Cross, Clark, Bobby: 1986) by discussing the history and development of this scale is validated. The second part of this section presents a discussion of the

dimensions of the LRSS. In the third part the modifications made to the LRSS are stated, and in the final part of this section the descriptive statistics of the LRSS are presented.

#### **4.5.1 History and development of the Role Salience Scale**

The value of a role to a stakeholder has been expressed through several different variable types in the study of inter-role conflict, particularly in the work-family conflict area. These variables include role commitment (Stryker & Serpe, 1994), role centrality (Martire, Stephens & Townsend, 2000; Rosenberg, 1979), role involvement (Frone, Russel & Cooper, 1995), role priorities (Carlson & Kacmar, 2000), and role salience (Carlson & Kacmar, 2000; Amatea, Cross, Clark, & Bobby, 1986).

These terms have been used across many different professions including the education profession (Raju & Srivastava, 1994). Common to these measurements across different professions is the determination of the 'value of a role'. This perceived value of a role has an effect on how the role holder experiences excessive role time demands, and therefore how the role holder experiences the conflict between, and in roles. As Carlson and Kacmar (p.1035), state "Values motivate action and are the basis from which individuals define their roles. Thus, value expression represents the physical manifestation of values related to an individual's identity or self-concept". Role values therefore are important in determining role behaviour associated with role conflict and inter-role conflict.

Determining the most suitable scale and measurement for 'role value' is grounded by the purpose of this study. Since one of the objectives of this study is to examine the relative comparisons between roles, role value will be limited to the two possible variables of role centrality and role salience. These two measures have been selected for this study, because of

their continued use in measuring the relative differences between roles (Stryker & Serpe, 1994). These two measures are discussed below.

The term salience is rooted in social identity theory and self-categorisation theory (Stryker & Serpe, 1994). The two key features of salience are the need for reciprocal social interaction and the need for accessibility and opportunity to play a role in the social context or social group. The reciprocal interaction of the social or role identity to the social contexts is a key characteristic of social identity theory (Burke & Reitzes, 1981). Given that the motives of a stakeholder in social situations is to reduce uncertainty and to self enhance, if the role holder can find a 'fit' (i.e., the role holder can find their role in the social group or social context subjectively meaningful), the particular role will be played out. Having a fit in a social group or social context is not enough for a particular role to be salient. In order for the role to be salient, the opportunities to play out this fit must be accessible. Highly salient roles therefore are those roles that are more subjectively meaningful and are played out with subjective ease. These roles are organised into a conceptual schema and are Tran situational in that the most salient role is the one that is most likely to be played out in favourable circumstances (Stryker & Serpe, 1994).

The difference between salience and centrality is subtle. While salience is based on social group and social fit, and on opportunity to play out the social role, there are other non-social factors that make a role central (e.g., pay rate, working conditions etc.). All these factors contribute to how important or central the identity is to oneself. For example, a Head of Department role (50% teaching load), may prefer their classroom teacher role because the stakeholder finds this role socially rewarding and it fits with their core values of making a difference. The stakeholder will seek to play out this role if this role domain is the most salient within their teaching position. However, the stakeholder when asked "What do you do for a

living?” may respond. “I am a Head of Department”. This administrative role domain may be seen as more central because of the overall contribution to one’s self-esteem (Rosenberg, 1979). Potentially both concepts of role centrality and role salience scales may be suitable for the relative measures of role value.

Stryker and Serpre (1994) found that centrality and salience could not be presumed to be measured by the same scale, and could not determine whether salience and centrality were overlapping or independent measures. Their conclusion was that both centrality and salience measures should be used to determine the value of a role. Although there may be some merit in using centrality as a measure, this study limited its measure of role value to a single scale. Stryker and Serpre (1994) discuss the use of the role salience measures over role centrality measure because centrality is identified through stakeholder intentions. This conception makes the assumption that the stakeholder has a conscious awareness of role preference, whereas salience does not. The other justification for the preference of role salience is that like role ambiguity and role conflict, role salience has its origins rooted in social identity theory. Based on the presented evidence it was appropriate to employ role salience scales to measure role value. Discussion in this section has validated the choice of the LRSS over other role salience / value measures on the basis that this measure has two dimensions and that the term ‘salience’ is rooted in social identity theory. In the next section the two dimensions of the LRSS are discussed.

#### **4.5.2 Dimensions of the Life Role Salience Scale**

In this section, the two dimensions of the LRSS developed by Ametee et al. (1986) are explained. This scale has been heavily and almost exclusively used or adapted in determining the value of roles in various role domains. In addition, this scale has previously had its dimensions validated (Campbell & Campbell, 1995). The role salience scale to be used in this



study therefore will also draw on the two dimensions of role salience; commitment and value. Examples of the LRSS scale and items from this scale can be found in Table 4.10.

**TABLE 4.10**

*Summary of Life Role Salience Scale*

<b>Construct Name</b>	<b>Construct Description</b>	<b>Items per Construct</b>	<b>Sample item</b>	<b>Item numbers</b>
Role Salience (RS)	Measures the value the stakeholder has of the role and the their commitment to the role	9	It is important to me to feel successful in this role.	39,40,41,42,43,44,45,46, 47
Role Salience - Commitment	Role Reward Value	4	Having work / a career that is interesting and exciting to me is my most important life goal.	39,40,41,42
Role Salience - Value	Role Commitment	5	I want to work, but I do not want to have a role that is too demanding.	43,44,45,46,47

### 4.5.3 Modifications made to the Life Role Salience Scale

The modifications made to the LRSS in order to adapt the scale to the aims of this study are stated in this section. The LRSS items have been modified to reflect two roles in a single work domain as opposed to the two roles of work and family, existing in two physically separate domains. Table 4.11 shows the modifications that have been made to each of the items of the LRSS.

**TABLE 4.11***Changes to the Wording of Items to the Life Role Salience Scale*

<b>Item #</b>	<b>Original Wording of the Item</b>	<b>New Wording of Item</b>
39	I expect this job to give me more real satisfaction than anything else I do.	I expect this role to give me more real satisfaction than anything else I do.
40	Building a name and reputation for myself through this job is not one of my life goals.	Building a name and reputation for myself through this role is not one of my life goals.
41	It is important to me that I have a job in which I can achieve something of importance.	It is important to me that I have a specific role in which I can achieve something of importance.
42	It is important to me to feel successful.	It is important to me to feel successful in this role.
43	I want to work, but I do not want a job that is too demanding.	I want to work, but I do not want to have a role that is too demanding.
44	I expect to make as many sacrifices as are necessary in order to advance at work.	I expect to make as many sacrifices as are necessary in order to advance within this role.
45	I value being involved in this job and expect to devote the time and effort needed to develop it.	I value being involved in this role and expect to devote the time and effort needed to develop it.
46	I expect to devote a significant amount of my time to building my reputation and developing the skills necessary to advance within this job.	I expect to devote a significant amount of my time to building this role and developing the skills necessary to advance within this role.
47	I expect to devote whatever time and energy it takes to improve or to be recognised at work.	I expect to devote whatever time and energy it takes to improve or to be recognised within this role.

#### **4.5.4 Descriptive statistics for the Life Role Salience Scale**

In this section a discussion of the Cronbach  $\alpha$  measure for the LRSS is conducted. This measure can be found in Table 4.12. The Cronbach  $\alpha$  coefficient scores show that all of the scales used to measure role overload had a Cronbach  $\alpha$  measure higher than .60, except for the commitment dimension in the primary role. Table 4.12 shows that all scales had a Cronbach  $\alpha$

greater than .80 other than the role salience – commitment scale. In summary, role salience is defined as the subjective fit of a role and the ease with which this role can be played out in the social group. The LRSS which has been used extensively to measure role salience, measures

**TABLE 4.12**

*Descriptive Statistics for the Life Role Salience Scale*

Scale Name	Cronbach $\alpha$ Coefficient	ScaleMean	Standard Deviation	Minimum Statistic	Maximum Statistic	Skewness Statistic
RS	.87 (O)	3.36	0.55	1.70	4.80	-0.26
	.77 (P)	3.47	0.57	1.70	4.80	-0.19
	.78 (S)	3.26	0.61	1.50	4.80	-2.13
RS - Commitment	.79 (O)	3.41	0.62	1.60	5.00	-0.10
	.59 (P)	3.51	0.64	1.60	5.00	-0.16
	.61 (S)	3.32	0.66	1.60	5.00	-0.08
RS – Value	.82 (O)	3.31	0.62	1.50	4.80	-0.17
	.70 (P)	3.43	0.65	1.60	4.80	-0.18
	.70 (S)	3.19	0.71	1.40	5.00	-0.17

**Key:** O = Overall measure, P = Primary role measure, S = Secondary role measure

the two constructs of ‘role reward value’ and ‘role commitment’. To date the LRSS is the most appropriate existing scale that measures the phenomenon of role salience. This scale and the various dimensions of the role salience scale had appropriate levels of internal reliability according to the value for Cronbach  $\alpha$  attained. The next section of this chapter will address the selection and validation issues of the inter-role conflict scale.

## **4.6 INTER-ROLE CONFLICT SCALE**

Rizzo, House and Lirtzman (1970) in their studies of inter-role conflict define inter-role conflict as a form of role conflict, and in their original role conflict scale inter-role conflict was represented by two questions.

1. I am able to act the same regardless of the group I am with.
2. I work with two or more groups who operate quite differently.

Since the interest in inter-role conflict as an independent variable has increased, the need for a greater depth in this scale has also arisen.

In this section of this thesis a validation of the selection and use of the inter-role conflict scale is constructed. This section has three parts. In the first part of this section the selection and use of the inter-role conflict scale is validated by discussing the history and development of the role overload scale. This section does not contain discussion about the dimensions of the inter-role conflict scale as the scale chosen does not contain any dimensions. In the second part of this section the modifications that were made to this scale are stated. In the third part of this section the descriptive statistics of the inter-role conflict scale are presented.

### **4.6.1 History and development of the Inter-role Conflict Scale**

Most studies today use a combination of questions from Rizzo, House and Lirtzman (1970) and their own developed questionnaire items to measure the construct of inter-role conflict. Other inter-role conflict scales have been adapted from Frone et al. (1992) cited in Foley, Ngo, & Lui (2005), Netemeyer et al. cited in (1996) Boyar et al. (2003) and Kopelman, Greenhaus, & Connolly (1983) cited in Elroy & Smith (2003). Some authors have also developed inter-role conflict scales independently of previous scales. (Smyrnios et al., 2003; Lui, Ngo & Tsang, 2001). Carlson, Kacmar & Williams (2000) cited in Madsen (2003) has developed the most comprehensive inter-role conflict scales to date; a multidimensional scale of inter-role conflict

in the work family domain. This scale measures the three proposed dimensions of inter-role conflict. These dimensions are sometimes referred to as six dimensions because they are bi-directional (i.e., work to family conflict and also family to work conflict). These three dimensions are 'time-based conflict', 'strain-based conflict' and 'behaviour based conflict'. This inter-role conflict scale consists of nine questions with three questions in each dimension. This scale was originally chosen as the scale to measure the construct of inter-role conflict. Although the scales used in Carlson, Kacmar & Williams (2000) are the most comprehensive scales used in inter-role conflict studies, these scales have only been developed relatively recently and have not been scrutinized heavily. Another concern with these scales is the small number of questions contained for each of the dimensions of the scales. Because the essence of this research study is focused on the phenomenon of inter-role conflict, a redundant scale for inter-role conflict was included within the questionnaire for this study. The redundant inter-role conflict scale chosen came from Rizzo et al. (1970).

#### **4.6.2 Modifications made to the Inter-role Conflict scale**

A description to the modifications made to the inter-role conflict scale is made in this section. As per previous sections, (4.2.3, 4.3.2, 4.4.3 & 4.5.4) the wording of items to the inter-role conflict scale have been modified to reflect two roles in a single work domain, as opposed to the two roles of work and family existing in two physically separate domains. Table 4.13 shows the modifications that have been made to each of the items of the inter-role conflict scales. After the internal reliability consistency testing was performed, further modifications were made to the final inter-role conflict scale that was used for further analysis in this study. The results from the scale internal reliability tests showed that the Carlson, Kacmar & Williams (2000) inter-role conflict scale had a Cronbach alpha of .59. For each of the dimensions of their inter-role conflict scale the Cronbach alpha was .58 (Time based), .58 (Strain based), and .82 for (Behaviour based Inter-role Conflict) (See Table 4.14 for details of

these results). Table 4.14 shows the summary of inter-role conflict scales and subscales. The Cronbach  $\alpha$  for Rizzo et al.'s inter-role conflict scale was .82 (See Table 4.15). Given the outcomes of the scale internal reliability testing it was decided that the Carlson, Kacmar & Williams (2000)'s inter-role conflict scale would not be considered in the analysis of results for this study. The scale used for analysis for inter-role conflict therefore was the scale developed by Rizzo et al. (1970).

**TABLE 4.13**

*Changes to the Wording of Items to the Inter-role Conflict Scale*

<b>Item #</b>	<b>Original Wording of the Item</b>	<b>New Wording of Item</b>
27	I am able to act the same regardless of the group I am with.	This role requires that I act differently than I do in other roles.
28	I work with two or more groups who operate quite differently.	I work with two or more groups who operate quite differently, in this role.
29	The expectations of my work behaviour and attitudes from my firm are incompatible with those from my profession.	The expectations of my work behaviour and attitudes are incompatible between this role and other roles.
30	I feel that my family life interferes with my work.	I feel that this role interferes with my other work.
31	It is not easy to be a good employee of my firm and an ideal professional accountant at the same time.	It is not easy to be a good employee in this role and an ideal teaching professional at the same time.
32	The work procedures and practices of my firm sometimes deviate from the standard practices of the profession.	The work procedures and practices of my school sometimes deviate from the standard practices expected in the teaching profession.
33	The way I do my work seems to be more accepted by my firm than by my profession.	The way I do my work in this role is more accepted, than in other roles.
48	I have to miss the fun things in life due to the amount of time spent at work.	I have to miss the fun things in teaching due to the amount of time spent on this role's responsibilities.
49	I am often so drained that it prevents me from contributing to other aspects of my life.	I am often so drained from this role that it prevents me from contributing to other aspects of teaching life.
50	The problem solving behaviours I use at work are not effective in resolving problems in other areas of my life.	The problem solving behaviour I use in this role is not effective in resolving problems in other areas of teaching.

**TABLE 4.14***Summary of the Inter-role Conflict Scales and Sub-Scales*

<b>Construct Name</b>	<b>Construct Description</b>	<b>Items per Construct</b>	<b>Sample item</b>	<b>Item numbers</b>
Inter-role Conflict (IRC) Rizzo et al.	Conflict between several roles for the same person which require different or incompatible behaviours.	14	This role requires that I act differently in this role than I do in other roles.	27,28,29,30,31,32,33
Inter-role Conflict (IRC) Carlson et al.	Conflict between several roles for the same person which require different or incompatible behaviours.	6	I have to miss the fun things in teaching due to the amount of time spent on this role's responsibilities.	48,49,50
Inter-role Conflict (IRC-T) Carlson et al.	Inter-role Conflict – time based.	2	I have to miss the fun things in teaching due to the amount of time spent on this role's responsibilities.	48
Inter-role Conflict (IRC-S) Carlson et al.	Inter-role Conflict – strained based.	2	I am often so drained from this role that it prevents me from contributing to other aspects of teaching life.	49
Inter-role Conflict (IRC-B) Carlson et al.	Inter-role Conflict – behaviour based.	2	The problem solving behaviour I use in this role is not effective in resolving problems in other areas of teaching.	50

**TABLE 4.15***Descriptive Statistics for Inter-role Conflict Scale*

Scale Name	Cronbach $\alpha$ Coefficient	Scale Mean	Standard Deviation	Minimum	Maximum	Skewness
IRC – Rizzo et.al (1970)	.82 (O)	2.80	0.64	1.00	4.29	0.18
	.68 (P)	2.81	0.68	1.00	4.57	0.17
	.72 (S)	2.80	0.71	1.00	4.57	0.19
IRC - Time	.58 (O)	2.92	2.00	2.69	1.17	0.15
IRC - Strain	.58 (O)	3.07	1.96	2.88	3.26	0.25
IRC - Behaviour	.82 (O)	2.28	1.65	2.24	2.28	1.14

Key: (O = Overall measure, P = Primary role measure, S = Secondary role measure)

**4.7 CHAPTER SUMMARY**

Discussion in this chapter has forwarded the most suitable scales for each of the dependent variables and the independent variable, and validated these scales as the most appropriate scales for each of the constructs presented within this study. Discussion in this chapter has also introduced the dimensions intrinsic to each of the research constructs introduced in this study. A summary of the scales for each construct and its relevant dimensions has been listed. SPSS version 15.0 was used to test the internal reliability of the scales employed for this study. An internal reliability test was conducted for both the construct and also for the dimensions for each of the constructs. The Cronbach  $\alpha$  for all constructs used in the analyses of this research had an  $\alpha$  coefficient overall greater than 0.60. As each scale was applied twice, once for the primary role and once for the secondary role a Cronbach  $\alpha$  analysis for constructs within the primary and secondary roles was also conducted. For each construct the internal reliability for the primary and secondary roles had a Cronbach  $\alpha$  greater than 0.60. Not all dimensions for each of the constructs showed internal consistency reliability. Role ambiguity dimension



(behaviour predictability) for both the primary and secondary role revealed a Cronbach  $\alpha$  of less than 0.6, however the role ambiguity dimension (Role Clarity) showed acceptable levels of internal reliability. Two of the four dimensions within the role conflict scales (Role conflict – resources and defined role behaviour, Role conflict – incompatible policies), had Cronbach  $\alpha$  value of less than 0.60. The role salience subscales (RS-1) showed marginal levels of acceptability, with RS-2 revealing coefficients greater than 0.60. The Cronbach  $\alpha$  for Carlson's IRC scales overall and for the subscales was less than 0.60. For this reason the Carlson's IRC scale was omitted from further analysis within this study. Instead, Rizzo et al.'s (1970) IRC scale was used for further analysis to examine the interaction effects with inter-role conflict. The results for each of the scales that were applied to a sample of teachers within the Brisbane Catholic Education Archdiocese are provided in the following chapter.

## **CHAPTER 5**

### **RESULTS OF DATA ANALYSIS**

#### **5.1 INTRODUCTION**

In the previous chapter the development and validation of the data collection instruments used for this study was reported. The purpose of this chapter is to report the results obtained by using the instruments described in Chapter 4 to a sample of teachers in Catholic schools. Schools exclusively from the Brisbane Catholic Education Archdiocese were invited to participate in this study. Data were potentially collected from 162 schools, of which 118 were primary schools, and 44 were secondary schools. Schools classified as a P-12 school were counted as both a secondary and a primary school. Exact data on the actual schools that took part of the survey could not be discerned. Research dictated that all respondents remain anonymous, and therefore asking respondents to identify their employing school would compromise their anonymity in this study. There were a total of 207 responses used for data analysis. Further information on the sample of respondents is provided in Chapter 3 of this thesis (See Section 3.2.6).

All research questions presented in Section 5.2 were answered by the data obtained from the single survey. This survey contained five scales employed as part of the research design for this study. These five scales measured the five constructs of role ambiguity, role overload, role conflict, role salience and inter-role conflict for both primary and secondary roles. This produced measures for primary and secondary role ambiguity, primary and secondary role overload, primary and secondary role conflict, primary and secondary role salience, and primary and secondary inter-role conflict.

This chapter has ten main sections, other than this introduction. The research questions proposed in this thesis are introduced in Section 5.2. The data analysis technique used for each of these research questions are stated in Section 5.3. Discussion about the data preparation activities that were undertaken are provided in Section 5.4. The correlations between all constructs are presented in Section 5.5. In Sections 5.6 -5.10 the research questions under the major headings of role ambiguity, role overload, role conflict, role salience, and inter-role conflict are addressed. The final section (5.11) is the chapter conclusion.

## **5.2 RESEARCH QUESTIONS ANSWERED IN THIS CHAPTER**

Nineteen research questions for this study were formulated. Five questions sought to investigate each of role ambiguity and role overload. Four questions were formulated for each of role salience, and role conflict. One question was formulated directly for inter-role conflict. These research questions were:

### **5.2.1 Role Ambiguity research questions**

**RQ 5.2.1** - What is the relationship between Role Ambiguity and Role Conflict?

**RQ 5.2.2** - To what extent is Inter-role Conflict dependent on Role Ambiguity?

**RQ 5.2.3** - To what extent is Role Ambiguity dependent on Gender (**A**), Age (**B**), Years of Teaching Service (**C**), and School-Level Focus (**D**).

**RQ 5.2.4** - To what extent is the relationship between Primary Role Ambiguity and Inter-role (primary on secondary) Conflict dependent on the level of Secondary Role Salience?

**RQ 5.2.5** - To what extent is the relationship between Secondary Role Ambiguity and Inter-Role (secondary on primary) conflict dependent on the level of Primary Role Salience?

### **5.2.2 Role Overload research questions**

**RQ 5.2.6** - What is the relationship between Role Overload and Role Conflict?

**RQ 5.2.7** - To what extent is Inter-role Conflict dependent on Role Overload?

**RQ 5.2.8** - To what extent is Role Overload dependent on Gender (**A**), Age (**B**), Years of Teaching Service (**C**), and School-Level Focus (**D**).

**RQ 5.2.9** - To what extent is the relationship between Primary Role Overload and Inter-role (primary on secondary) Conflict dependent on the level of Secondary Role Salience?

**RQ 5.2.10** - To what extent is the relationship between Secondary Role Overload and Secondary Inter-role (secondary on primary) Conflict dependent on the level of Primary Role Salience?

### **5.2.3 Role Conflict research questions**

**RQ 5.2.11** - What is the relationship between Role Conflict and Inter-role Conflict?

**RQ 5.2.12** - To what extent is Role Conflict dependent on Gender (**A**), Age (**B**), Years of Teaching Service (**C**), and School-Level Focus (**D**).

**RQ 5.2.13** - To what extent is the relationship between Primary Role Conflict and Inter-role (primary on secondary) Conflict dependent on the level of Secondary Role Salience?

**RQ 5.2.14** - To what extent is the relationship between Secondary Role Conflict and Secondary Inter-role (secondary on primary) Conflict dependent on the level of Primary Role Salience?

### **5.2.4 Role Salience research questions**

**RQ 5.2.15** - What is the relationship between Role Salience and Role Conflict?

**RQ 5.2.16** - What is the relationship between Role Salience and Inter-role Conflict?

**RQ 5.2.17** - To what extent is Role Salience dependent on Gender (**A**), Age (**B**), Years of Teaching Service (**C**), and School-Level Focus (**D**).

**RQ 5.2.18** - To what extent is Primary Role Salience related to Secondary Role Salience?

### 5.2.5 Inter-role Conflict research question

**RQ 5.2.19** - To what extent is Inter-role Conflict dependent on Gender (**A**), Age (**B**), Years of Teaching Service (**C**), and School-Level Focus (**D**).

The research questions for this thesis have been stated in this section. In the next section of this study, each of the data analysis techniques used are presented. The research questions these data analysis techniques were applied to are also listed.

## 5.3 DATA ANALYSIS TECHNIQUES PERFORMED IN THIS STUDY

This section is focused on the data analysis techniques are employed for each research question. The second part of this section contains an explicit description of these data analysis techniques.

The first data analysis technique used in this study was the Pearson's correlation  $r$  (See Table 5.1). It was used to examine the linear relationship between the variables used in research questions RQ 5.2.1, RQ 5.2.2, RQ 5.2.6, RQ 5.2.7, RQ 5.2.11, and RQ 5.2.15. *Effect sizes* were also calculated for each of the above correlations. A second set of analyses employed  $t$ -tests to examine the relationship between Gender and the five variables assessed in this study (RQ 5.2.3.A, RQ 5.2.8.A, RQ 5.2.12.A, RQ 5.2.17.A, 5.2.19.A). A third set of analyses was on the relationship between the three grouping variables (age, years of teaching service, and school-level focus) and the five variables assessed in this study. These were investigated through the use of a multivariate analysis of variance (MANOVA). (RQ 5.2.3.B, RQ 5.2.3.C, RQ 5.2.3.D, RQ 5.2.8.B, RQ 5.2.8.C, RQ 5.2.8.D, RQ 5.2.12.B, RQ 5.2.12.C, RQ 5.2.12.D, RQ 5.2.17.B, RQ 5.2.17.C, RQ 5.2.17.D, RQ 5.2.19.B, RQ 5.2.19.C, RQ 5.2.19.D). The final set of data analyses employed a multivariate analysis of variance (MANOVA) using recoded variables (RQ 5.2.4, RQ 5.2.5, RQ 5.2.9, RQ 5.2.10, RQ 5.2.13, RQ 5.2.14, and RQ 5.2.18)

**TABLE 5.1***Data analysis techniques for each research question categorised by role construct*

	Data Analysis Technique			
	Pearson's <i>r</i> Correlation	<i>t</i> -test	MANOVA	MANOVA with recoded variables
<b>Role Ambiguity</b>				
5.2.1	X			
5.2.2	X			
5.2.3.A		X		
5.2.3.B			X	
5.2.3.C			X	
5.2.3.D			X	
5.2.4				X
5.2.5				X
<b>Role Overload</b>				
5.2.6	X			
5.2.7	X			
5.2.8.A		X		
5.2.8.B			X	
5.2.8.C			X	
5.2.8.D			X	
5.2.9				X
5.2.10				X
<b>Role Conflict</b>				
5.2.11	X			
5.2.12	X			
5.2.12.A		X		
5.2.12.B			X	
5.2.12.C			X	
5.2.12.D			X	
5.2.13				X
5.2.14				X
<b>Role Salience</b>				
5.2.15	X			
5.2.16	X			
5.2.17.A		X		
5.2.17.B			X	
5.2.17.C			X	
5.2.17.D			X	
5.2.18				X
<b>Inter-role Conflict</b>				
5.2.19.A		X		
5.2.19.B			X	
5.2.19.C			X	
5.2.19.D			X	

(See section 5.3.4 for more details on the use of recoded variables). In this section the data analysis techniques and their application to research questions was stated. The four data analysis techniques used within this study are described in the next section. The post hoc procedures undertaken and the conditions in which each post hoc procedure was used are also described in this section.

### **5.3.1 Pearson's $r$ correlation**

A correlational data analysis technique with Pearson's  $r$  as the accepted statistic was used to examine the relationships between role ambiguity, role conflict, role overload, role salience and inter-role conflict in both the primary and secondary roles. Pearson's  $r$  quantified the linear relationship that exists between the dependent variable (Inter-role Conflict) and the dependent variables of role time demands, role conflict, role salience and role ambiguity. Correlations between the dependent variables were also examined. The *Effect Size* for each of these correlations was calculated using Cohen's (1988)  $d$ . The *Effect Size* for a correlation is an indication of how strong the relationship is between two variables. *Effect size* can be understood as the percent of non-overlap between the distribution scores of two variables. A  $d$  of 0.0 indicates that the distribution of the scores of two variables completely overlap, or have a 0% non-overlap. A  $d$  of 0.80 indicates a non-overlap of 47.4% between the distributions of two variables, and a  $d$  of 1.70 predicts a non-overlap of 75.4% between the distributions of two variables.

### **5.3.2 $t$ -tests**

A series of  $t$ -tests were employed to examine the relationships between gender and each of the five variables assessed in this study (viz. role ambiguity, role conflict, role time demands, role salience and inter-role conflict). The  $t$ -test is used to assess whether the means of the male and female group were statistically different from each other for the five variables mentioned above.

### **5.3.3 Multivariate Analysis of Variance (MANOVA)**

A multivariate analysis of variance was used to investigate the effects of the three grouping variables (viz. age, years of service, and school-level focus) on each of the five dependent variables assessed in this study (viz. role ambiguity, role conflict, role time demands, role salience and inter-role conflict).

### **5.3.4 Multivariate Analysis of Variance (MANOVA) with recoded variables**

For the final analysis, each of the responses to each of the five dependent variables are categorised (recoded) into a low, middle or high bin, e.g., low ambiguity, middle ambiguity, high ambiguity. Each of these newly 'binned' variables was treated as a separate variable. A multivariate analysis of the recoded variables (viz. low, middle, high role ambiguity, low, middle, high role conflict, low, middle, high role overload, low, middle, high inter-role conflict) was used on the newly recoded role salience (viz. low, middle, high role salience).

A  $p=.05$  criterion of statistical significance was employed for all statistical tests. If the null hypothesis was rejected, a *Tukey post hoc* test was employed to identify groups for which means were dependent. A *Levene's* test was performed to test the equality of variance for the different groups of the independent variables. For samples where the population variances and sample sizes were not equal, a Games-Howell post hoc test was performed instead of the *Tukey HSD*. A summary of the data analysis techniques performed for each research question can be found in Table 5.1.

## **5.4 DATA PREPARATION**

The data for this study were prepared for analysis by assigning a value of 5 to those questions where the response equalled 'Strongly Agree' and a value of 1 to those responses that equalled 'Strongly Disagree'. Reverse scoring was also applied to specific questions within the survey. The reversed scored items were questions 7, 9, 11, 13, 15 for the Role Ambiguity scale,



questions 19, 20 for the role conflict scale and questions 40, 43 for the role salience scale. See Appendix A to view the questionnaire used in this study. Once the questions had been reversed, the relevant questions belonging to each scale were then grouped and the newly named constructs (e.g., role ambiguity), that reflected the scale were formed. Analyses to test differences between group means on these scales were then conducted.

This chapter contains another four main sections. Detailed information about the various correlations that can be found between each of the constructs is made available in Section 5.5. This information is placed in a separate section as it is referred to in Sections 5.6 - 5.10. The *Effect Sizes* for each of these correlations will also be examined, in this section. In Sections 5.6, 5.7, 5.8, 5.9, 5.10 the analysis of results for each of research questions under the major headings of role ambiguity, role overload, role conflict, inter-role conflict, and role salience are reported.

## **5.5 RESEARCH QUESTIONS**

The results for each of the research questions stated in Section 5.2 are presented in the next section. In Sections 5.5.1 and 5.5.2 the results for all correlations that have been performed in this study are provided. The *Mean*, *Standard Deviation*, and *Effect Size* for these correlations are further provided in Sections 5.5.3. The subsequent five sections (5.6, 5.7, 5.8, 5.9, & 5.10) state the research questions and the relevant analyses and results for that research question. The five sections of this chapter address the research questions under the headings of role ambiguity, role overload, role conflict, role salience, and inter-role conflict respectively.

### **5.5.1 Correlations between constructs**

The Pearson  $r$  (.05) test was employed to examine the correlations between each of the constructs (i.e., role ambiguity, role conflict, role salience, role overload, and inter-role

conflict). The correlation between each of the constructs can be found in Table 5.2. A diagrammatic view of the correlations between each of the constructs can be found in Figure 5.1. Figure 5.1 is a map of the correlations found in Table 5.2 to the existing Carlson and Kacmar (2000) framework. This framework provides a view that allows the researcher to more easily view the interaction between all constructs used in this study.

**TABLE 5.2**

*Pearson's r correlation for each of the role development questionnaire scales.*

	RA - P	RA - S	RC - P	RC - S	IRC - P	IRC - S	RO - P	RO - S	RS - P	RS - S
<b>RA - P</b>	1									
<b>RA - S</b>	.52**	1								
<b>RC - P</b>	.55**	.39**	1							
<b>RC - S</b>	.30**	.53**	.65**	1						
<b>IRC - P</b>	.43**	.37**	.67**	.46**	1					
<b>IRC - S</b>	.31**	.47**	.56**	.70**	.73**	1				
<b>RO - P</b>	.45**	.38**	.66**	.38**	.58**	.45**	1			
<b>RO - S</b>	.17*	.34**	.31**	.59**	.34**	.63**	.44**	1		
<b>RS - P</b>	-.23**	-.19*	-.21**	-.12	-.14*	-.09	-.16*	-.09	1	
<b>RS - S</b>	-.18*	-.17*	-.22**	-.13	-.14	-.07	-.15*	.02	.77**	1

\*.05 significance, \*\*.001 significance

**KEY:**

RA-P, Primary Role Ambiguity; RA-S, Secondary Role Ambiguity; RC-P, Primary Role Conflict; RC-S, Secondary Role Conflict; RO-P, Primary Role Overload; RO-S, Secondary Role Overload; RS-P, Primary Role Salience; RS-S, Secondary Role Salience; IRC-P, Inter-role Conflict on the Primary role; IRC-S, Inter-role Conflict on the Secondary role.

**Figure 5.1 - Correlations mapped diagrammatically using existing research models**

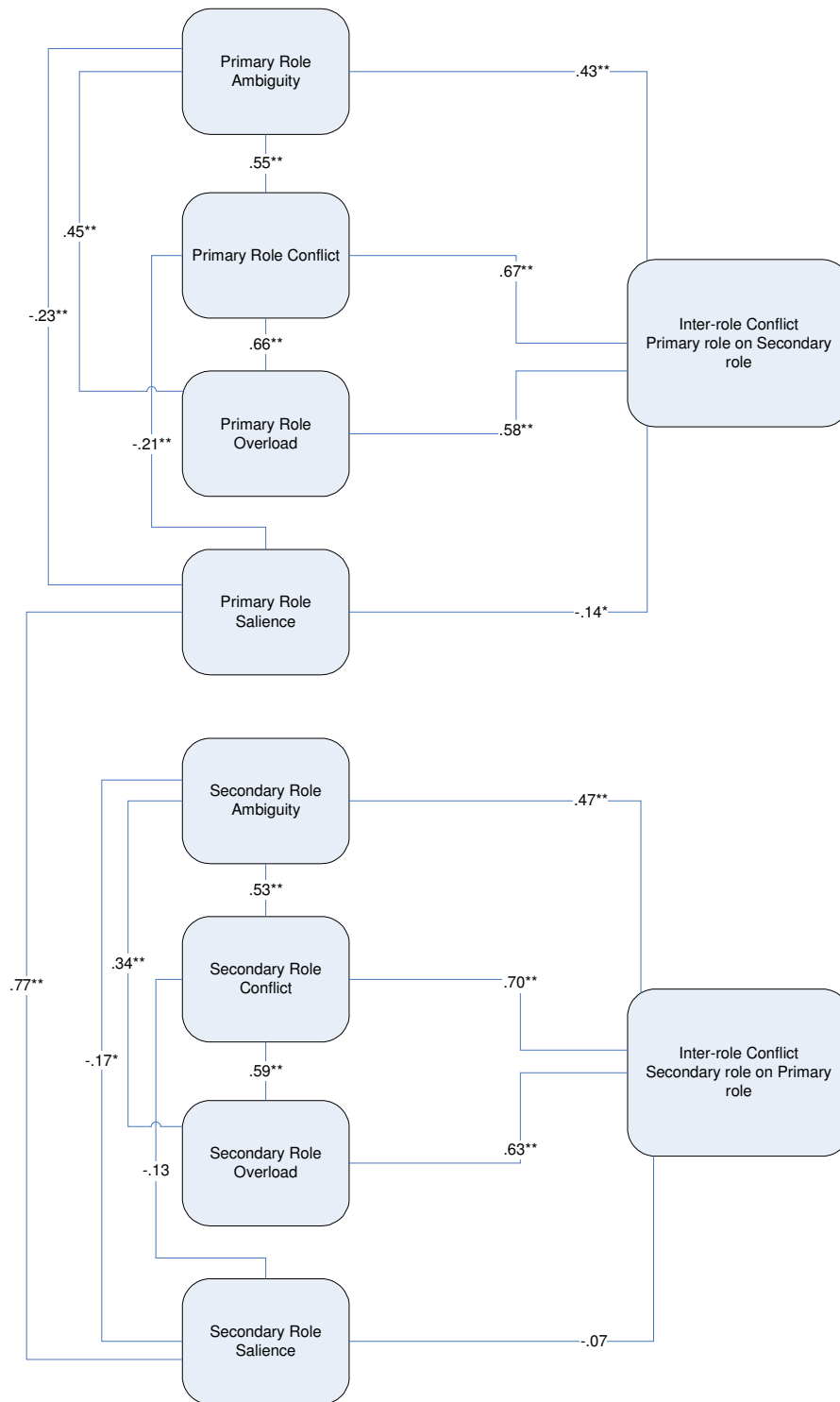


Figure 5.1 - A visual representation of the Pearson's  $r$  correlation for each of the constructs used in this study. (\*.05, \*\*.001)

### 5.5.3 Effect sizes for correlations

*Effect sizes* for each of the correlations examined in this study were calculated using Cohen's *d* (Cohen, 1988). This formula is stated as;  $d = M_1 - M_2 / \sigma_{\text{pooled}}$ , where  $\sigma_{\text{pooled}} = \sqrt{[(\sigma_1^2 + \sigma_2^2) / 2]}$ .

The *Effect Size* and the *Percent of non-overlap* between any two constructs can be seen in Table 5.3.

**TABLE 5.3**

*Ordered Effect Size, Means and Standard Deviations for Correlations Studied in Fig 5.1*

<b>Construct 1</b>	<b>Mean</b>	<b>SD1</b>	<b>Construct 2</b>	<b>Mean</b>	<b>SD2</b>	<b>Effect Size</b>	<b>% of non-overlap</b>
Role Ambiguity (P)	2.34	0.66	Role Salience (P)	3.48	0.57	1.45	69.40
Role Conflict (P)	2.75	0.68	Role Salience (P)	3.48	0.57	0.92	52.20
Role Ambiguity (P)	2.34	0.66	Role Overload (P)	3.15	0.93	0.91	51.90
Role Ambiguity (S)	2.49	0.70	Role Salience (S)	3.26	0.62	0.95	50.30
Role Salience (P)	3.48	0.57	Inter-role Conflict (P)	2.81	0.68	0.85	49.50
Role Conflict (P)	2.75	0.68	Inter-role Conflict (P)	2.81	0.68	0.72	45.00
Role Conflict (S)	2.70	0.70	Role Salience (S)	3.26	0.62	0.69	42.50
Role Ambiguity (P)	2.34	0.66	Inter-role Conflict (P)	2.81	0.68	0.57	35.10
Role Salience (S)	3.26	0.62	Inter-role Conflict (S)	2.8	0.72	0.56	34.80
Role Ambiguity (P)	2.34	0.66	Role Conflict (P)	2.75	0.68	0.50	33.00
Role Conflict (P)	2.75	0.68	Role Overload (P)	3.15	0.93	0.45	30.20
Role Ambiguity (S)	2.49	0.70	Role Overload (S)	2.87	0.94	0.42	28.50
Role Overload (P)	3.15	0.93	Inter-role Conflict (P)	2.81	0.68	0.38	26.10
Role Ambiguity (S)	2.49	0.70	Inter-role Conflict (S)	2.80	0.72	0.37	25.50
Role Salience (P)	3.48	0.57	Role Salience (S)	3.26	0.62	0.29	20.70
Role Ambiguity (S)	2.49	0.70	Role Conflict (S)	2.70	0.7	0.25	18.10
Role Conflict (S)	2.70	0.70	Role Overload (S)	2.87	0.94	0.19	14.00
Role Conflict (S)	2.70	0.70	Inter-role Conflict (S)	2.80	0.72	0.12	9.10
Role Overload (S)	2.87	0.94	Inter-role Conflict (S)	2.80	0.72	0.08	6.30

Table 5.3 – shows the Mean, Standard Deviation, Effect Size, and Percent of non-overlap for each of the correlations examined between variables within this study.

Each correlation between the variables has been ordered according to the *Effect Size*.

According to Cohen (1988) an *effect size* is considered to be small if  $d=.2$ , medium when  $d=.5$ , and large if  $d=.8$ . *Effect sizes* can also be considered in terms of the percent of overlap between two distributions. An effect size of .2 indicates that the two distributions have a non-overlap of 14.7%. An *effect size* of .5 indicates that the two distributions have a non-overlap of 33.0%, and an *effect size* of .8 indicates a non-overlap of 47.4% between two distributions. Table 5.3 shows that the correlation between variables where the *effect size* was considered to be small was predominantly found with secondary role variables.

## **5.6 ROLE AMBIGUITY RESEARCH QUESTIONS**

### **RQ 5.6.1 – What is the relationship between Role Ambiguity and Role Conflict?**

To investigate this question a Pearson's  $r$  test was conducted to determine the correlation between the variables. The results which can be found in Table 5.2 showed that primary role ambiguity was positively correlated to primary role conflict ( $r = .55, p < .05$ ), and secondary role ambiguity was positively correlated to secondary Role Conflict ( $r = .53, p < .05$ ). The *Effect Size* for each of these correlations were .50 and .25 respectively (Table 5.3).

### **RQ 5.6.2 – To what extent is Inter-role Conflict dependent on Role Ambiguity?**

To determine the relationship between the role ambiguity and inter-role conflict variables, a test of statistical significance was also conducted. It was found that primary role ambiguity was correlated to role conflict, and as expected, was in turn related to primary role inter-role conflict ( $r = .43, p < .05$ ). As for primary role ambiguity, secondary role ambiguity was correlated to secondary role conflict, and this in turn was also correlated to secondary role inter-role conflict ( $r = .47, p < .05$ ). The *effect size* for these two correlations were .57 and .37 respectively.

**RQ 5.6.3 – To what extent is Role Ambiguity dependent on Gender (A), Age (B), Years of Teaching Service (C), and School Level Focus (D)?**

**RQ 5.6.3.A – Gender and Role Ambiguity**

To determine the gender effects on the level of role ambiguity experienced in both primary and secondary roles an independent *t* test was conducted. The results of the *t* test showed that there was a significant gender effect on role ambiguity. This effect was found for the primary role, but not for the secondary role, or role ambiguity overall. Males within the cohort had significantly higher levels of role ambiguity in their primary role ( $M=2.48$ ,  $SD =0.75$ ) than did their female counterparts ( $M=2.24$ ,  $SD = .057$ ),  $t(194) = 2.59$ ,  $p<.05$  (See Figure 5.2). A further independent *t*-test was conducted on the role ambiguity sub-scales to determine how role ambiguity was manifested for males. The results of the *t*-test showed that there were no significant differences on the RA-1 (Predictability) sub-scale between males ( $M=2.84$ ,  $SD =0.72$ ) and females ( $M=2.75$ ,  $SD = .072$ ),  $t(172) = .817$ ,  $p<.05$ . There were however significant differences between the genders on the RA-2 (Clarity) role ambiguity sub-scale, ( $M=2.39$ ,  $SD =0.69$ ) and females ( $M=2.17$ ,  $SD = .057$ ),  $t(177) = 2.34$ ,  $p<.05$ .

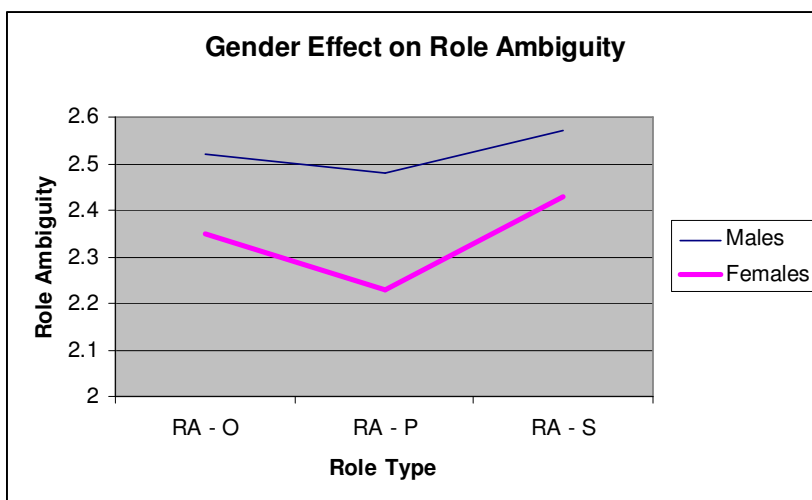


Figure 5.2 - Mean scores - Gender Effect on Role Ambiguity.

### RQ 5.6.3.B – Age and Role Ambiguity

For the following research questions RQ 5.1.3.B, RQ 5.1.3.C, and RQ 5.1.3.D, a univariate ANOVA was conducted. For RQ 5.1.3.B (Age) the ANOVA was with four groups (i.e., 20-30 years, 31-40 years, 41-50 years, >51 years), for RQ 5.1.3.C (Years of Service) the ANOVA was with three groups (i.e., 0-10 years, 11-20 years, >21 years), and for RQ 5.1.3.D (school level focus) the ANOVA had three groups (i.e., primary, secondary and P-12).

The main effect of age on the level of the participants' role ambiguity was not statistically significant for either the primary role  $F(3,192) = .865$   $p < .05$ , or for the secondary role  $F(3,172) = .027$ ,  $p < .05$ . Figure 5.3 shows that the level of role ambiguity experienced is least at the early age and late age categories within teaching. The peak for age category for experiencing role ambiguity occurs between the 31-40 years Age category. As expected, the role ambiguity for the secondary role had higher means than for the primary role.

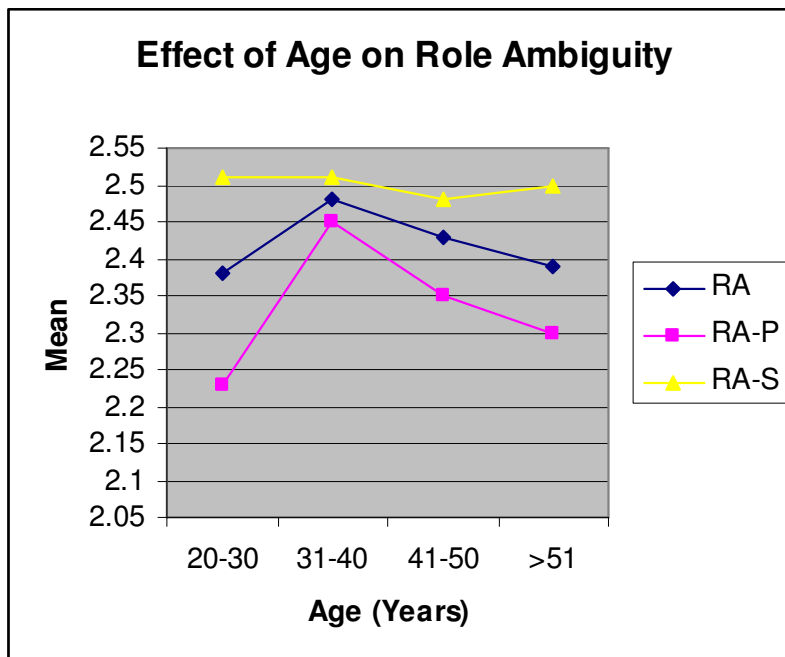


Figure 5.3 - Mean scores - Age Effect on Role Ambiguity.

### Q 5.6.3.C – Years of Service and Role Ambiguity

The main effect for years of service on the participant's level of role ambiguity was not statistically significant  $F(2,169) = .81, p < .05$ . The main effect for years of teaching service on primary role ambiguity  $F(2,193) = .59, p < .05$  and on secondary role ambiguity  $F(2,173) = .87, p < .05$ , were not statistically significant. Figure 5.4 shows that the highest level of role ambiguity experienced across the 'Years of Service' varies between the primary and secondary role. Secondary role ambiguity is the highest in the beginning years of service. However for the primary role, the level of role ambiguity peaks between the 11-20 years of teaching service.

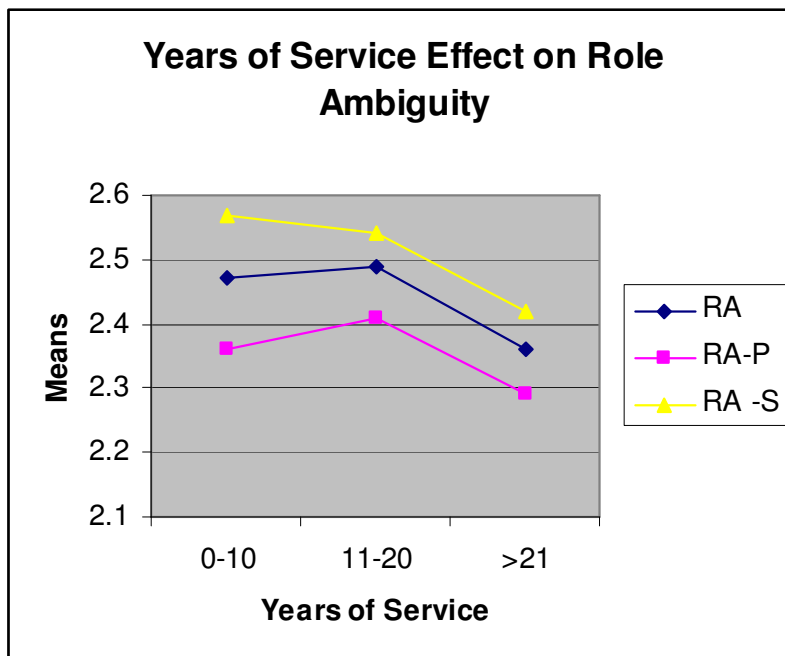


Figure 5.4 - Mean scores - 'No. of Years of Service' effect on Role Ambiguity.

### RQ 5.6.3.D – School Level Focus and Role Ambiguity.

The main effect of school level focus on the participant's level of role ambiguity overall  $F(2,170) = 1.50, p < .05$  and in the secondary role  $F(2,174) = .557, p < .05$  was not statistically significant. The main effect of school level focus on the participants' level of ambiguity in the primary role, however,  $F(2,194) = 5.63, p < .05$  was statistically significant. Figure 5.5 shows



that the mean scores for role ambiguity increases from the primary setting to the secondary setting, with the highest role ambiguity means found for teachers teaching within a P-12 school.

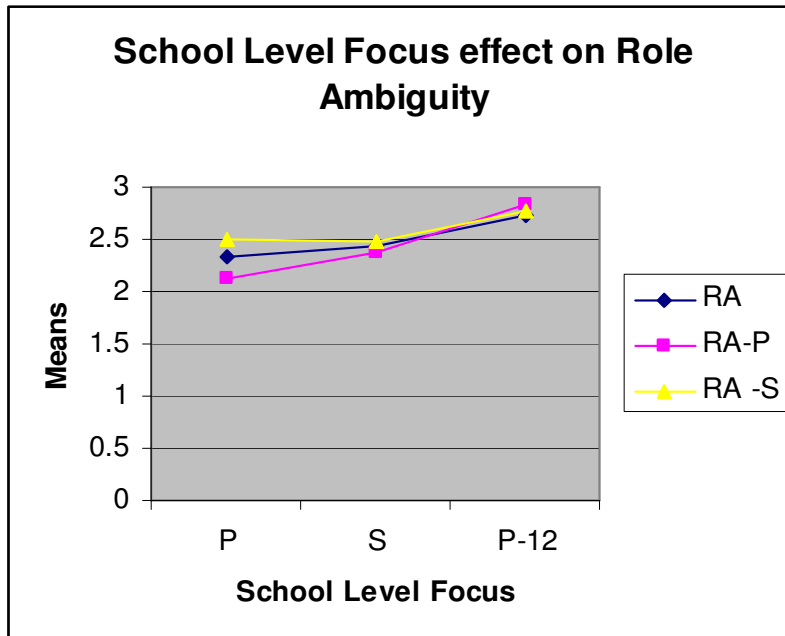


Figure 5.5 – Mean scores - School Level Focus main effect on Role Ambiguity.

Because the school level focus was significant in the univariate analysis ( $p < .05$ ), univariate  $F$  tests were interpreted. The *Tukey post-hoc* procedure indicated that the level of role ambiguity experienced in the primary role within the primary school setting was significantly different from the level of role ambiguity experienced in the primary role for both the secondary school setting and the P-12 school setting. The *Tukey post-hoc* procedure did not show significant differences between the secondary school setting and the P-12 setting. The results of the *Tukey post-hoc* test can be seen in Table 5.4. The means in the role ambiguity score (primary role) for each of the school level focus settings can be seen in Figure 5.5.

**TABLE 5.4***Tukey HSD – Role Ambiguity and School Level Focus*

School Focus(I)	School Focus(J)	<i>Mean</i>		
		<i>Difference (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
Primary(1)	2	-0.41	0.13	0.01*
	3	-0.79	0.27	0.01*
Secondary(2)	1	0.41	0.13	0.01*
	3	-0.38	0.25	0.29
P-12(3)	1	0.79	0.27	0.01*
	2	0.38	0.25	0.29

\*  $p < .05$ 

**RQ 5.6.4 - To what extent is the relationship between primary Role Ambiguity and primary Inter-role Conflict dependent on the level of secondary Role Salience?**

To test whether role salience had a covariate effect on the relationship between role ambiguity and inter-role conflict a univariate analysis of variance was conducted with the recoded variables. The results of the univariate analysis with the variables recoded can be found in Figure 5.7 and 5.8 respectively. The graphs highlight the usefulness of the recoded variables. To obtain the data in Figures 5.7 and 5.8 the scores for role salience for all subjects were divided into three groups, those subjects who had low role salience, mid level role salience, and high levels of role salience. Figure 5.6 is a screenshot from SPSS that highlights the ‘Visual Binning’ process of role salience.

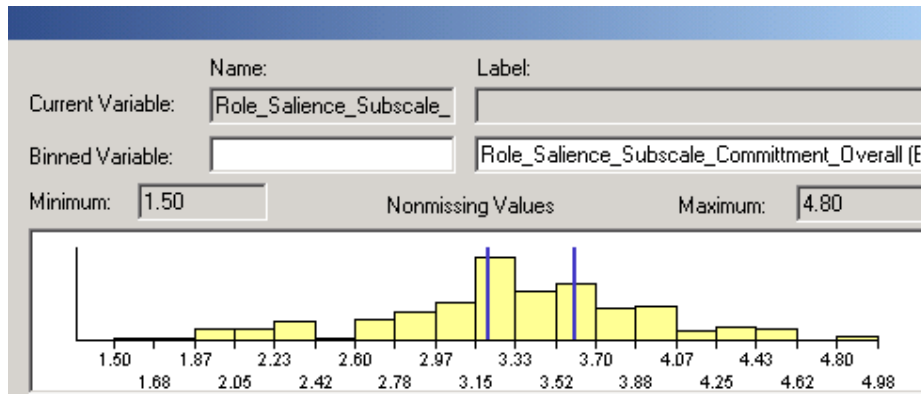


Figure 5.6 - The 'Visual Binning' process in SPSS. In this diagram the responses to commitment dimension scale is divided into three categories. The 'high commitment' category is represented as one third of the population with highest level of commitment. This figure shows how the SPSS software categorises the population according to their responses.

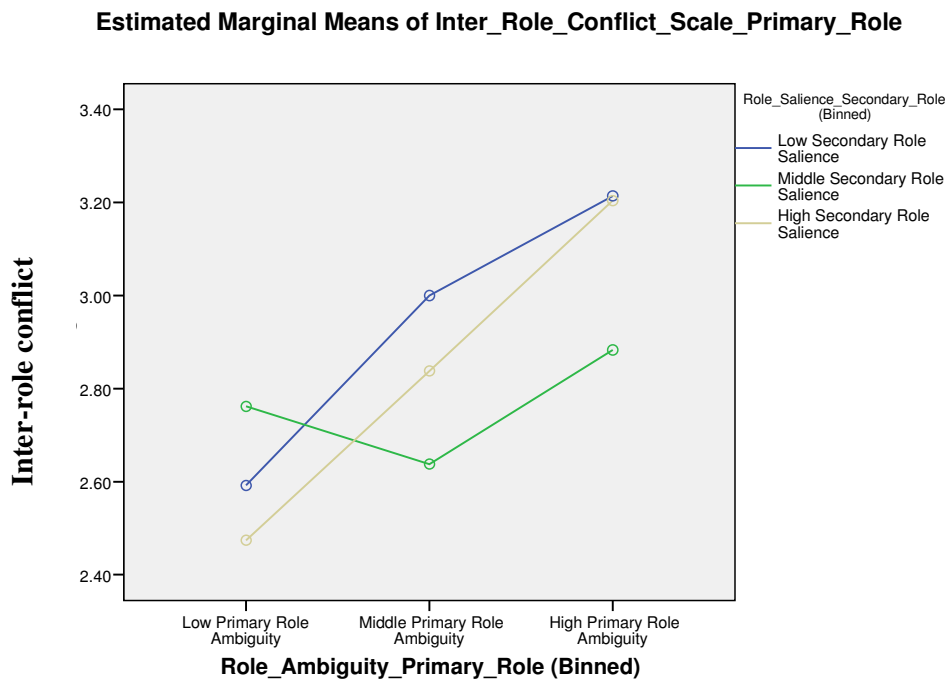


Figure 5.7 - Relationship between primary Role Ambiguity and Inter-role Conflict (primary on secondary) with secondary Role Salience acting as a covariate.

Estimated Marginal Means of Inter\_Role\_Conflict\_Scale\_Secondary\_Role

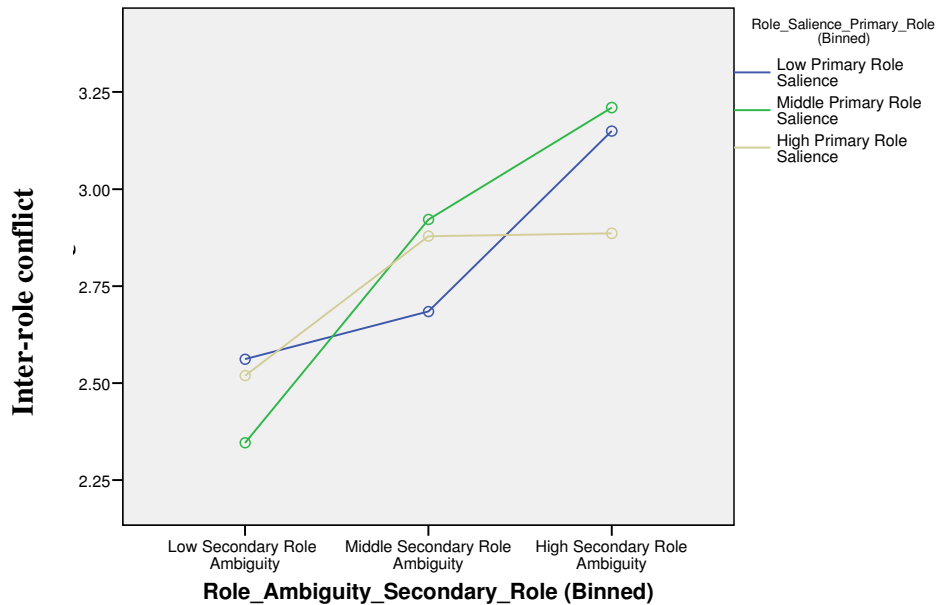


Figure 5.8 – Relationship between secondary Role Ambiguity and Inter-role Conflict (secondary on primary) with primary Role Salience acting as a covariate.

This process takes the sample for the question asked and divides the sample into low middle and high groups according to their responses. Each of these groups is treated as a separate group for further analyses.

The relationship between primary role ambiguity and inter-role conflict (primary on secondary) was then analysed using a MANOVA for those subjects who had low role salience, mid-level role salience, and high levels of role salience. The data showed no interaction effects between primary role ambiguity and secondary role salience on inter-role conflict (primary on secondary)  $F(4,159) = 1.19, p < .05$ . Figure 5.7 shows a plot of the relationships between primary role ambiguity, and inter-role conflict (primary on secondary) with secondary role salience levels acting as a covariate.

**RQ 5.6.5 - To what extent is the relationship between secondary Role Ambiguity and secondary Inter-role Conflict dependent on the level of primary Role Saliency?**

To test this research question a univariate analysis of variance was conducted. The results showed that there was no interaction effect between primary role saliency and role ambiguity on secondary role inter-role conflict was not significant.  $F(4,156) = 1.05, p < .05$ . The plot of these results can be found in Figure 5.8.

**5.6.6 Summary of results for Role Ambiguity**

The results for this section showed that role ambiguity was correlated to role conflict and this in turn was correlated to inter-role conflict. This relationship was present for both the primary and secondary role. Role ambiguity was significantly higher for males in the primary role and this role ambiguity was prominent in the RA-1 subscale, but not in the RA-2 subscale. Age and the number of years of service did not have a main effect on role ambiguity. However, the school level focus did have a main effect on role ambiguity. The results of the post hoc test for school level focus showed that respondents in both the P-12 and the secondary school settings had significantly higher levels of role ambiguity than the primary school settings. The final finding showed that role saliency did not significantly act as a covariate in the relationship between role ambiguity and inter-role conflict, even across role domains. The next section addresses the research questions for role overload.

**5.7 ROLE OVERLOAD RESEARCH QUESTIONS**

**RQ 5.7.1 - What is the relationship between Role Overload and Role Conflict**

To investigate this question a Pearson's  $r$  test was conducted to determine the correlations between the variables. The results which can be found in Table 5.2 showed that primary role overload was positively correlated to primary role conflict ( $r = .66, p < .05$ ) and secondary role

overload was positively correlated to secondary role conflict ( $r = .59, p < .05$ ). The *effect size* for each of these relationship was .45 and .19 respectively.

### **RQ 5.7.2 – To what extent is Inter-role Conflict dependent on Role Overload?**

To determine the relationship between the role overload and inter-role conflict variables, a Pearson's  $r$  correlation test was also conducted. It was found that primary role overload was, as mentioned in the previous research question results, correlated to role conflict, and as expected, was in turn was related to primary role inter-role conflict ( $r = .58, p < .05$ ). As for primary role, the secondary role overload was correlated to secondary role conflict, and this in turn was also correlated to secondary role inter-role conflict ( $r = .63, p < .05$ ). The effect size for each of these relationships was .38 and .08 respectively.

### **RQ 5.7.3 – To what extent is Role Overload dependent on Gender(A), Age(B), Years of Teaching Service(C), and School Level Focus(D)?**

#### **RQ 5.7.3.A – Gender and Role Overload**

The independent  $t$ -test that was conducted to examine this relationship found that there were no significant differences between females ( $M=3.18, SD=.88$ ) and males ( $M=3.10, SD=.81$ ) in regards to primary role overload,  $t(201) = .59, p < .05$ . However the results for the secondary role showed that females perceived greater role overload ( $M=3.01, SD = 0.92$ ) than their male counterparts ( $M = 2.68, SD = .93$ ),  $t(181) = -2.15, p < .05$ . Figure 5.9 shows the effect of gender on role overload. The figure shows role overload is perceived as higher for females in both the primary and secondary role. For both males and females role overload in the primary role is perceived as higher than role overload in the secondary role.

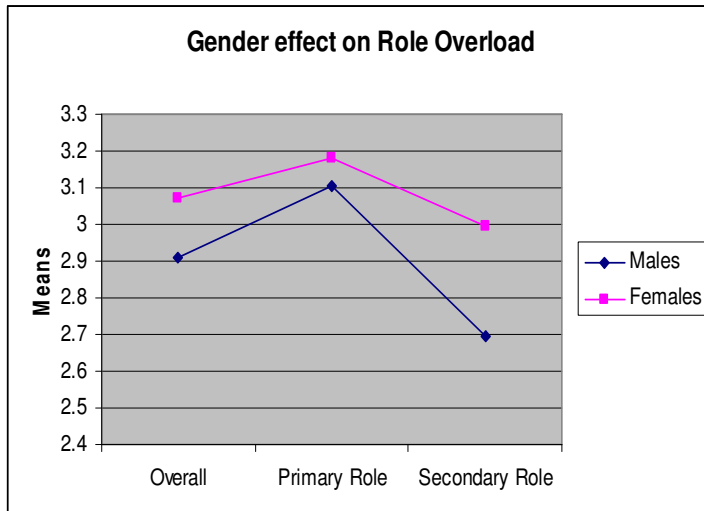


Figure 5.9 – Main effect of Gender on Role Overload in the primary and secondary role.

### RQ 5.7.3.B – Age and Role Overload

The univariate analysis of variance used to determine whether the main effect of age on the participant's level of role overload in the primary  $F(3,199) = 7.15, p < .05$  and secondary role  $F(3,178) = 1.46, p < .05$  determined that age did not statistically have a main effect on role overload for either role. Figure 5.10 shows that role overload is perceived as moderate across nearly all of the various age categories.

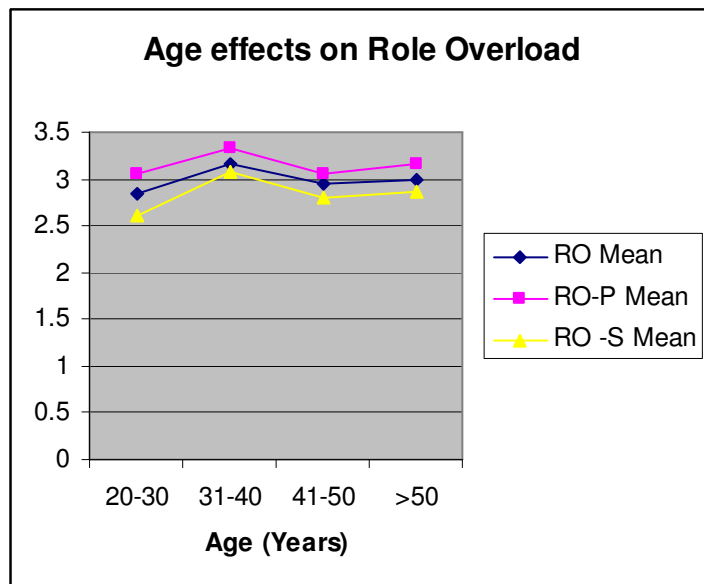


Figure 5.10 - Main effect of Age on Role Overload in the primary and secondary role.

### RQ 5.7.3.C – Year of Service and Role Overload

After conducting a univariate analysis of variance, it was found that the main effect of years of service on the participants' experienced level of role overload overall was not statistically significant for either the primary role  $F(2,200) = 2.61, p < .05$ , the secondary role  $F(2,182) = .96, p < .05$  or overall  $F(2,176) = 2.42, p < .05$ . Figure 5.11 shows that the 0-10, and >20 years of service category experience a moderated level of role overload. The 11-20 years of service category however had mean scores that indicated respondents agreed to 'high' levels of perceived role overload.

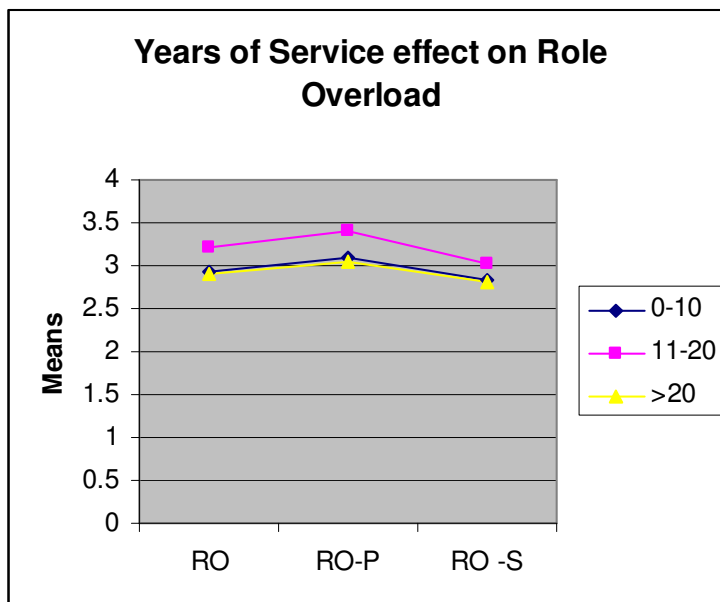


Figure 5.11 - Main effect of the 'number of Years of Service' on Role Overload in the primary and secondary role.

### RQ 5.7.3.D – School Level Focus and Role Overload

For this research question a univariate analysis of variance was employed to determine the main effect of school level focus on perceived role overload. The main effect of school level



focus on the participant's level of experienced role overload for the primary role was statistically significant  $F(2,204) = 3.06, p < .05$ . The main effect of school level focus on the participant's level of perceived role overload for the secondary role was not statistically significant  $F(2,180) = .07, p < .05$ .

To determine the difference between the three groups, a *Games-Howell post hoc* procedure was used. The *Games-Howell* procedure was used instead of the *Tukey HSD*, because there was not equality of variance between groups.

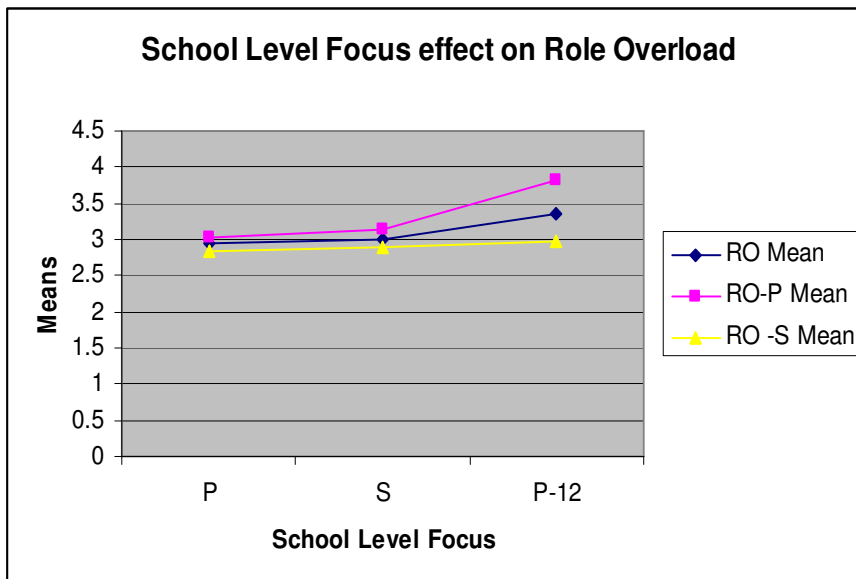


Figure 5.12 – Main effect of School Level Focus on Role Overload in the primary and secondary role. The data displayed in Figure 5.12 highlights the main effect of School Level Focus on Role Overload.

The results from the *Games Howell* test (See Table 5.5) revealed that those participants, who responded from a P-12 school, experienced role overload in their primary role significantly more than their secondary and primary colleagues.

**TABLE 5.5***Games-Howell Test– Role Overload on School Level Focus*

School Focus(I)	School Focus(J)	Mean Difference (I-J)	Std. Error	Sig.
Primary(1)	2	-0.11	0.15	.75
	3	-0.79	0.32	.04*
Secondary(2)	1	0.11	0.15	.75
	3	-0.68	.30	.06
P-12(3)	1	0.79	.32	.04*
	2	0.68	.30	.06

\*  $p < .05$ 

**RQ 5.7.4 – To what extent is the relationship between primary Role Overload and primary Inter-role Conflict dependent on the level of secondary Role Salience?**

To test this research question a univariate analysis of variance was used to test the mean differences between the recoded variables.

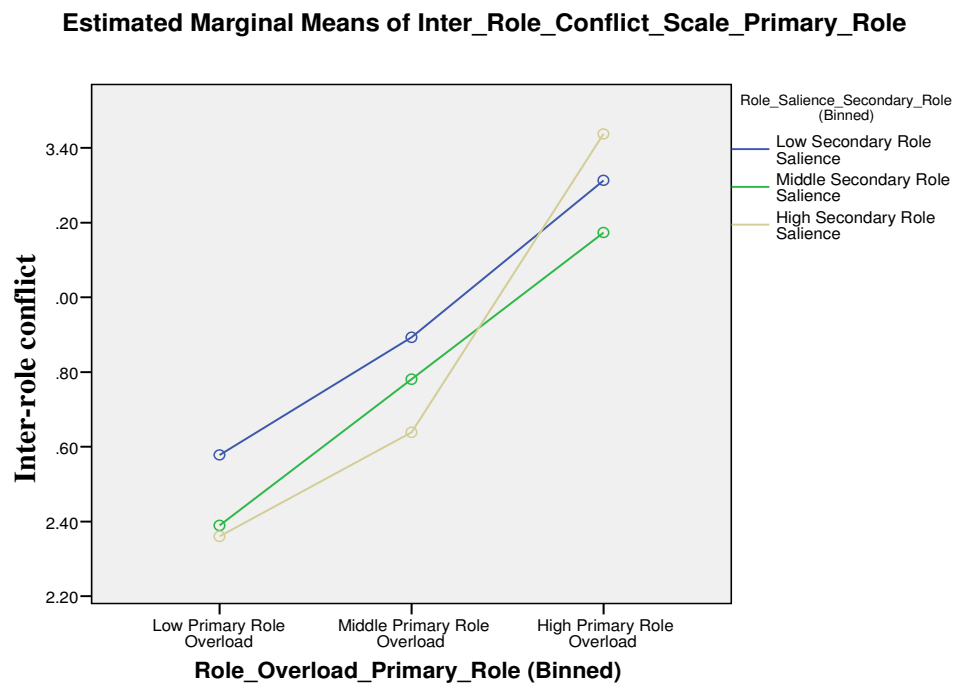


Figure 5.13 – shows the relationship between Role Overload Role Conflict for the three Role Salience groups (i.e., low, middle and high Role Salience groups). This relationship is for the primary role.

The results revealed that there was no interaction effect between secondary role salience and primary role overload on inter-role conflict (primary on secondary)  $F(4,163) = 0.79, p < .05$  (See Fig 5.13).

**RQ 5.7.5 – To what extent is the relationship between secondary Role Overload and secondary Inter-role Conflict dependent on the level of primary Role Salience?**

The results also revealed that there was no interaction between primary role salience and secondary role overload on inter-role conflict (secondary on primary)  $F(4,161) = .25, p < .05$ .

Figures 5.13 and 5.14 shows the relationship between role overload and role conflict, with role salience acting as a covariate. Role salience shows no effect, significant or otherwise, on the relationship between role overload and inter-role conflict.

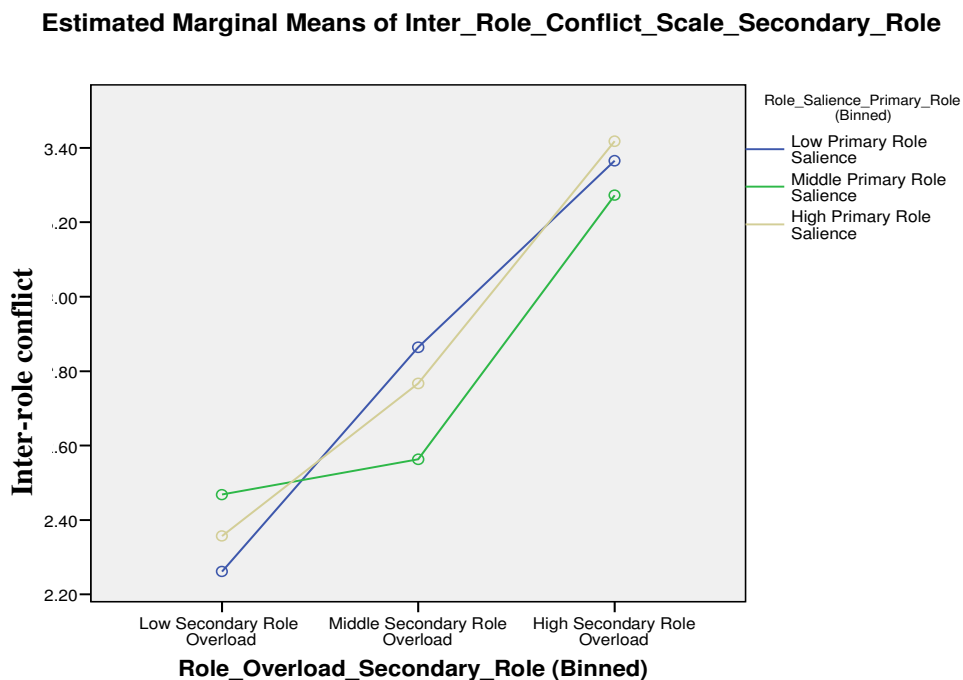


Figure 5.14 – shows the relationship between Role Ambiguity and Inter-role Conflict with Role Salience acting as a covariate. This relationship is for the secondary role.

### **5.7.6 Summary of results for Role Overload**

The results for this section showed that role overload was correlated to role conflict and in this in turn was correlated to inter-role conflict. This relationship was present for both the primary and secondary role. For females role overload was significantly higher in the secondary role. Age and the number of years of service did not have a main effect on role overload. However the school level focus did have a main effect on role overload. The results of the post hoc test for school level focus showed that the P-12 school settings had significantly higher levels of role overload than the primary school settings. The final finding showed that role salience does not significantly act as a covariate in the relationship between role overload and role conflict for either the primary or secondary roles. The next section will address the research questions for role conflict.

## **5.8 ROLE CONFLICT RESEARCH QUESTIONS**

### **RQ 5.8.1 - What is the relationship between Role Conflict and Inter-role Conflict?**

To investigate this question a Pearson's  $r$  test was conducted to determine the correlations between the variables. The Pearson's  $r$  test showed that primary role conflict was correlated to primary role inter-role conflict ( $r = .67, p < .05$ ) and secondary role conflict was correlated to secondary role inter-role conflict ( $r = .70, p < .05$ ). The *Effect Sizes* for both of these correlations were .72 and .12 respectively (Refer to Tables 5.2 & 5.3). The Person's  $r$  correlations can be viewed in Table 5.2.

### **RQ 5.8.2 – To what extent is Role Conflict dependent on Gender (A), Age (B), Years of Teaching Service (C), and School Level Focus (D).**

### RQ 5.8.2.A – Gender and Role Conflict

The independent t-test engaged for this research question showed that there were no significant differences between males ( $M=2.82$ ,  $SD=.69$ ) and females ( $M=2.68$ ,  $SD=.66$ ) for primary role conflict,  $t(197) = 1.46$ ,  $p<.05$ . There was also no difference between males ( $M=2.68$ ,  $SD=.70$ ) and females ( $M=2.67$ ,  $SD=.70$ ) on the secondary role conflict measure  $t(179) = .087$ ,  $p<.05$ .

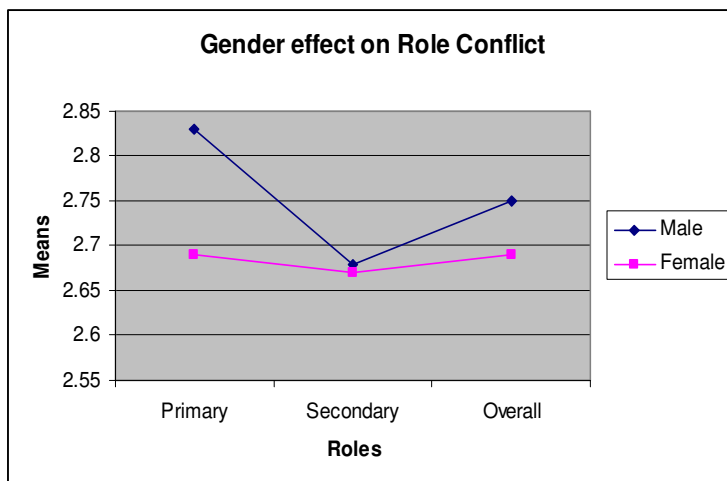


Figure 5.15 – Main effect of Gender on Role Conflict in the primary and secondary roles.

The *means* for each gender across each of the role types is displayed in Figure 5.15. The figure shows that males have greater role conflict than females across all role types. This difference is, however, not statistically significant.

### RQ 5.8.2.B – Age and Role Conflict

The univariate analysis of variance used for this research question showed that there was no significant effect of age on role conflict for either the primary  $F(36,162) = .96$ ,  $p<.05$  or the secondary role  $F(35,144) = .65$ ,  $p<.05$ .

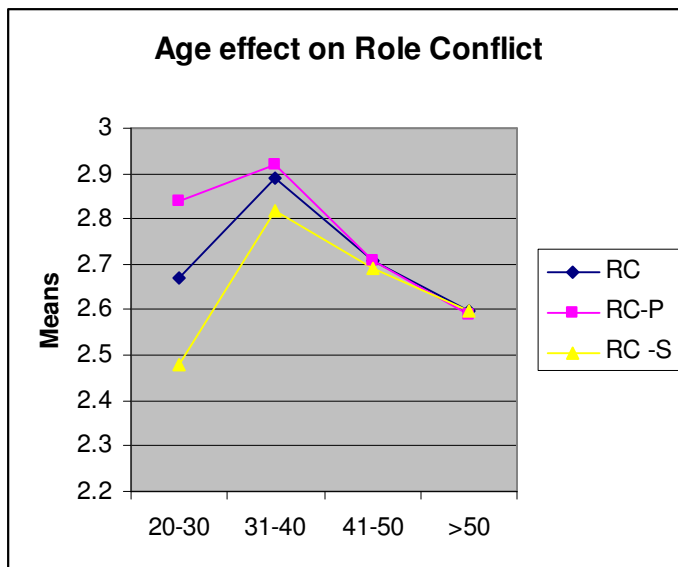


Figure 5.16 – Main effect of the number of Age on Role Conflict in the primary and secondary roles.

Figure 5.16 shows that role conflict is experienced least in the 20-30 age brackets. The amount of role conflict experienced in both the primary and the secondary role peaks at the 31-40 age brackets, with a decline experienced with subsequent age categories. The means for the different age categories for primary role conflict can be seen in Figure 5.16.

#### RQ 5.8.2.C – Years of Service and Role Conflict

The univariate analysis of variance used for this research question showed there was a statistically significant main effect for years of service on primary role conflict,  $F(2,199) = 3.25, p < .05$ . There was no main effect of the number of years of service on secondary role conflict  $F(35,144) = .831, p < .05$ .

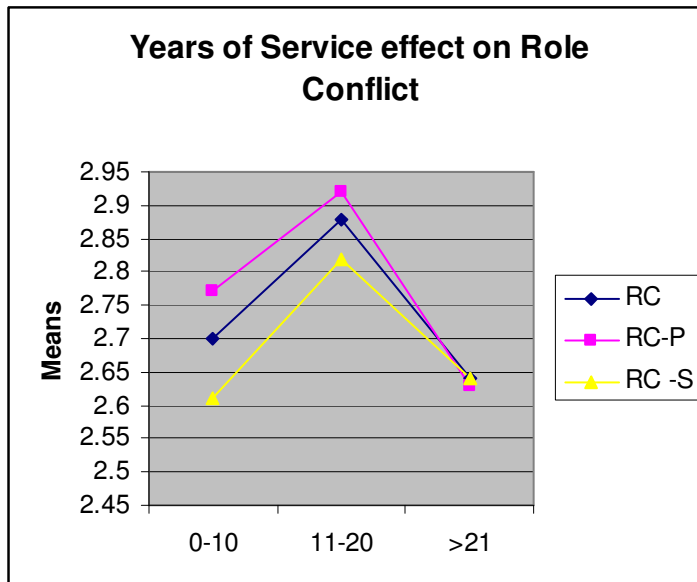


Figure 5.17 - Main effect of the number of Years of Service and Role Conflict in the primary and secondary roles.

The *Tukey HSD post hoc* procedure (Table 5.6) revealed that significant differences existed for primary role conflict between the 11-20 year category of service and the >21 year category of service. Participants in the 11-20 years of service category experienced the highest amount of primary role conflict.

**TABLE 5.6**

*Tukey HSD – Years of Service on Role Conflict*

(I) Years of Service	(J) Years of Service	Mean Difference (I-J)	Std. Error	Sig.
1	2 (11-20years)	-0.15	0.13	0.49
	3 (>21years)	0.14	0.12	0.44
2	1 (1-10years)	0.15	0.13	0.49
	3 (>21years)	0.29	0.11	0.03
3	1 (1-10years)	-0.14	0.12	0.44
	2 (11-20years)	-0.29	0.11	0.03*

$p < .05$

#### RQ 5.8.2.D – School Level Focus and Role Conflict

The univariate analysis of variance used for this research question showed there was a statistically significant main effect for school level focus on primary role conflict,  $F(2,200)$

=3.00, ( $p < .05$ ). There was no main effect of the school level focus on secondary role conflict,  $F(35,145) = 1.06$ , ( $p < .05$ ). This result can be found in Figure 5.18. The *Games-Howell post-hoc* procedure indicated that the difference in the school level focus categories existed between the primary and the P-12 setting. The results of the *Games-Howell* procedure can be found in Table 5.7.

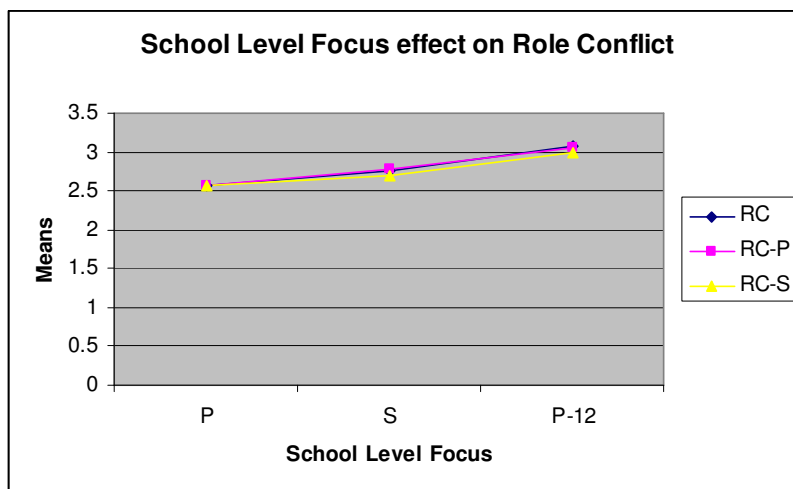


Figure 5.18 – Main effect of School Level Focus and Role Conflict in the primary and secondary roles.

**TABLE 5.7**

*Games-Howell Test, Role Conflict on School Level Focus*

		<b>Mean Difference</b>	<b>Std. Error</b>	<b>Sig.</b>
Primary(1)	2	-0.21	0.10	0.07
	3	-0.49	0.19	0.05
Secondary(2)	1	0.21	0.10	0.07
	3	-0.28	0.18	0.30*
P-12(3)	1	0.49	0.19	0.05
	2	0.28	0.18	0.30*

\*  $p < .05$

### **RQ 5.8.3 – To what extent is the relationship between primary Role Conflict and primary Inter-role Conflict dependent on the level of secondary Role Salience?**

The results of the univariate analysis of variance revealed that there was no interaction effect between secondary role salience and primary role conflict on the primary inter-role conflict



variables,  $F(4,160) = 2.35$ , ( $p < .05$ ). Although statistically, secondary role salience ( $p < .05$ ) did not act as a covariate between the two variables of primary role conflict and inter-role conflict (primary on secondary), descriptively some inferences may be made about the relationship between these variables.

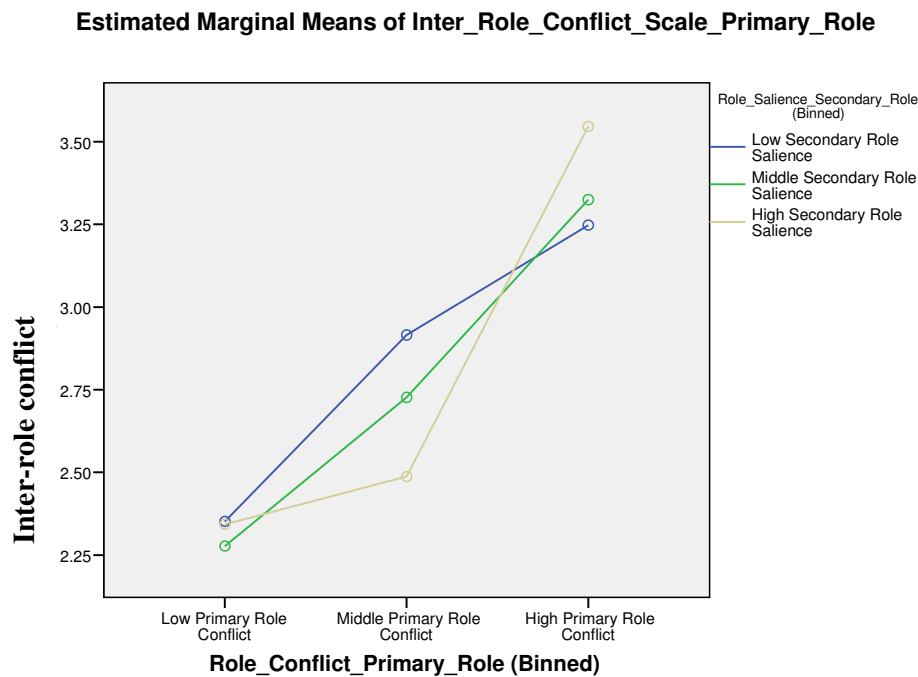


Figure 5.19 – Relationship between Role Conflict and Inter-role Conflict with Role Salience acting as a covariate. This relationship is for the primary role.

#### **RQ 5.8.4 – To what extent is the relationship between secondary Role Conflict and secondary Inter-role Conflict dependent on the level of primary Role Salience?**

The results of the univariate analysis of variance revealed that there was no interaction effect between primary role salience and secondary role conflict on the secondary inter-role conflict variables,  $F(4,159) = .99$ , ( $p < .05$ ). Figure 5.19 and 5.20 show the strong correlation between secondary role conflict and secondary inter-role conflict.

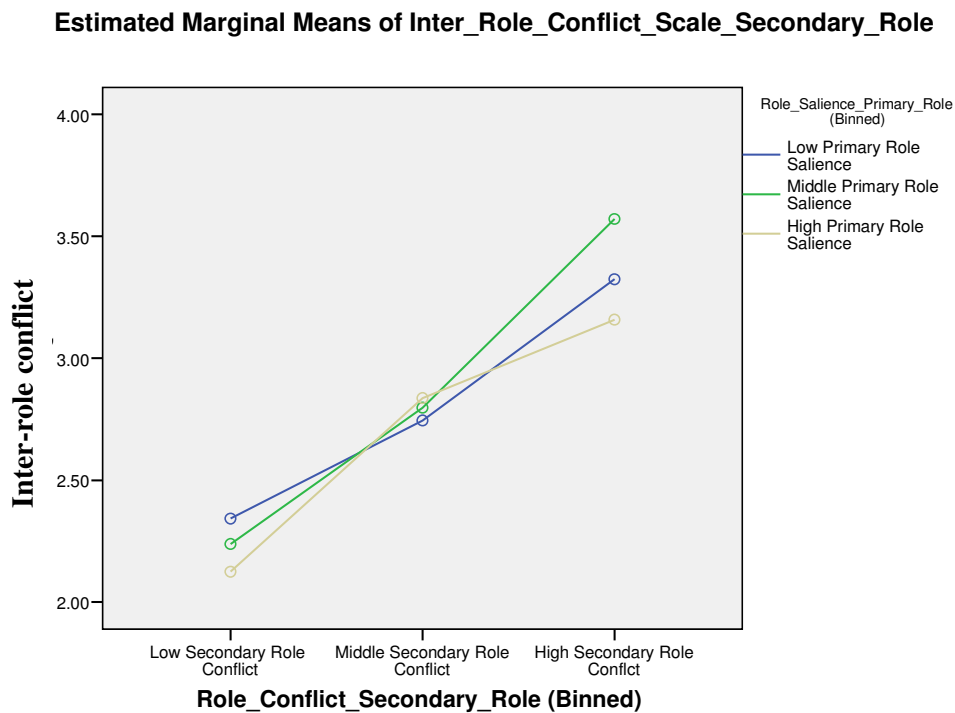


Figure 5.20 – Relationship between Role Conflict and Inter-role Conflict with Role Saliency acting as a covariate. This relationship is for the secondary role.

### 5.8.5 Summary of results for Role Conflict

The results for this section showed that role conflict was correlated to inter-role conflict. Not only was primary role conflict correlated to primary inter-role conflict, secondary role conflict was correlated to secondary inter-role conflict. The results showed that gender and age did not have a main effect on role conflict. However, years of service did have a main effect on role conflict with the post hoc test showing that the 11-20 years category of service was significantly different from the >21 years category of service. The school level focus also had a main effect on role conflict. The results of the post hoc test for school level focus showed that the primary and the P-12 settings were significantly different. The final finding for this section showed that role saliency does not significantly act as a covariate in the relationship between

role conflict and inter-role conflict. The next section will address in detail the research questions for role conflict.

## **5.9 ROLE SALIENCE RESEARCH**

### **RQ 5.9.1 – What is the relationship between Role Salience and Role Conflict?**

To investigate this question a Pearson's  $r$  test was conducted to determine the correlations between the variables. The Pearson's  $r$  test showed primary role salience was negatively correlated to primary role conflict ( $r = -.21, p < .05$ ). However, the secondary role salience was not related to secondary role conflict ( $r = -.13, p < .05$ ). The salience of the primary role was not correlated to secondary role conflict, but the salience of the secondary role was related to primary role conflict ( $r = -.22, p < .05$ ). Primary role salience had a positive correlation with secondary role salience ( $r = .77, p < .05$ ). The *Effect Size* for the correlations between role salience and role conflict was calculated for both the primary and secondary roles. These *Effect Sizes* were .92 and .69 respectively (Refer to Table 5.2 & 5.3).

### **RQ 5.9.2 – What is the relationship between Role Salience and Inter-role Conflict?**

To investigate this question a Pearson's  $r$  test was conducted to determine the correlations between the variables. The Pearson's  $r$  test showed that primary role salience was negatively correlated to primary inter-role conflict ( $r = -.14, p < .05$ ), but secondary role salience was not correlated to secondary role conflict ( $r = -.07, p < .05$ ).

### **RQ 5.9.3 - To what extent is Role Salience dependent on Gender (A).**

#### **RQ 5.9.3 A – Gender and Role Salience**

The independent  $t$ -test performed to assess the main effect of gender and role salience found that there were no significant differences between males ( $M=3.38, SD= .58$ ) and females ( $M=3.53, SD= .55$ ) on role salience scores in the primary role,  $t(196) = -1.89, p < .05$ . The results showed that there was also no significant difference between males ( $M=3.20, SD=.61$ )

and females ( $M=3.30$ ,  $SD=.62$ ) on secondary role Salience scores,  $t(176) = 1.01$ ,  $p<.05$ ). As expected, the data in Figure 5.21 shows that role salience for the primary role was higher than the secondary role. Although not statistically significant, the results suggest that females had a higher value and centrality for both the primary and the secondary role.

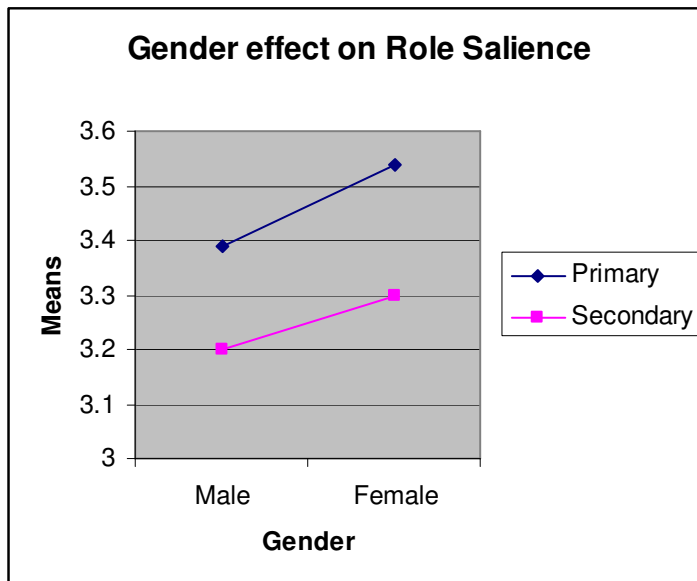


Figure 5.21 – Main effect of Gender on Role Salience in the primary and secondary roles.

### RQ 5.9.3 - To what extent is Role Salience dependent on Age (B).

#### RQ 5.9.3 B – Age and Role Salience

The results of the univariate analysis showed that there was no main effect of age on role salience in either the primary  $F(28,168) = .65$ ,  $p<.05$  or secondary role  $F(31,177) = .97$ ,  $p<.05$ .

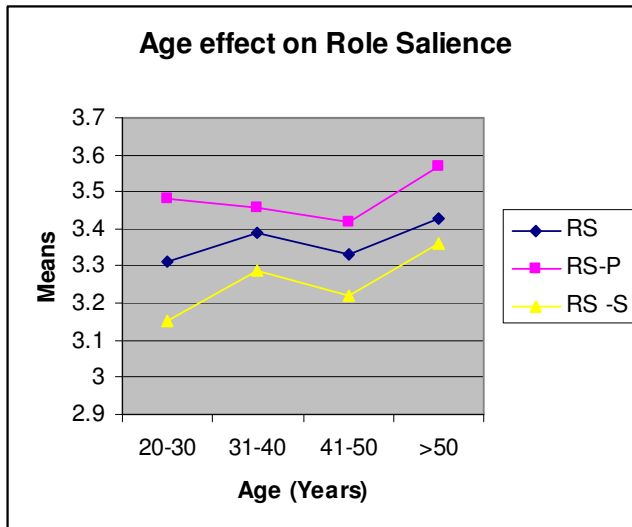


Figure 5.22 – Main effect of ‘Age’ on Role Salience in the primary and secondary roles.

### RQ 5.9.3 C – Years of Service and Role Salience

The results of the univariate analysis showed that there was no main effect of years of service on either primary role salience  $F(28,169) = .87, p < .05$ , or secondary role salience  $F(31,178) = 1.33, p < .05$ . No significant trends can be seen in Figure 5.23 in regards to role salience across either the primary and secondary role.

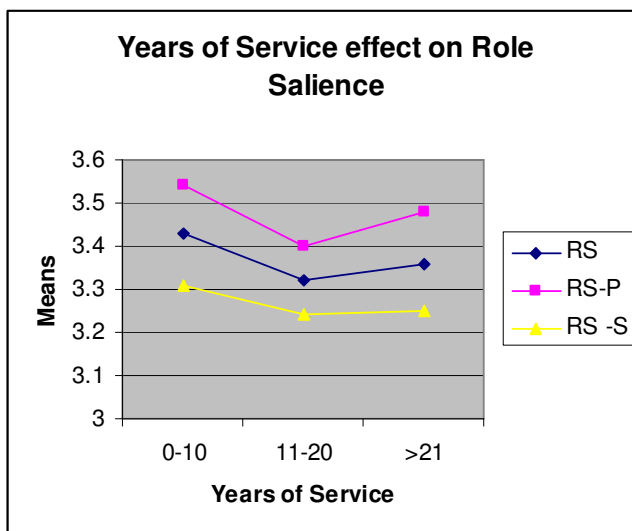


Figure 5.23 – Main effect of Years of Service on Role Salience in the primary and secondary roles.

### RQ 5.9.3 D – School Level Focus and Role Salience

The results of the univariate test showed that there was a not a significant effect of school level focus on either primary role salience  $F(28,169) = .82, p < .05$  or secondary role salience  $F(31,146) = .83, p < .05$ . Showing an inverse relationship to role conflict, Figure 5.24 shows that role salience for both the primary and secondary roles is highest in the primary school setting. Role salience in the P-12 and secondary school settings show very similar role salience means.

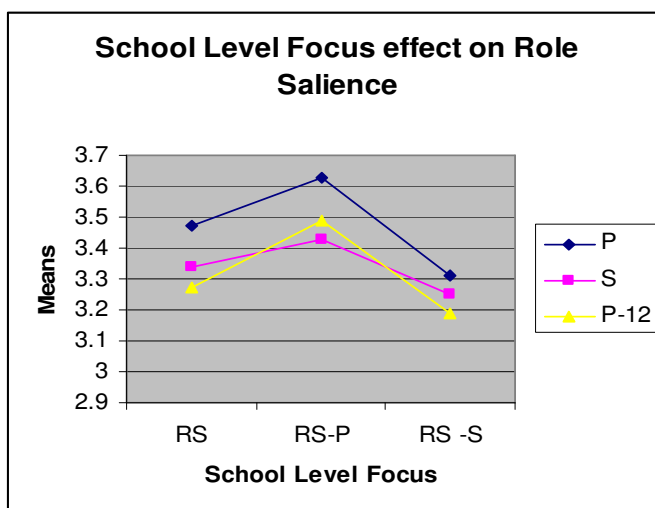


Figure 5.24 – Main effect of ‘School Level Focus’ on Role Salience in the primary and secondary roles.

### RQ 5.9.4 – To what extent is primary Role Salience related to secondary Role Salience?

Using Pearson’s  $r$  as the accepted statistic, it was found that a strong correlation existed between primary Role Salience and secondary Role Salience ( $r = .77, p < .05$ ) (See Table 5.3).

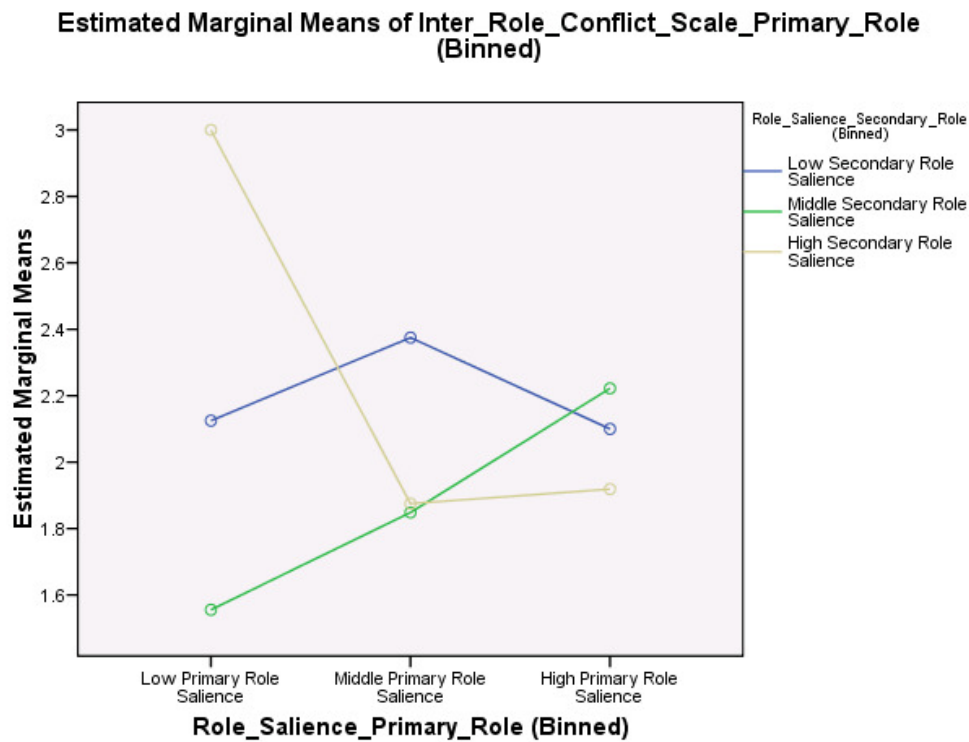


Figure 5.25 - Relationship between primary Role Salience and secondary Role Salience and there effect on Inter-role Conflict.

### 5.9.5 Summary of results for Role Salience

The results for this section showed that primary role salience was negatively correlated to primary role conflict, but the salience of the secondary role was not related to secondary role conflict. The salience of the primary role was not correlated to secondary role conflict, but the salience of the secondary role was related to primary role conflict. Gender, age, years of service, and school level focus had no main effect on the level of role salience. The final analysis showed that primary role salience had a positive correlation with secondary role salience. The next part of this results section will provide the results to the inter-role conflict research questions.

### 5.10.1 RESEARCH QUESTIONS FOR INTER-ROLE CONFLICT

**RQ 5.10.2 – To what extent is Inter-role Conflict dependent on Gender (A), Age (B), Years of Teaching Service (C), and School Level Focus (D).**

#### RQ 5.10.2 A – Gender and Inter-role Conflict

The independent *t-test* performed to assess the main effect of gender and inter-role conflict found that there were no significant differences between males ( $M=2.92$ ,  $SD=.70$ ) and females ( $M=2.74$ ,  $SD=.67$ ) on primary inter-role conflict,  $t(197) = 1.90$ ,  $p<.05$ ), nor any differences between males ( $M=2.80$ ,  $SD=.75$ ) and females ( $M=2.79$ ,  $SD=.69$ ) on the secondary inter-role conflict scores.

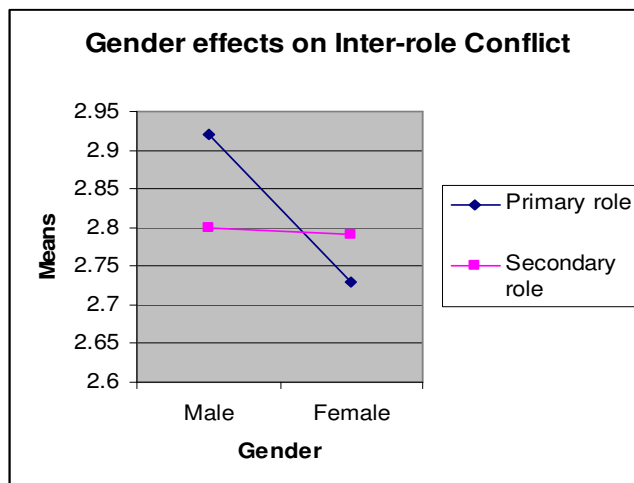


Figure 5.26 - Main effect of Gender on Inter-role Conflict in the primary and secondary roles.

**RQ 5.10.2 – To what extent is Inter-role Conflict dependent on Gender (A), Age (B), Years of Teaching Service (C), and School Level Focus (D).**

#### RQ 5.10.2.B – Age and Inter-role Conflict

The univariate analysis of variance performed to assess the main effect of age and inter-role conflict found that Age had a statistically significant effect on inter-role conflict. This effect was present for both the primary  $F(3,199) = 2.66$ ,  $p<.05$  and the secondary role conflict



$F(3,172) = 3.00, p < .05$ . As a result, age also had an effect on the overall means for inter-role conflict  $F(3,169) = 3.08, p < .05$  (See Figure 5.27). The subsequent *Tukey HSD* procedure that was performed to determine which age categories were different from each other showed that 41-50 years age category was significantly different to 31-40 years age category.

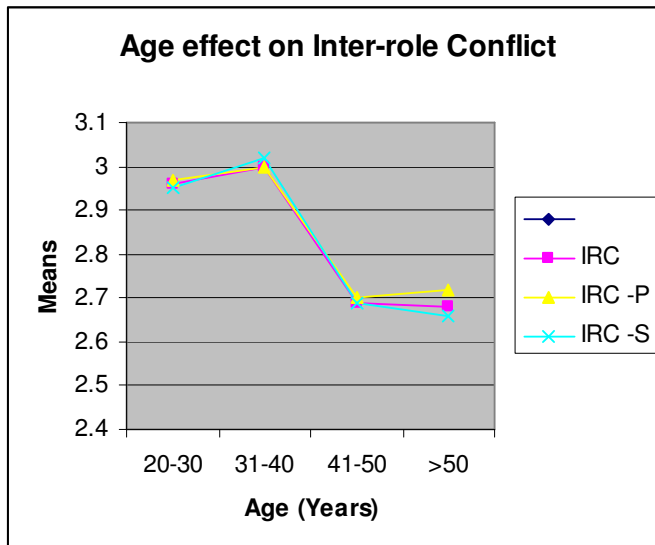


Figure 5.27 – Main effect of Age on Inter-role Conflict in the primary and secondary roles.

**RQ 5.10.2 – To what extent is Inter-role Conflict dependent on Gender (A), Age (B), Years of Teaching Service (C), and School Level Focus (D).**

**RQ 5.10.2.C – Years of Service and Inter-role Conflict**

The results of the univariate test showed that there was a no significant effect of years of service on primary role inter-role conflict  $F(24,174) = 1.12, p < .05$ , or secondary role inter-role conflict,  $F(22,153) = 1.37, p < .05$ . Figure 5.28 shows a significant drop in the level of inter-role conflict experienced in both the primary and the secondary roles for inter-role conflict.

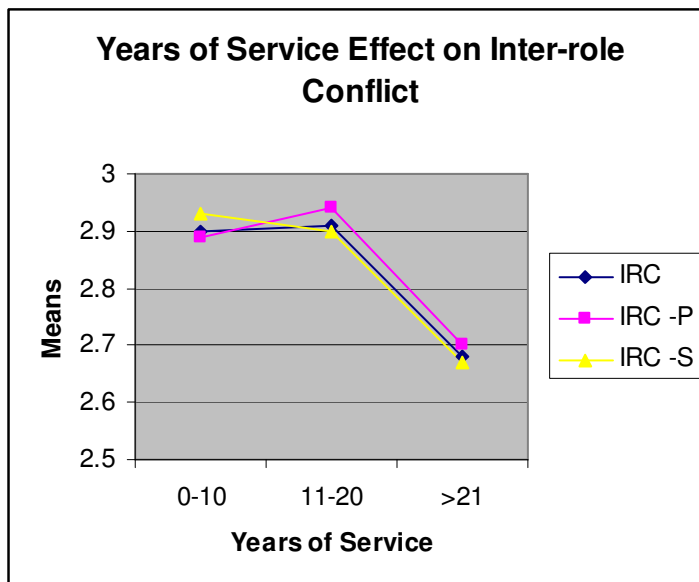


Figure 5.28 – Main effect of Years of Service on Inter-role Conflict in the primary and secondary roles.

**RQ 5.10.2 – To what extent is Inter-role Conflict dependent on Gender (A), Age (B), Years of Teaching Service (C), and School Level Focus (D).**

**RQ 5.10.2.D – School Level Focus and Inter-role Conflict**

The results of the univariate test showed that there was a not a significant effect of ‘school level focus’ on either primary inter-role conflict  $F(24,175) = .58, p < .05$ , or secondary inter-role conflict  $F(22,154) = .58, p < .05$ . Figure 5.29 shows a gradual increase in the amount of inter-role Conflict experienced in both the primary and secondary role, across the three settings of Primary, Secondary and P-12. This increase is not significant.

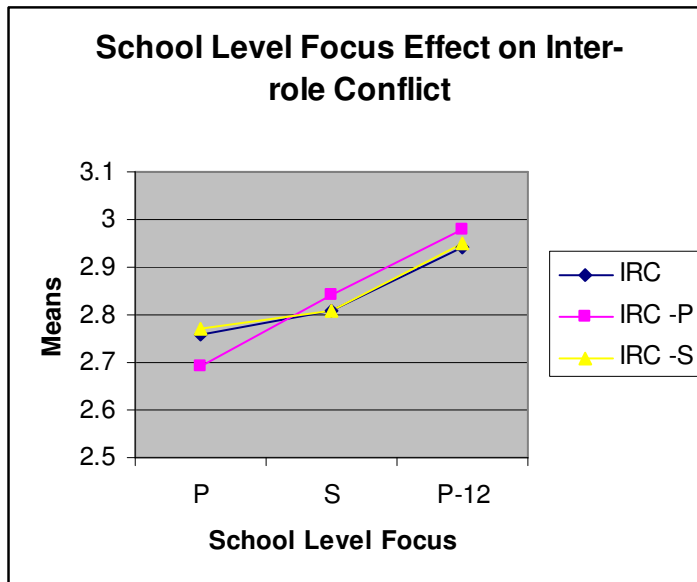


Figure 5.29 – Main effect of ‘School Level Focus’ on Inter-role Conflict in the primary and secondary roles.

### 5.10.3 Summary of Inter-role Conflict Results

The results for inter-role conflict showed only age had a main effect on inter-role conflict for both the primary and the secondary role. Gender, years of service and ‘school level focus’ did not have a main effect on inter-role conflict.

## 5.11 CHAPTER SUMMARY

The research questions for this study were presented in this chapter. In this chapter the data analysis techniques used to answer these research questions and the results obtained for each of the research questions were also presented. Section 5.5 revealed the correlations found between each of the constructs presented in this study. These correlations were also presented in a figure format aligning with the research model of previous studies on inter-role conflict. Correlations were found between all constructs examined except for the relationship between secondary role salience and secondary role conflict, and secondary role salience and inter-role conflict (secondary on primary). *Effect sizes* for each of the correlations were calculated using Cohen’s pooled *d*. The *effect size* and the percent of non-overlap scores suggested that *effect size* was

the smallest for predominantly secondary role constructs with other secondary role constructs, and the largest *effect size* was predominantly reserved for those correlations of primary role constructs with other primary role constructs. This observation was not strictly adhered to with exceptions seen to this. The results for the role ambiguity results sections found role ambiguity was correlated to role conflict and in turn related to inter-role conflict. This relationship was found for both the primary and the secondary roles. Role ambiguity was found to be higher for males than females in the primary role, and this role ambiguity was prominent in the RA-1 subscale, but not the RA-2 subscale. Age and years of service did not have an effect on the level of role ambiguity experienced. However, the focus level of a school did have a bearing on the level of role ambiguity experienced by the respondents. The results showed that respondents in Secondary and P-12 schools had significantly higher levels of role ambiguity than their primary school counterparts. The last finding for role ambiguity showed that role salience did not act as a covariate between role ambiguity and role conflict, and between role ambiguity and inter-role conflict.

The analyses completed for role overload showed that role overload was correlated to role conflict and that this in turn was also correlated to inter-role conflict. This relationship was found for both the primary and secondary roles. Role overload was found to be significantly higher for females in the secondary role. However, age and years of service did not have a main effect on the level of role overload experienced by the respondents. Like role ambiguity, however, role overload was found to be different between school level focus. P-12 schools showed significantly different perceptions in the level of role overload from the primary school setting. The final findings for role overload showed that role salience did not act as a covariate in the relationship between role overload and inter-role conflict.

The results produced for role conflict found that role conflict was correlated to inter-role conflict for both the primary and secondary roles. The results showed that gender and age did not have a main effect on role conflict. However, there were significant differences found between groups for the years of service and school level focus variables. The post hoc tests showed that the 11-20 years of service category were significantly different from the >21 years of service category. The post hoc tests also revealed that the level of role conflict experienced was different for respondents in Primary and P-12 schools. This section of results also showed that role salience does not significantly act as a covariate in the relationship between role conflict and inter-role conflict.

Results pertaining to role salience showed that primary role salience was negatively correlated to primary role conflict; however secondary role salience was not correlated to secondary role conflict. Gender, age, years of service and school level focus had no main effect on the level of role salience. Finally, primary role salience had a strong correlation to secondary role salience. The final results obtained in this paper showed that only age had a main effect of the level on inter-role conflict for both the primary and secondary role. Gender, years of service, and school level focus did not have a main effect on inter-role conflict for either the primary or secondary role.

In this chapter the raw results for each of the research questions of this paper were provided. Within this chapter data about the demographics of the participants in this survey was provided. The relationships between the various constructs were then studied. The results first provided the correlations and effect sizes between each of the constructs. The results then focused on the relationship between each of the constructs and the independent variable of inter-role conflict.

The next chapter will be a review of the major patterns and observations found within these results, and discuss exceptions to trends in the data under the major sections of correlations, role conflict, role overload, role salience, role ambiguity, and inter-role conflict.

## **CHAPTER 6**

### **DISCUSSION**

#### **6.1 INTRODUCTION**

The results found for each of the research questions proposed in Chapter 5 of this thesis are discussed in this chapter. Within this discussion the major relationships, patterns and trends will be stated. Generalisations about the data will be inferred and discussion about the likely mechanisms underlying these generalisations will be forwarded.

As stated, the purpose of this thesis was to further knowledge of the change management discipline by examining change from the perspective of the role and asking the questions how do roles change, and how do these changes have an effect on the role holder? Through studying how roles change in the context of other roles, some conclusions about change management in schools are also inferred. Using the variables of role ambiguity, role overload, role salience, and role conflict, this discussion will begin by defining which characteristics, according to the results found in this thesis, make up a positive teaching identity. Secondly, this chapter will define how the various constructs of this study interact.

For each of the major research questions, comparisons of results with previous studies will be considered. This chapter has five main sections under the headings of role ambiguity, role overload, role conflict, role salience, and inter-role conflict. Discussion about the results for each of the research questions will be addressed under these five major headings. The first section to be addressed is role ambiguity.

## **6.2 ROLE AMBIGUITY**

This section has eight parts. The first part after this introduction will examine role ambiguity and its effect on the overall role identity of the stakeholder. The following six parts each focus on the six research questions that were stated in section 5.2.1 for role ambiguity. The final part of this section is a summary of the main discussion points on role ambiguity.

### **6.2.1 – Role Ambiguity and role identity**

Role ambiguity is defined by its two dimensions: clarity of the expected behaviours in a role and the predictability of the responses from others to one's behaviour in a role. The results of this thesis showed that it is clearly important to both primary and secondary role identity to have predefined role behaviours (from the social perspective), and also the relevant social work groups with an understanding of one's defined role behaviours.

### **6.2.2 The relationship between Role Ambiguity and Role Conflict.**

The results in this study showed that the relationship between role ambiguity and role conflict is strongest for the primary role as is evidenced through the *Cronbach  $\alpha$*  coefficient and *Effect Size*. These results align with previous research on this relationship (Bedian & Armenakis, 1981; Jackson & Schuler, 1985; Jones, 2005; Rizzo et al., 1970). This conclusion is expected given that the role holder will likely play out and derive more social benefits from the primary role than the secondary role (Tajfel & Turner, 1979). These results support the hypotheses forwarded in section 2.4 and are aligned with the findings of the majority of other studies that have examined this relationship (Bedian & Armenakis, 1981; Jackson & Schuler, 1985; Jones, 2005; Rizzo, House and Lirtzman (1970). The implication for having a stronger relationship between role ambiguity and role conflict for the primary role is that a stronger focus on the clarity of primary roles is vital to the overall work identity of the stakeholder. The results, however, also show that secondary role ambiguity is also related to role conflict. So it is



therefore also of importance to ensure that secondary teaching roles are also clearly defined to the stakeholder, and to the other stakeholders that the individual will interact with. These roles would include ancillary roles that educational staff are responsible for, but are not well considered in terms of role clarity.

### **6.2.3 Role Ambiguity and Gender**

Previous research on the correlations between role ambiguity, role conflict and inter-role conflict suggest that differences between males and females exist when studying these relationships (Babin & Boles, 1998; McNeilly & Goldsmith, 1991, Wood 2003). These studies state that men and women differ in regards to their perceptions of value and centrality of the work role, and that therefore females and males can experience different levels of role ambiguity and role conflict. Centrality of the work role was found to be greater for males. The family role is seen to have both the greatest salience and centrality for females (Gilbert, 1992; Marsiglio, 1993). Two theories have been forwarded to explain the differences between males and females, including the physio-biological and social theories. The physio-biological theory states that females look for and participate in work roles that do not interfere with their more central and salient role of motherhood (Brown, 1970; Browne, 1998; Mackey & Coney, 2000). The social theories suggests that women are socialized into communal roles, whereas men's agentic orientation is manifested in self-expansion, self-assertion, status asserting and the urge to master (Eagly, 1987). This outlook implies that men will experience significant role conflict when the agentic role characteristics of the work role are not met. For men, those parts of the work role not salient to the agentic aspect of the work role should increase the level of work role ambiguity. Therefore, the role ambiguity as they relate to social and interpersonal interactions will not be as important as agentic expectations and outcomes. In contrast to this, females will be satisfied in roles in which they can interact with others in a supportive and cooperative way (Eagly 1987). Previous research studies between genders examining the

relationship between role ambiguity and role conflict have proven inconclusive with conflicting results. It is probable that these differences are sample-specific (Wood, 2003).

The results of this study showed that role ambiguity was higher for males in the primary role and this role ambiguity was prominent in the RA-1 subscale (behaviour predictability), but not the RA-2 subscale (role clarity). These results may support differences between males and females when stated in physio-biological and social theories. It is possible that primary roles within education do not support the agentic values males look for in roles. In contrast to this, primary educational roles may be seen to support the supportive and cooperative role values that females seek. Further support for this theory should be found in differences between males and females in the role salience scales (See section 5.5.10 for these results). The results for role salience showed that females had greater commitment and value for both primary and secondary roles. This result, however, was not significant. The scope of this study did not study role combinations across gender groups, so this study can not make any definitive conclusions about which roles males and females held and whether these roles are gender suited.

The other possible reasons for gender differences for primary role ambiguity can be attributed to differences between males and females in the total number of roles held. Do differences in the total number of roles held, which leads to role overload, also lead to role ambiguity? According to role accumulation theory (Goode, 1960), if males were to have a greater number of roles in the work domain, then spending less time in the primary role may lead to levels of uncertainty due to the lack of continuity in a role. The results of this thesis showed that primary role overload is correlated to primary role ambiguity ( $r = .45, p < .05$ ). The problem with this theory, however, was that no differences were found between males and females in regards to the primary role overload. It is unlikely; therefore, that primary role ambiguity is related to the total number of roles held.

#### **6.2.4 Role Ambiguity and Age**

Two views exist on how age affects work related performance. The first view argues that ageing leads to lesser psychological health and therefore a reduced capability for dealing with role related stressors such as ambiguity and overload. The other view suggests that with age comes life experiences and therefore strategies to effectively deal with work related stressors such as role ambiguity and role overload. These two views are discussed.

Several research articles have been published on the 'decrement theory on ageing' arguing that certain physical and cognitive changes may co-occur with age (Giniger, Dispenzieri, & Eisenberg, 1983). It is purported, that these changes can negatively affect physical health and therefore psychological resources of an individual. Adopting these perspective higher levels of role ambiguity and role overload could lead to greater levels of role conflict and inter-role conflict. However, little evidence tends to support this view, with many studies showing either a decreased level of role stressors for older ages (Waldman & Avolio, 1986), or no difference at all (McEvoy & Cascio, 1989; Shirom, Gilboa, Fried & Cooper, 2008).

The second view states that age reflects accumulated life and work experience and therefore should lead to lower levels of role ambiguity and role conflict (Quinones, Ford & Teachout, 1995). Throughout different stages of life, differences in coping patterns have been found for the different life stages and thus the Ageing worker builds a repertoire of coping strategies and mechanisms (Folkman & Lazarus, 1980). It is probable that wisdom and experience, gained through life experiences, leads to a reduced level of role ambiguity, role overload and ultimately role conflict (Cohen, 1993; Glenn, Taylor & Weaver, 1977; Thornton & Dumke, 2005). To support this notion, a meta-analytic study on role ambiguity and role conflict found age to be negatively correlated with both role ambiguity and role conflict, providing support for the idea that age has positive effect on the outcomes of a role.

The results of this study showed that age did not have a main effect on the level of role ambiguity experienced by stakeholders. It was anticipated that some differences may have been found between the younger and more experienced teachers. This was not supported by the results. The lack of differentiation between the age categories may be explained by the groupings of age categories. Future studies using a greater number of age categories with fewer ages in these categories may yield differences.

The results also showed that the 20-30 years age category experienced the lowest level of role ambiguity while the 31-40 years category experienced the highest level of role ambiguity. This result was not expected. It was expected that younger educators, who would typically have less life experiences, would find teaching roles more ambiguous. As this study did not examine role ambiguity across different role types, the unexpected levels of role ambiguity found in the 20-30 and 31-40 age categories can not be discerned. This unexpected result may be due to the types of roles that each of these age categories specify as their salient role. Of educators surveyed for this study, 34% ( $N = 207$ ) answered that they hold a middle management position. It is likely that the 31-40 years category hold these positions and these positions account for the higher level of role ambiguity. This may be as a result of teachers taking on roles that require the skills of management and leadership that are not formally taught in undergraduate studies. Future studies will need to include analyses to ensure a better understanding of the relationship between age and role ambiguity.

### **6.2.5 Role Ambiguity and Years of Service**

The number of years of service did not have a main effect on role ambiguity. It was expected that the 0-5 years of service category may have shown a significantly different level of role ambiguity than other grouped categories of years of service. It was assumed that beginning teachers would take some time to become familiar with the working, social and political

climate of the school. The results did not support this assumption. It is possible that the groupings of years of service into five year blocks may have prevented the research in discriminating role ambiguity levels in these early years of service.

#### **6.2.6 Role Ambiguity and School Level Focus**

The results showed that school level focus did have a main effect on role ambiguity.

The results of the post hoc test for school level focus showed that respondents in both the P-12 and the secondary school settings had significantly higher levels of role ambiguity than the primary school settings. Again it is difficult to make any conclusions as to why stakeholders in P-12 schools find their roles more ambiguous than their counterparts. A possible explanation for this result may exist with the structures associated with large P-12 schools. No previous study has replicated this result. Previous studies comparing elementary schools and secondary schools have found no differences in perceived levels of role ambiguity, role overload or role conflict. Conley and Woosely (1999) for example, using Rizzo, House and Lirtzman's (1970) scales, found no differences in levels of role ambiguity for subjects between elementary and secondary schools. Future studies may provide insights and information about the types and number of roles that P-12 schools consist of.

#### **6.2.7 Relationship between Role Ambiguity and Inter-role Conflict**

The key question for this section is how ambiguity in a single role affects other roles that a stakeholder may hold. The results showed that ambiguity of one role is correlated to role conflict experienced on a second role (inter-role conflict). This result was applicable to both the primary and secondary role. This result was also expected given that conflict in one role will take greater personal resources to manage and therefore have an effect on other roles. The implication for this finding is that always when schools undergo organisational change, it is important to consider all roles. As stated in section 2.4.1, roles are formal and informal, paid and unpaid. Effort is needed to ensure the clarity of these informal and unpaid roles (usually

identified as a secondary role), as an ambiguous secondary role will lead to conflict within an educator's primary role.

Other studies examining the relationship between role ambiguity and inter-role conflict, have found no relationship between role ambiguity and inter-role conflict (Boyar, Maertz, Pearson & Keough, 2003), but these studies discuss this result as an anomaly (Carlson & Kacmar, 2000). Settles and Sellers (2002) theory on psychological separation may explain the non-relationship between role ambiguity and inter-role conflict. This theory states that inter-role conflict can be reduced if the stakeholder is able to psychologically separate and segment the various roles that they may hold. This is in contradiction to a stakeholder viewing their work and family roles as a single role. Unlike previous research, this study examined multiple roles in one physical domain. It could be proposed that stakeholders are less likely to psychologically separate roles if these roles exist in a single physical domain. This may be one explanation for the differences found between this research and previous research for the relationship between role ambiguity and inter-role conflict.

The relationship between role ambiguity and inter-role conflict was hypothesised for this study. Given that conflict occurs within a role, unless the role is independent of other roles that make up the teacher identity (i.e., the two teacher roles interact separately with a non overlapping social group, have no differences in expected values and expected behaviours, and the teacher is not considered to be overloaded within the role), then this role conflict should lead to conflict with other roles (inter-role conflict).

### **6.2.8 Relationship between Role Ambiguity and Inter-role Conflict with Role Salience acting as a covariate.**

Various authors (Biggs & Brough, 2005) argue that role salience is a role factor that has been largely ignored within role conflict and inter-role conflict studies. There are differing views on what effects role salience has on the interaction of two roles (i.e., inter-role conflict). Some authors suggest that the higher the salience in a role, the more likely the stakeholder will wish to act in this role because the role holder gains social benefits from acting within the role.

These authors suggest, therefore, if another role comes along that will 'threaten' the possibility of deriving social benefits from this role, then inter-role conflict will arise (Adams, King & King, 1996; Carlson and Kacmar, 2000). Some authors, however, suggest that this argument does not consider the positive benefits of holding additional roles, and that additional roles do not always have to threaten already held benefits (e.g., Snoek, 1966). New roles can be complementary to already existing roles. This study supports the notion that two roles can be complementary, as long as both roles are not 'contaminated' by role ambiguity and role overload. If one role however has high role salience and a second role has high role ambiguity, an elevated level of inter-role conflict will arise. This is because a second ambiguous role should not allow the role holder to derive any further social benefits.

The results of this study did not statistically support our hypothesis. The results showed that role salience did not significantly and positively act as a covariate in the relationship between role ambiguity and inter-role conflict. This is unlike other studies such as Biggs and Brough (2005). Instead, the descriptive trends in the data showed that as role salience increases in the primary role, there tends to be a mediating effect on the relationship between role ambiguity in lower order roles and the lower order roles conflict with the primary role (inter-role conflict). The results found that this mediating effect which role salience had on inter-role conflict, only occurred for the primary role (i.e., high secondary role salience did not have a mediating effect

on inter-role conflict - primary on secondary). This relationship was not statistically significant, but could be discerned through the use of descriptive statistics.

This result, therefore, was in contradiction to those results proposed by Carson and Kacmar (2000). Although the results did not support our original hypothesis, the results do have implications for further studies on inter-role conflict (e.g., work-family conflict studies). If the primary role has a high level of role salience, then that role according to the results of this study is less likely to be affected by the ambiguity of other roles that make up the self-identity of the individual. For lower order roles, however, the salience level of the lower order roles will not 'shield' the lower order role from the role ambiguity of higher order roles.

#### **6.2.9 Summary of Discussion Points for Role Ambiguity**

The construct of role ambiguity and this constructs relationship to the outcomes of a role was discussed in this section. It was also discussed in this section that within the education context role ambiguity is significantly correlated to role conflict. The implications of this finding were discussed. The reasons for males and females having a significantly different level of primary role ambiguity were also discussed. Some explanations were proposed as to why men experience a greater level of role ambiguity in their primary role. No reasons could be forwarded in this discussion as to why P-12 schools experience greater role ambiguity than their primary school counterparts. In the next section of this chapter the effect of role salience as covariate in the relationship between role ambiguity and inter-role conflict is discussed.

Descriptively the results showed a positive relationship between primary role ambiguity and inter-role conflict (secondary on primary). The level of role salience in the secondary role had no effect on this relationship. It seems therefore that role salience only had an effect on inter-role conflict, when inter-role conflict was in the direction of a higher order role (i.e., primary



role) to the direction of a lower order role (i.e., secondary roles). The next section of this chapter provides a discussion on the findings associated with role overload.

### **6.3 ROLE OVERLOAD**

The first part of this section, other than this short introduction, contains an examination of the construct of role overload and its effect on the overall role identity of a stakeholder. The remainder of this section has seven parts. The first six parts correspond to the six research questions that have been stated in Section 5.2.2. The final part of this section contains a summary of the main discussion points for role overload.

#### **6.3.1 Role Overload and Role Conflict**

Using social identity theory (Stryker, 1968) as a foundation for this argument, a role that is perceived to be overloaded should limit the ability of the role holder to capitalise on the benefits of a second role, (e.g., social integration points). An overloaded role, therefore, should cause conflict in other roles. (Frone, Yardley, & Markel, 1997; Major, Klein & Enrhart., 2003; Wallace, 1997). The results for this section supported the hypothesis stating that role overload would be correlated to role conflict. As also expected, the correlation between role overload and role conflict was the strongest for the primary role as evidenced through *Effect Size*.

#### **6.3.2 Role Overload and Inter-role Conflict**

The hypothesis for this study stated that role overload would be correlated to role inter-role conflict for both the primary and secondary role. Given that role overload would be correlated to role conflict, it was concluded that role overload would also be correlated to inter-role conflict. The findings in this thesis supported this hypothesis. Carlson, Kacmar and Stepina (1995), in contradiction to these results, found in their study that role time demands were not related to inter-role conflict when role salience was not factored. A possible explanation for this is that subjects in Carlson, Kacmar and Stepina (1995) study experienced a range of

salience levels (i.e., a high standard deviation, with subjects experiencing both positive and negative role salience). Stakeholders in this study who had low salience levels may have had high levels of role conflict and those subjects that had high salience levels may have experience low levels of conflict. Therefore when salience is not factored, the results did not show any significance due to a cancelling effect.

The results of this study showed that the salience levels of teachers were positive but not high. The salience levels of subjects in this study were males ( $M=3.38$ ,  $SD=.58$ ), females ( $M=3.53$ ,  $SD=.55$ ). The standard deviation, suggests that the salience levels of stakeholders in this study were relatively homogenous, with most subjects suggesting that they experienced a positive Role Salience. This therefore may be one reason for the differences found between Carlson, Kacmar and Stepina (1995) results and the results found in this paper for the relationship between role overload and inter-role conflict. However, no definitive conclusions can be made about whether this study's findings are in contradiction with Carlson, Kacmar and Stepina's (1995) study, given that no direct comparisons can be made between the salience levels of subjects between the two studies.

### **6.3.3 Role Overload and Gender**

The results showed that role overload was significantly higher for females than males in the secondary role only. Two explanations are proposed for this result. The first explanation suggests that women may have a greater number of life roles than males and, therefore, the time required for the secondary role requires more than the identity that is derived from the role. The second explanation makes the suggestion that secondary roles that females hold just require larger amounts of time in order to successfully fulfil the role.

Carlson, Kacmar and Stepina (1995) stated that as time and the identity derived from a role become less congruent, the more that inter-role conflict is likely to increase. Thus as an individual is forced to spend more or less time at work than the amount of identity he/she derives from work, then the more conflict that the individual will experience. Given this, a female who has many more life roles (Ameata, 1986) may derive less identity from the secondary role than what is required for the role in terms of time. When considering all life roles that females hold, it is likely that the identity that is derived from a secondary work role will be low, given its rank in the salience order. From this perspective the amount of time that females will arbitrarily allocate to this role will be low. The discrepancy between personal resources and the time required for these secondary roles can feasibly lead to feelings of overload.

When considering the secondary role types that females hold, do females hold secondary roles that they are typically not familiar with or formally trained in? In other words, do females hold secondary roles that are ambiguous? Role ambiguity may necessitate more time in a role in order to fulfil that roles requirements. The results of this thesis ruled out this possibility, with males only showing an increased level of role ambiguity in the primary role. Given the elimination of this, it is likely these secondary roles simply require more time allocation.

As this study did not account for the number of roles a stakeholder held or the make-up of these roles across gender, it is difficult to validate whether the time requirements that females hold is greater than those of males. To determine whether females derive less identity than the time resources required would need further analyses outside the scope of this study.

#### **6.3.4 Role Overload and Age**

'Age' did not have a main effect on role overload. The results showed that, for each age grouping, role overload was higher in the primary role than for the secondary role. The 31-40 year group, although not significant, experienced the greatest role overload. It was not expected in this study to find significant differences in the various age groups, as it was hypothesised that particular age categories would be different in terms of the number of life roles, life experiences, coping strategies, psychological templates (Cohen, 1993; Glenn, Taylor & Weaver, 1977; Thornton & Dumke, 2005). This would potentially lead to differing levels of perceived Role Overload. The results supported this hypothesis.

#### **6.3.5 Role Overload and Years of Service**

The results showed that role overload was greater for the primary role than for the secondary role. Role overload also showed an inverse 'U', with the middle Years of Service 11-20 years experiencing the highest (not significant) levels of role overload. Years of service did not have a main effect on role overload. Like the interaction between age and role overload, no differences between the various groups were expected. Although the 11-20 years group was expected to have the highest level of role overload (in terms of responsibility), it was expected that the 0-10 years of service group to have the highest level of role ambiguity and therefore greater feelings of role overload.

#### **6.3.6 Role Overload and School Level Focus**

School level focus did have a main effect on role overload. The results of the post hoc test for school level focus showed that the P-12 school settings had significantly higher levels of role overload than the primary school settings. Role overload was significantly correlated to role ambiguity for both the primary and secondary role (see Table 5.2). Given that school level focus had a main effect on role ambiguity; it was not surprising that school level focus had a main effect on role overload. Role overload was correlated to role ambiguity for the primary

role ( $r = .45, p < .05$ ) and the secondary role ( $r = .34, p < .05$ ). More study would be needed to determine why stakeholders in P-12 schools experience more role overload than their primary school counterparts.

### **6.3.7 Role Overload and Inter-role Conflict with Role Salience acting as a covariate.**

It was proposed in this study that the results of this thesis would not follow the Carlson, Kacmar and Stepina (1995) results which found that work time demands were related to inter-role conflict only when identity salience (identity interaction) was factored. Carlson, Kacmar and Stepina (1995) explained these results stating that a stakeholder who spends more time in a role that is highly salient caused less conflict than occurred when the scenario presented a highly salient role with the stakeholder spending less time in that role.

The results of this study showed that role salience does not significantly act as a covariate in the relationship between role overload and inter-role conflict for either the primary or secondary roles. From the descriptive data, it did not matter if the primary or secondary role salience was considered to be low, middle or high; role overload had a strong relationship to both role conflict and inter-role conflict. This was in contradiction to the hypothesis proposed in this thesis.

### **6.3.8 Summary of Discussion Points for Role Overload**

The construct of role overload and its relationship to the outcomes of a role was discussed in this section. It was purported that role overload was, as expected, correlated to role conflict and inter-role conflict. The positive correlation between role overload and inter-role conflict was not aligned with the previous study by Carlson, Kacmar and Stepina (1995). An explanation for this was forwarded. This explanation suggested that differences in the relationship between role overload and inter-role conflict are due to the different role salience levels for each of the groups studied. The significance of females perceiving greater work overload in their

secondary role was discussed. Discussion was also made that age and years of service had no main effect on role overload; however P-12 school stakeholders perceived that they were more overloaded than their primary school counterparts. No explanation was found for this finding. Finally, in this section it was stated that role salience did not have any covariate effect on the relationship between role overload and inter-role conflict. Instead, the results of this study showed that increasing levels of role salience reduces the perception of role overload and therefore instead of leading to increased levels of inter-role conflict, an increased role salience leads to a reduced level of inter-role conflict. In the next section of this thesis the findings of role conflict and its relationship to the outcomes of a role will be discussed.

## **6.4 ROLE CONFLICT**

This section has seven parts. The first six parts align with the research questions answered for role conflict. The final part of this section includes a summary of the discussion points.

### **6.4.1 Role Conflict and Inter-role Conflict**

The results for this section showed that role conflict was correlated to inter-role conflict. Not only was primary role conflict correlated to primary inter-role conflict, secondary role conflict was correlated to secondary inter-role conflict. This result supported the hypotheses and is supported by many other studies which have examined the relationship between role conflict and inter-role conflict (Chiu, Man, & Thayerm, 1988. Kemery, Bedian & Armenakis, 1985). If a stakeholder experiences conflict in either a primary or secondary role, this role has the potential to cause residual conflict in other roles held by the stakeholder.

### **6.4.2 Role Conflict and Gender**

The results showed that gender did not have a main effect on role conflict. This relationship was previously produced by Biggs and Brough, (2000). No previous studies suggest that a correlation should have been found between age and role conflict. Also, given that this study

did not find correlations between role ambiguity, role overload and gender it was unlikely to find a correlation between role conflict and gender.

#### **6.4.3 Role Conflict and Age**

Age also did not have a main effect on role conflict. This was not surprising considering that both gender and age did not have a main effect on either role ambiguity or role overload.

#### **6.4.4 Role Conflict and Years of Service**

Years of service, however, did have a main effect on role conflict with the post hoc test showing that the 11-20 years category of service was significantly different to the >21 years category of service. This was surprising considering that years of service did not have a main effect on role ambiguity or role overload. It was also surprising from the point of view that age did not have a main effect on role conflict. This suggests that somehow as the years of service increases the teacher's interaction with their primary role somehow changes. This change in interaction with the role is not correlated to age but only to years of service. An explanation for the differences in role conflict experienced between these two groups could not be suggested.

#### **6.4.5 Role Conflict and School Level Focus**

The school level focus also had a main effect on role conflict. The results of the post hoc test for school level focus showed that the Primary schools settings and the P-12 settings were significantly different. This would be expected considering that role ambiguity and role overload were also different for the P-12 schools and primary school schools. No previous study has reproduced this result.

#### **6.4.6 Relationship of Role Conflict and Inter-role Conflict with Role Salience acting as a covariate.**

The final finding for this section showed that role salience does not significantly act as a covariate in the relationship between role conflict and inter-role conflict. Descriptively, when

primary role salience was high, role salience, like role overload and role ambiguity, appeared to act as a mediating variable between role conflict and inter-role conflict. For the secondary role, however, high role salience had the opposite effect. High role salience increased the amount of inter-role conflict experienced for the corresponding amount of role conflict.

#### **6.4.7 Summary of Discussion Points for Role Conflict.**

In this section role conflict and its relationship to inter-role conflict was discussed. It was stated in this section that role conflict does lead to role conflict in both the primary and secondary roles. This correlation was in line with the hypothesis of this study. Age and gender did not have a main effect on role conflict and this study did not expect to find a correlation for them. Years of service did have a main effect on role conflict. No explanation was proposed for this finding. School level focus also had a main effect on role conflict; this finding was not surprising given that both role overload and role ambiguity also had a main effect on years of service. Finally, it was discussed in this section the reasons for the finding that role salience did not act as a covariate in the relationship between role conflict and inter-role conflict. The findings associated with the construct role salience will be discussed in the next section.

### **6.5 ROLE SALIENCE**

This section contains six parts. The first five of these parts correspond to the five research questions forwarded for this paper. The final part of this section will summarise the main discussion points.

#### **6.5.1. Relationship between Primary Role Salience and Secondary Role Salience**

The results showed that there is a strong correlation between primary role salience and secondary role salience. The results for this section also showed that primary role salience was negatively correlated to primary role conflict and inter-role conflict. The salience of the secondary role, however, was not related to secondary role conflict, or inter-role conflict. This



would suggest that when salience is low in the primary role, conflict is likely to be experienced also in the secondary role, regardless of its salience status. The results seem to show that role conflict will have an effect on 'lower order' roles. No previous research as reported this result. This trend, however, is not applicable to lower order roles when considering whether they have an effect on higher order roles. The results showed that the level of role conflict and role salience in lower order 'roles' does not seem to affect or produce conflict in higher order roles. The results showed that primary role salience was also correlated to inter-role conflict (primary on secondary). However, secondary role salience was not correlated to inter-role conflict (secondary on primary). This result has implications in change management practice in Catholic Schools, ensuring that primary role salience is addressed before adding or changing secondary roles.

### **6.5.2 Role Salience and Gender**

Gender had no main effect on the level of role salience. It was not expected that differences would be found for this. Descriptively, females had higher levels of role salience for both primary and secondary roles (See figure 5.2.1). As previously discussed, it is likely that educational roles are more suited to the social and supportive aspects that women seek from roles (Brown, 1970; Browne, 1998; Mackey & Coney 2000).

### **6.5.3 Role Salience and Age**

Age had no main effect on the level of role salience. Generally, the results showed that role salience increased as age increased. The exception to this rule was the 41-50 years category, which showed a decrease for both the secondary and primary roles. No reason could be proposed for this decrease. It could be suggested that 41-50 years category are more likely to change their roles during this period, but this could not be discerned through statistics.

#### **6.5.4 Role Salience and Years of Service**

Years of service had no main effect on the level of role salience. In general, the descriptive statistics showed that level of role salience tended to decrease with the number of years of service. The results showed that role salience was highest for the 0-10 years of service group. As also expected, the primary role had a greater level of role salience than the secondary role.

#### **6.5.5 Role Salience and School Level Focus**

School level focus had no main effect on the level of role salience. The descriptive statistics showed that respondents from the 'Primary Schools' had the greatest level of role salience and P-12 schools had the lowest level. Given that school level focus had a main effect on role overload and role ambiguity, it was expected that some differences may have been found between the role salience levels of primary and P-12 schools. This result was not found.

#### **6.5.6 Summary of Discussion Points for Role Salience**

The construct of role salience and its relationship to the outcomes of a role was discussed in this section. Section 6.5.1 included discussion about the relationship of primary role salience to secondary role salience. It was purported in this section the trend that primary role salience is correlated to role conflict and inter-role conflict. However, secondary role salience had no relationship to role conflict and inter-role conflict. Primary role salience was correlated to secondary role salience. The evidence suggests that primary role salience is one of the most important factors in determining the state of the primary role, secondary role, and the relationships between both roles. In the second section of this paper the lack of main effect was found between genders, age, years of service, and school level focus was discussed. In the last section of this discussion chapter the construct of inter-role conflict and whether demographic variables had an effect on the level of inter-role conflict experienced was forwarded.

## **6.6 INTER-ROLE CONFLICT**

This final section of this discussion chapter contains five parts. These parts briefly discuss age, gender, years of service and school level focus and their interaction on inter-role conflict.

Sections 6.6.1 – 6.6.5 contain discussion on these interactions. The final section of this chapter concludes by discussing the outcomes of this study and its implications in the field of change management in Queensland Catholic Schools.

### **6.6.2 Inter-role Conflict and Gender**

Gender did not have a main effect on inter-role conflict. Biggs and Brough (2005) found that gender significantly moderated the relationship between role salience and inter-role conflict, with females experiencing more inter-role conflict as their level of family role salience increased. The opposite results were produced for the male respondents. The results of this study did not show gender as a mediating factor to the level of inter-role conflict.

### **6.6.1 Inter-role Conflict and Age**

The results for inter-role conflict showed only age had a main effect on inter-role conflict for both the primary and the secondary role. The results showed that the 31-40 years age category experienced significantly more inter-role conflict than the 41-50 years age category. As there were no other differences in the role salience, role ambiguity, and role overload, and role conflict levels between these age categories, some other factor must be contributing to the drop in inter-role conflict for the 41-50 years category. Whether psychological separation of roles, or a decrease in the total number of life roles, are factors would be the subject of further study.

### **6.6.3 Inter-role Conflict and Years of Service**

Years of service did not have a main effect on inter-role conflict. The descriptive statistics showed that the level of inter-role conflict experienced between the 0-10 years and 11-20 years was generally the same. There was a drop, however, of the level of inter-role conflict

experienced in the >21 years of service group. A drop in perceptions of inter-role conflict may be due to either a decreased number of life roles, and therefore the ability to manage life roles better, or simply a greater skill by the individual to manage the various life roles.

#### **6.6.4 School Level Focus and Inter-role Conflict**

Descriptively, the greatest level of role conflict was experienced in the P-12 schools, followed by secondary schools, then primary. Given that the results found significantly greater levels of role ambiguity and role overload for P-12 schools, it was expected that a significantly greater level on inter-role conflict would be found. The results did not show this. School level focus did not have a main effect on inter-role conflict.

#### **6.6.5 Summary of Discussion Points for Inter-role Conflict**

The correlations between age, gender, years of service, school level focus and inter-role conflict were discussed in this section. Age and its main effect on inter-role conflict were also discussed. It was suggested that the 51-60 years age category were able to somehow psychologically separate roles, given that no other difference between the groups were found within this study.

### **6.7 CHAPTER SUMMARY**

In this section details about the major relationships, patterns and trends found in this thesis were forwarded. Generalisations about the data, where possible, have been inferred and discussions about the likely mechanisms underlying these generalisations have been proposed. The results have clearly shown that role ambiguity, role overload, and role salience have a direct correlation to role conflict. This correlation is stronger for the primary role than the secondary role. Role ambiguity, role overload, and role conflict were also correlated to inter-role conflict. It is proposed that these constructs are valid considerations in determining the positive or negative identity of a single role within the Catholic Education context. When

studying the relationship between role ambiguity, role overload, role conflict and inter-role conflict with role salience acting as a covariate, the results were mixed. The results showed that primary role salience acted as a mediator rather than an antagonist in the relationship between primary role ambiguity and inter-role conflict (primary role on secondary role). This relationship was also present for role conflict and inter-role conflict (secondary on primary), when role salience acts as a covariate. Secondary role salience had no effect on the relationship between secondary role ambiguity / secondary role overload and inter-role conflict (secondary on primary). These results were in contradiction with previous studies. A possible explanation for this contradiction was that both the primary and secondary roles had positive salience levels in this study. It was proposed that other studies where role salience acted as an antagonist rather than a mediator may have had one of the two roles studied in conflict. Having stated this contradictory research, the trends in the results on how role salience acts as a covariate was suggested. This trend in the data proposes that role salience acts as a mediator to role conflict when the direction of roles is from higher order to lower order only. This section concludes by supporting the theory that multiple roles can be complementary to the overall identity of the stakeholder, as long as the primary role of the stakeholder is deemed salient and that additional roles are free from role ambiguity, role overload and role conflict.

Threats to role integrity through role change can occur one of four ways (Reitzes and Mutran, 1994). Organisational change can introduce many new roles and, therefore, completely new sets of organisational behaviours. Secondly, there can be a change to a partial set of formal duties associated with a position. The organisational change can also represent alteration to those informal roles that a stakeholder may hold within the organisation (social roles). Finally organisational change requires the stakeholder to show a support role for the change through positive reinforcement of the change amongst the social group/ work group. Role change, therefore, can arise in many different ways within the context of organisational change.

In order to effectively manage role change, the organisational change will need to be carefully managed at both an organisational and stakeholder level. How a stakeholder views a role change in an organisation is dependent on how this role change is communicated to the stakeholder. There is a multitude of research focused on the way that organisational visions should be presented within an organisational change and on how this presentation style affects the formation of attitudes towards the vision and, therefore, role behaviours. The key to planned change models, in particular, lies with the development and communication of a shared vision among all organisational stakeholders. (Abrahamson, 2000; Beckhard & Pritchard, 1992; Bennis, Benne & Chin, 1961; Coyle-Shapiro, 1999; Fullan, 2001; Kotter and Cohen, 2005; Mento, Jones & Dirndorfer, 2002; Oxman & Smith, 2003). In addition to this, the organisational vision must communicate insights into how the change will benefit the individual stakeholder (Klein, 1996).

Communication of organisational change and how individual roles will fit within this organisational change should be clearly and methodically communicated to all stakeholders in the organisation. This communication should identify the individual benefits of holding the role to the stakeholder. This should ensure that roles have clarity. The communication about roles should be conducted within a Human Resources (HR) framework so that the predictability of the responses, from others about one's behaviour in a role, is also high. Role commitment and role value (dimensions of role salience) also can be ensured with careful consideration of the how the individual's roles should make a unique contribution to the overall outcome of the social group and the organisation (Ellemers, Gilder & Haslam, 2004). As part of the role identity of the stakeholder, role overload also should be carefully managed, so that the social integration points of the role can still be utilised by the role holder. The results of this study suggest that the primary focus of any HR program should be on the primary role, but the results also show that secondary roles do need more consideration within

schools. Primary role salience is the key consideration to ensure the overall positive work identity. The constructs of role salience, role ambiguity, role overload, role conflict, and inter-role conflict are strong correlates to the outcomes of the primary role and, therefore, should be managed according to the principles and recommendations outlined in the next chapter.

## **CHAPTER 7**

### **CONCLUSION: SUMMARY, IMPLICATIONS RECOMMENDATIONS AND LIMITATIONS**

#### **7.1 INTRODUCTION**

This chapter is the end of this thesis and contains six main sections. Section 7.2 contains a summary of the study by restating its purpose, methodology, structure and key findings. A reflection on the discussion chapter stating the implications of this study to the Catholic Education sector also occurs in this section. These implications focus on three areas including Queensland Catholic secondary education practices, methodology in learning environment research and future learning environment research. Recommendations of the study are provided in Section 7.3. A summary of these recommendations is made in Section 7.4. The limitations of the study are addressed in Section 7.5 and this thesis is finished with some concluding remarks in Section 7.6.

#### **7.2 SUMMARY OF THE STUDY**

The purpose of this study was to further research in schools by determining best educational change management practices. Change in education can occur in many forms but this research was conducted from the perspective of the role and the role holder. Section 1.1.2 contained discussion on the place of role change in the study of change management. Of particular interest was how the change to a single role could affect other roles an individual held. This was investigated because roles are not held in isolation. What affects one role may also cause conflict with another role, further compounding the effect on one's overall self identity.

A leading question of this thesis is 'what are the role characteristics of a stakeholder with a positive teacher identity'? Leading on from this is 'how do the various roles that make up



teacher identity interact to ensure a positive teacher identity'? Conversely, 'what are the characteristics of roles and the interaction of roles that lead to a negative teacher identity'? The characteristics of role ambiguity, role salience, role conflict, role overload and the interaction (inter-role conflict) between those roles making up the teacher identity were investigated in this study.

An ex post facto design, which is one of several well-established quantitative experimental design methods, was used as the research method in this study. This research method lies within the strong tradition of positivistic research in this field. This design was used instead of a true experimental design for three main reasons. The first reason was that for several of the research questions listed, it would be unethical to manipulate the independent variable. Furthermore, the ex post facto design was logistically a more practical design for collecting data than an experimental method, particularly in role development research. The second problem with an experimental method included establishing both a control and an experimental group. This would have been particularly difficult at the organisational level. The access and timing of research within the school environment is also difficult in a geographically dispersed organisation such as Queensland Catholic Education. The final reason for the choice of the ex post facto design was the traditionally low response return rate within educational research.

Four types of statistical analyses were performed on the quantitative data. First a correlational data analyses with Pearson's  $r$  the accepted statistic were performed. These analyses were used to examine the relationships among role ambiguity, role conflict, role overload, role salience and inter-role conflict in both the primary and secondary roles. Pearson's  $r$  quantified the linear relationship that exists between the dependent variable (inter-role conflict) and the dependent variables of role overload, role conflict, role salience and role ambiguity. A second series of analyses ( $t$ -tests) was employed to examine the relationships between gender and each

of the five variables assessed in this study (viz. role ambiguity, role conflict, role overload, role salience and inter-role conflict). The *t*-test assessed whether the means of the male and female group were statistically different from each other for the five variables mentioned above. The third type of statistical analysis was multivariate analysis of variance. This was used to investigate the effects of the three grouping variables (viz. age, years of teaching service, and school-level focus) on each of the five dependent variables assessed in this study (viz. role ambiguity, role conflict, role overload, role salience and inter-role conflict). For the final analysis, each of the responses to each of the five dependent variables was categorised (recoded) into a low, middle or high bin, e.g., low ambiguity, middle ambiguity, high ambiguity. Each of these newly 'binned' variables was treated as a separate variable. A multivariate analysis of the recoded variables (viz. low, middle, high role ambiguity, low, middle, high, role conflict, low, middle, high, role overload, low middle high inter-role conflict) was used on the newly recoded role salience (viz. low, middle, high role salience).

A .05 criterion of statistical significance (i.e., Type I error rate) was employed for all tests. If the null hypothesis was rejected a *Tukey post hoc* test was employed to identify groups for which means were dependent. A *Levene's* test was performed to test the equality of variance for the different groups of the independent variables. For samples where the population variances and sample sizes were not equal, a *Games-Howell* test was performed instead of the *Tukey HSD*.

There were several major patterns to the findings within this study. First, the correlational data technique analysis showed role ambiguity, role overload, and role salience was correlated to role conflict, which in turn was correlated with inter-role conflict. The strength of the relationship between role ambiguity, role overload, role salience and role conflict was higher

for the primary role than for the secondary role, as was expected. This strength of the relationship between role conflict and inter-role conflict was also strongest for the primary role.

The *t-tests* performed to study differences between males and females for the five variables in this study (viz. role ambiguity, role conflict, role overload, role salience and inter-role conflict) found gender differences for two scales. The first difference was related to role ambiguity. The results showed that males had a greater level of role ambiguity (subscale – behaviour predictability) than did females. The second difference showed that females experienced a greater level of role overload in their secondary role than did males.

The multivariate analysis of variance (MANOVA) used to investigate the effects of the three grouping variables (viz. age, years of teaching service, and school-level focus) on each of the five dependent variables assessed in this study (viz. role ambiguity, role conflict, role overload, role salience and inter-role conflict, found statistical differences). Three differences were found for the grouping variable ‘school level focus’, and one statistical difference was found for ‘years of service’. The results showed that for role ambiguity, role overload, and role conflict, P-12 schools experienced significantly higher levels than their primary school counterparts. The final MANOVA showed that 11-20 ‘years of service’ group experienced significantly higher levels of role conflict than 21-30 ‘years of service’ group.

The multivariate analysis using the recoded variables (viz. low, middle, high role ambiguity, low, middle, high, role conflict, low, middle, high, role overload, low middle high inter-role conflict) on the newly recoded role salience (viz. low, middle, high role salience) showed no significant results.

## **7.3 IMPLICATIONS TO THE STUDY**

Chapter 6 of this thesis contained discussion on each of the results found for each of the research questions of this thesis. The major implications of this study to Queensland Catholic Education, and also suggestions on improvement to methodology of future role development and change management research is emphasised in this section. Findings and discussions in Chapter 6 and 7 are aggregated in order to make recommendations for Queensland Catholic Education and future role development research. Recommendations are made throughout this section and are summarised in Section 7.4.

### **7.3.1 Implications for Queensland Catholic Secondary Schools**

The first set of results discussed within this section examines the correlation between role ambiguity, role overload and role conflict. The results of this study showed that role ambiguity and role overload were directly correlated with role conflict and therefore inter-role conflict. Boyar, Maertz, Pearson and Keough, (2003) found that the level of inter-role conflict experienced between two roles was related to intentions to leave the organisation. To reduce turnover intentions within Queensland Catholic Schools, the following two recommendations are made. The first recommendation of this section relates to ensuring that roles within Queensland Catholic Schools are clearly defined. Given that the definition of role ambiguity is twofold, paralleling the two dimensions of role ambiguity, school administrators should address role ambiguity as a two step process. The first step is to clearly define a stakeholder's role in terms of its physical and behavioural requirements, and secondly to define these physical and behavioural requirements to all other stakeholders who interact with the holder of this role. It should be noted that role ambiguity was correlated to role conflict and inter-role conflict for the secondary role as well, so it is vital that role clarity is evident across both the primary and other secondary roles (*Recommendation 1*).

Role overload, according to this study, was clearly a key concern with most participants 'agreeing' they experienced role overload across both the primary and secondary roles. The second recommendation of this section states that role overload should be carefully considered within a role, but also in the context of all other roles that a stakeholder holds (*Recommendation 2*).

In their study Boyar, Maertz, Pearson and Keough, (2003) found that respondents who had low levels of professional commitment were more likely to quit their jobs when they experienced a high level of inter-role conflict than those who had a high level of professional commitment. They found that commitment to a role (dimension of salience) acted as a moderator to inter-role conflict. Further to this finding, the results found in this study showed that role salience only acted as a mediator to inter-role conflict when the direction of the conflict was from higher order roles to lower order roles. Details about the effect of role salience on inter-role conflict can be found in section 5.9.2. Ensuring positive salience of the primary role is a key finding of this research. The two dimensions of salience are 'commitment to the role' and 'perceiving the value of the role'. Ensuring that a stakeholder has a commitment to their primary role and that the stakeholder values their primary role will reduce the likelihood of role conflict and inter-role conflict and ultimately turnover intentions (*Recommendation 3*).

From a change management perspective, when adding or changing any secondary role, ensuring that role ambiguity and role overload are carefully well thought-out is of importance. This consideration, however, is only of use if the salience of the primary role is positive. School initiatives that utilises a stakeholders secondary role will be unlikely to be successful unless their primary role is salient. The fourth recommendation, therefore, is to ensure that the primary role is salient before adding or changing secondary roles (*Recommendation 4*).

Results from the *t*-tests conducted in this study indicate differences between males and females in regards to role ambiguity and role overload. It could not be ascertained why males had greater level of role ambiguity in their primary role (RA dimension – behaviour predictability) compared to females. The second key finding was that role overload was greater for females in the secondary role. Two hypotheses for this result were proposed. The first hypothesis was that the secondary roles that females held took more time. The second hypothesis was that females held many more life roles and, therefore, the time that the secondary teaching role took to conduct was more than the identity that females derived from these roles. The data from this study, did not offer a definitive explanation for either of these results. Further research encompassing gender differences and role development is recommended (*Recommendation 5*).

The MANOVA analyses established two key outcomes. First inter-role conflict significantly dropped from 31-40 years age category to the 41-50 years Age category. The theory proposed for this outcome was that 41-50 years Age category was able to better psychologically separate one role in conflict from other life roles. Testing the ability of stakeholders to psychologically separate roles in conflict should be included as scale in future studies on role development, as this factor has a high potential to contaminate results (*Recommendation 6*).

The second key outcome of the MANOVA analyses and the last key finding of this study relates to the differences found between different types of schools. Results showed that for role ambiguity, role overload, and role conflict, P-12 schools experienced significantly higher levels than their primary school counterparts. No explanation was proposed for these differences in the discussion section. Future research focusing on the structures of P-12 schools and their effects on the development of the work role is needed (*Recommendation 7*).

### 7.3.2 Implications for Methodology in Role Development Research

For this research, three main suggestions about the improvement to the methodology are made. These suggestions are the continued use of the 'multiple process model' framework, collection of further demographic information such as number and types of roles held by stakeholders, and the further use of scales to separate confounding variables, such as 'Psychological Separation'.

The 'Multiple Process Model' framework used within this study continues to allow a common framework through which role development research can be meaningfully compared. The findings of this study support the use of established constructs (i.e., role ambiguity, role overload, role salience, role conflict and inter-role conflict) to allow meaningful comparisons with previous research in the area of role development. The dimensions of constructs also allows for greater understanding of the correlations between each of the constructs. Scales used in this study had internal consistency reliability greater than .60. The continued use of these scales as part of the 'Multiple Process Model' is therefore recommended (*Recommendation 8*).

It is also recommended that more demographic information within role development questionnaires should be collected to allow for more of understanding of roles within the context of Queensland Catholic Education. It is recommended for future studies of inter-role conflict that surveys consist of more detailed questions breaking down the number and type of work roles that one holds. It has been well established in previous literature that inter-role conflict may arise as a result of either 'role accumulation' or as a result of conflict between the values needed to hold various role types. The results of this study suggest that there are certain combinations of role antecedents that may be a precursor supporting either or both of these two arguments.

Some caution is needed in interpreting the results found from this research. For example, within the work domain it was very difficult to make any statements as to why females perceived greater role demands than males. This is because role overload and role salience need to be considered in the context of all roles that an individual stakeholder may hold. Although the analysis of role types was outside the scope of this study information was collected about the kinds of roles that each of the respondents held. Further analyses of this data collected could have yielded useful information about the types of roles that the various genders and age groupings held. This may have given further insight into why females found their secondary role overloaded and why males' primary roles were felt to be less salient than their female counterparts. It is recommended that a greater collection of data and analyses of role information such as role types and role numbers is included in future research.

*(Recommendation 9).*

The final methodological recommendation is to include further constructs in the 'Multiple Process Model'. An example of this is the use of the scale to test the participant's ability to 'Psychologically Separate' roles that are in conflict. This recent proposal by Settles, Sellers, and Damas (2002) suggests that a stakeholder's ability to psychologically separate roles can reduce the amount of inter-role conflict. Given this valid construct, it is recommended that the 'Psychological Role Separation' construct be included in future role development research models *(Recommendation 10).*

### **7.3.3 Recommended Directions for Future Change Management Research**

Future directions in Change Management and Role Development research are presented in this section. Very little empirical research has been conducted across both of these disciplines in the context of education, and what little research has been conducted has not embraced the broader context of educational change management. Discussion on the need for conducting



change management using an applied schema is therefore discussed in this section. The second part of this section contains discussion on the possible future of role development research and its place in an applied change management research schema.

Recently within change management research there has been no systematic procedure by which change and change management research has been conducted. This has meant that previous research in this field and change management conclusions are isolated and without context. This is also observed in educational change management practice. For example, many Queensland Catholic Schools send their staff on courses in the name of professional development. In the change management context this professional development is categorised as 'Individual Change' Management. 'Learning Organisations' (OL) is an area of educational research that centres on improving the organisation through changing and improving the skills of all of the stakeholders of the organisation. The problem with this line of education change management research is that this research is not undertaken within the context of a change management schema.

Fullan (1993), for example, doubts the effectiveness of reform practices centering on professional development where the new skills and information obtained through professional development are not considered as part of culture and collaboration amongst teachers. Coopey (1995) makes the point that OL is unable to justify on its own merits how administration of schools will redistribute the control of power and resources for improved change. It is, therefore, unlikely that any knowledge retained by a subordinate organisational member will be used to the advantage of the organisation. The strongest opponent to OL states that the OL ideology will make no difference to the hierarchical structure and controlling interests of the organisation. "It is a Machiavellian subterfuge. It is a pimp, and the employees are the hapless prostitutes" (Armstrong & Foley, 1997). The first recommendation made in this section,

therefore, suggests that future change management research should be conducted as part of a wider change management research schema (*Recommendation 11*). An example of a schema is one suggested by Schumacher, Drenkard and Tornabeni (1997). According to their Change Intervention Schema, educational change can be categorised according to its targeted audience. It is recommended that research in the field of change management align itself to a schema of this genre. Change Management research under this schema is categorised as Psychology of the Individual, Social Psychological, Cultural, Innovative, Organisational, and Project Based Change. This study is categorised as a Social Psychological change management study when applying this schema. Given that this study fits within the “Social Psychological’ change category of research, the conclusions made in this study can be contextualised and, therefore, applied in practice to educational change management.

#### **7.3.4 Recommended Directions for Role Development Research**

Within some change management schema that can be applied to both research and in practice, further role development research should continue to play a key role as part of wider educational change management research. In the introductory chapter of this thesis, Chia (2000) stated that there must be an ontological shift to a more subjective view of change, (i.e., how do individuals personally view and commit to change). Insight into how stakeholders are affected when the key unit of the role is changed has been provided in this section. Statements on how the methodology of role development research can be improved were made in Section 8.3.2. It is recommended, therefore, that future role development use these recommendations to further research in the area of role development in the context of change management research (*Recommendation 12*).

## 7.4 SUMMARY OF RECOMMENDATIONS

- Recommendation 1*      Ensure role clarity across both the primary and other secondary roles.
- Recommendation 2*      Carefully consider role overload within a role, but also in the context of all other roles that a stakeholder holds.
- Recommendation 3*      Ensure stakeholder commitment to and value of primary role
- Recommendation 4*      Ensure that the primary role is salient before adding or changing secondary roles.
- Recommendation 5*      Further research encompassing gender differences and role development is recommended.
- Recommendation 6*      Testing the ability of stakeholders to psychologically separate roles in conflict should be included as a scale in future studies on role development.
- Recommendation 7*      Future research focusing on the structures of P-12 schools and their effects on the development of the work role is recommended.
- Recommendation 8*      The ‘Multiple Process Model’ framework should continue to be used in further role development studies.
- Recommendation 9*      Further research should include greater detail and role information (i.e. number and type) from participants.
- Recommendation 10*      Psychological Separation should be added to the ‘Multiple Process Model’ to standardise the relationships between role variables.
- Recommendation 11*      Future educational change management research should be conducted within the context of a change management research schema.
- Recommendation 12*      Role development research should be continued with improvements to methodology, and made in the context of change management research and practice.

## 7.5 LIMITATIONS TO THE STUDY

Outside of the limitations mentioned in Section 3.4 of this thesis, this section includes suggestions for improvements to the methodology of this study. Given that this study used an ex post facto design with a single questionnaire, criticism of the methodology used in this

study centres mainly around the implementation of the questionnaire. Justification for the use of the ex post facto design has been made in Section 3.21, and justification for the use of scales within the questionnaire has also been made in Section 3.3 of this thesis. Suggestions about the use of additional scales to collect more detailed information about number and types of roles were made in Section 7.3.2. The use of data analyses techniques within this study were appropriate.

The procedure for administering the role development questionnaire in schools was a potentially limiting factor in this study's methodology. It included the task of initially sending an information letter to the principals. This letter directed the principals to distribute the survey to those staff that held positions of added responsibility (PARs). If surplus surveys existed from the initial distribution to those staff with PARs, principals could then distribute the surveys to those staff members who held multiple roles, but were not officially recognised for this role through formal remuneration or organisational structure. This procedure was most likely a limiting factor on the number of return surveys, given that this procedure would have taken considerable time to complete either by the principal or by a delegate of the principal. It is recommended that in the future administration of surveys be made as simple as possible. This would include sending the survey to principals electronically, which would facilitate an easier distribution of the survey.

In this study, the sample included teachers across three School Level Focus types (i.e., primary schools, secondary schools, and P-12 schools). Typically P-12 schools in the Queensland Catholic Schools sector constitute only a small percentage of the total number of schools. Given the total sample size of this study, some caution should be taken when considering those conclusions made about P-12 schools.

## 7.6 CONCLUDING REMARKS

Having an understanding of why stakeholders during organisational change will modify and exhibit particular behaviours has been explored by identity theorists. Resistance to organisational change, for example, has been proposed to occur because change undermines the distinctiveness of the stakeholder's proposed roles and identities within the organisation. Conversely, those stakeholders who can maintain or see how they can maintain their distinct role in the new organisational change will be supportive of the new change (Hornsey & Hogg, 2000; Jetten, O'Brien, & Trindall, 2002; Van Leeuwen, Van Knippenberg, & Ellemers, 2003).

This study has focused on identifying the key characteristics that make up both a positive and negative role. It has also viewed the importance of the changing role in the context of organisational change. This study has shown that role ambiguity and role overload are correlated with role conflict, and it has shown that role salience is inversely correlated to role conflict, and inter-role conflict. The strength of these relationships was strongest for the primary role. This finding aligns with Strykers (1980) theory on 'Interactional and Affective Commitment'. Where roles are likely to be more salient and have greater interaction with more people, the more likely that factors such as role overload and role ambiguity, will lead to role conflict. In the case of role ambiguity, an ambiguous role can threaten identity of the stakeholder through ambiguous interactions with significant others within the organisation. Role overload similarly allows for little time to develop social relationships and, therefore, can have a detrimental effect on the social identity of the role holder. In closing, this research supports the importance of considering role change and role characteristic as part of wider education reform and change.

## REFERENCES

- Amatea, E. S., Cross, E. G., Clark, J. E., & Bobby, C. L. (1986). Assessing the work and family role expectations of career-oriented men and women: the life Role Salience scales. *Journal of Marriage and the Family*, 48, 831-838.
- Armstrong, A., & Foley, P. (1997). "Learning Organisations - New Paradigm or Latest Fad." *Comment Magazine*, July, 6-10.
- Babin, J., & Boles, J. (1998). Employee behavior in a service environment: A model and test of potential differences between men and women. *Journal of Marketing*, 62(April), 77-91.
- Baker, W. & Faulkner, R. (1991). Role as a resource in the Hollywood film industry. *American Journal of Sociology*, 97, 279-309.
- Beauregard, T. A. (2006). Predicting interference between work and home: A comparison of dispositional and situational antecedents. *Journal of Managerial Psychology*, 21(3), 244-264.
- Bedian, A. G., & Armenakis A. (1981). A path-analytic study of the consequence of Role Conflict and ambiguity. *Academy of Management Journal*, 24, 417-424.
- Beehr, T. A., Walsh, J. T., & Taber, T. D. (1976). Relationship of stress to individuality and organizationally valued states: Higher order needs as a moderator. *Journal of Applied Psychology*, 61, 41-47.
- Biggs, A. & Brough, P. (2005). Investigating the moderating influences of Gender upon Role Salience and work-family conflict. *Equal opportunities International*, 24(2), 30-41.
- Boorman, S., & White, H. (1976). Social structure from multiple networks, II. *American Journal of Sociology*, 81, 1384 - 1446.

- Boyar, S. L., Carr, J. C., Mosely, D. C., & Carson, C. M. (2007). The development and validation of scores on perceived work and family demand scales. *Educational and Psychological Measurement, 67*, 100-115.
- Boyar, S. L., Maertz, C. P., Pearson, A. W., & Keough, S. (2003). Work-family conflict: A model of linkages between work and family domain variables and turnover intentions. *Journal of Managerial Issues, 15*(2), 175-190.
- Brown, K. (1970). A note on the division of labor. *American Anthropologist, 72* (5), 1073-1078.
- Browne, B. A. (1998) Gender Stereotypes in Advertising on Children's Television in the 1990s: A Cross-National Analysis. *Journal of Advertising, 27*, 83-96.
- Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly, 19*, 533-546.
- Burke, P. (1969). Scapegoating: An alternative to role differentiation. *American Sociological Association, 32*(2), 159-168.
- Burke, P. J., & Harrod, M. M. (2002). *Too much of a good thing*. American Sociological Association, Chicago.
- Burke, P. J., & McClelland, K. (2006). *Perceptions of leadership in groups: An empirical test of identity control theory. Purpose, Meaning, and Action: Control Systems Theories in Sociology*. Secondary York, Palgrave/Macmillan.
- Burke, P. & Reitzes, D. (1981). The link between identity and role performance. *Social Psychology Quarterly, 44*(2), 83-92.
- Burke, P. & Stets, J. (1999). Trust and commitment through self-verification. *Social Psychology Quarterly, 62*(4), 347-366.
- Callero, P. (1994). From role-playing to role-using: Understanding role as a resource. *Social Psychology Quarterly, 57*(3), 228-243.

- Cammann, C., Fichman, M., Jenkins, G. D., & Klesh, J. R. (1979). *The Michigan organizational assessment questionnaire*. Michigan, University of Michigan.
- Campbell, K. M., & Campbell, D. J. (1995). Psychometric properties of the life role salience scales: Some construct validation evidence from a sample of non-professional women. *Educational and Psychological Measurement, 55*(2), 317-328.
- Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. New York. Carnegie Corporation of New York.
- Carlson, D. S. (1999). Personality and role variables as predictors of three forms of work-family conflict. *Journal of Vocational Behaviour, 55*(2), 236-253.
- Carlson, D. S., & Kacmar, K. M. (2000). Work-Family conflict in the organization: do life role values make a difference? *Journal of Management, 26*(5), 1031-1054.
- Carlson, D. S., Kacmar, K. M., & Stepina, L. P. (1995). An examination of two aspects of work-family conflict: time and identity. *Women in Management Review, 10*(2), 17-25.
- Carlson, D. S., Kacmar, K. M. & Williams, L. J. (2000) Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocation Behavior, 56*(2), 249-276.
- Carr, A. (1999). The psychodynamics of organisational change - Identity and the "reading" of emotion and emotionality in a process of change. *Journal of Managerial Psychology, 14*(7/8), 573-580.
- Carr, A. (2000). Critical theory and the management of change in organizations. *Journal of Organizational Change Management, 13*(3), 208-227.
- Chia, R. (2000). Discourse analysis as organizational analysis. *Organization, 7*(4), 513-518.
- Chiu, R. K., Man J. S. W., & Thayer, J. (1998) Effects of Role Conflicts and role satisfactions on stress of three professions in Hong Kong: A path analysis approach. *Journal of Managerial Psychology, 13*(5/6), 318-333.



- Clark, S. C. (2001). Work/family border balance: A new theory of work/family balance. *Human Relations, 53*(6), 747-770.
- Coghlan, D., & Shani, A. B. (2005). Roles, Politics, and Ethics in Action Research Design. *Systemic Practice and Action Research, 18*(6), 533-546.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. Hillsdale, NJ: Lawrence Earlbaum Associates.
- Cohen, A. (1993). Age and tenure in relation to organizational commitment: A meta-analysis. *Basic and Applied Social Psychology, 14*(2), 143-59.
- Conley, S. & Woosely, S. A. (2000). Teacher role stress, higher order needs and work outcomes. *Journal of Educational Administration, 38*(2), 179-201.
- Coopey, J. (1995). Managing the learning organisation. Retrieved from [https://www.ergonomiayhdistys.fi/nes2001/nes2001\\_p6.pdf](https://www.ergonomiayhdistys.fi/nes2001/nes2001_p6.pdf)
- Covey, S. (1989). *Seven habits of highly effective people*. New York City: Simon and Schuster.
- Creswell, J. W. (2005). *Research Design: Qualitative and Quantitative Approaches*. Sage Publications, Inc; annotated edition.
- Daniels, S. (2003). Employee training: A strategic approach to better return on investment. *Journal of Business Strategy, 24*(5), 39-42.
- Doress-Wortes, P. (1994). Adding elder care to women's multiple roles: A critical review of the caregiver stress and multiple roles literatures. *Sex Roles, 31*, 597-613.
- Eagly, A (1987). *Sex Differences in Social Behavior: A Social-Role Interpretation*. Hillsdale, NJ: Lawrence Erlbaum.
- Eagley, A. & Chaiken, S. (1993). *The Psychology of Attitudes*. Orlando, Harcourt Brace Jovanovich.
- Effect Size (ES) Retrieved September 12, 2008,  
<http://web.uccs.edu/lbecker/Psy590/es.htm#V.%20Effect%20size%20measures%20in%20ANOVA>.

- Elloy, D. F. & Smith, C. R. (2004). Antecedents of Work-Family Conflict Among Dual-Career Couples: An Australian Study. *Cross Cultural Management, 11*(4), 17-27.
- Elmore, R. (1995). Getting to scale with good educational practices. *Harvard Educational Review, 66*(1), 1-26.
- Everett, M. G., Director, E. D., Furtado, M. & Vickers, M. (2008). Research Symposium on Australian School Funding Policy. Venue: F509 CODE: FUR08866 December 4, 2008.
- Foley, S., & Hang-Yue, N. (2005). The Effects of Work Stressors, Perceived Organizational Support, and Gender on Work-Family Conflict in Hong Kong. *Asia Pacific Journal of Management, 2*, 237-256.
- Folkman, S. & Lazarus, R. (1980). An analysis of coping in middle-Aged community sample. *Journal of Health and Social Behavior, 21*, 219-239.
- Foote, D. A., Seipel, S. J., Johnson, N. B., & Duffy, M. K. (2005). Employee commitment and organizational policies. *Management Decision, 43*(2), 203-219.
- Frone, M. R. & Rice, R. W. (1987). Work-Family Conflict: The Effect of Job and Family Involvement. *Journal of Occupational Behaviour, 8*(1), 45-53.
- Frone, M., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology, 77*, 65-78.
- Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior, 50*, 145-167.
- Fullan, M. (1993). *Changing Forces. Probing the Depths of Educational Reform*. London, The Falmer Press.
- Fullan, M. (2000). *The three stories of educational reform*. Educational Practices 2010, Brisbane.

- Fullan, M. (2001). *The Secondary Meaning of Educational Change*. London, Teachers College Press.
- Gilbert, R. K. (1992). Revisiting the Psychology of Men. *Journal of Humanistic Psychology*, 32(2), 41-68.
- Giniger, S., Dispenzieri, A. & Eisenberg, J. (1983). Age, experience, and performance on speed and skill jobs in an applied setting. *Journal of Applied Psychology*, 68, 469–75.
- Glass, G. V., & Stanley, J. C. (1970). *Statistical methods in education and psychology*. New York: Prentice-Hall.
- Glenn, N. D., Taylor, P. A., & Weaver, C. N. (1977) Age and job satisfaction among males and females – multivariate, multisurvey study. *Journal of Applied Psychology*, 62(2), 189–93.
- Goode, W. (1960). A theory of role strain. *American Sociological Review*, 25(4), 483-496.
- Gove, W., & Zeiss, C. (1987). *Multiple roles and happiness. Spouse, Parent, Worker: On Gender and Multiple Roles*. Secondary Haven, Yale University Press.
- Greenhaus, J. H., Collins, K. M., Singh, R., & Parasuraman, S. (1997). Work and Family Influences on Departure from Public Accounting. *Journal of Vocational Behaviour* 50(2), 249-270.
- Guimaraes, T., & Armstrong C. (1998). Empirically testing the impact of change management effectiveness on company performance. *European Journal of Innovation Management*, 1(2), 74-84.
- Gutek, B. (1995). *The dynamics of service*. San Francisco, Jossey - Bass.
- Herst, D. E. L. (2003). *Cross-Cultural Measurement Invariance of Work / Family Conflict Scales Across English-Speaking Samples*. University of South Florida.
- Higgins, C. & Duxbury, L. (1992). Work-family conflict in the dual-career and traditional-career men. *Journal of Organizational Behavior*, 13, 389-411.
- Hogg, M. & Vaughan, G. (2002). *Social psychology*. Secondary York, Prentice Hall.

- Hornsey, M. J. & Hogg, M. (2000). Assimilation and Diversity: An Integrative Model of Subgroup Relations. *Personality and Social Psychology Review*, 4(2), 143-156.
- House, R. J., Schuler, R. S., & Levanoni, E. (1983). Role Conflict and ambiguity scales: Reality or artifacts? *Journal of Applied Psychology*, 68(2), 334-337.
- Howe, K. R., & Eisenhardt, M. (1990). Standards for qualitative (and quantitative) research: A prolegomenon. *Educational Researcher*, 19(4), 2-9.
- Jones, M. L. (2005). Role development and effective practice in specialist and advanced practice roles in acute hospital settings: systematic review and meta-synthesis. *Journal of Advanced Nursing*, 49(2), 191-209.
- Jetten, J., O'Brien, A., & Trindall, N. (2002). Changing identity: predicting adjustment to organizational restructure as a function of subgroup and superordinate identification. *British Journal of Social Psychology*, 41(2), 281-297.
- Kahn, R.L. (1964). *Organizational stress: Studies in Role Conflict and ambiguity*. New York: Wiley.
- Korman, A. K., & Korman, R. K. (1980). *Career success/personal failure*. Englewood Cliffs, N.J.: Prentice-Hall.
- Kanter, R. (1977). *Men and women of the corporation*. New York: Basic Books.
- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2), 285-308.
- Kelloway, E., Kevin, E., & Barling, J. (1990). Item content versus item wording: Disentangling Role Conflict and Role Ambiguity. *Journal of Applied Psychology*, 75(6), 738-742.
- Kemery, E., Bedeian, A., & Armenakis, A. A. (1985). Outcomes of role stress: A multisample constructive replication. *Academy of Management Journal*, 28(2), 363-375.
- King, L. A., & King, D. W. (1990). Role Conflict and Role Ambiguity: A critical assessment of construct validity. *Psychology Bulletin*, 107(11), 48-64.

- Kopelman, R. E., Greenhaus, J. H., & Connolly, T. F. (1983) A model of work, family and interRole Conflict: a construct validation study. *Organizational behaviour and human performance*, 32(2), 198-215.
- Kosmas, X. S., Romano, C. A., Tanewski, G. A., Karofsky, P. I., Millen, R., & Yilmaz, M. R. (2003). Work-Family Conflict: A study of American and Australian Family Businesses. *Family Business Review*, 16(1), 35-51.
- Kotter, J. P. & Cohen, D. S. (2005). The Heart of Change. *Real life stories of how people change their organizations*. Boston, Harvard Business School Press.
- Koustelios, A., Theodorakis, N., & Hassandra, M. (2004). Role Ambiguity, Role Conflict and job satisfaction among physical education teachers in Greece. *The International Journal of Educational Management*, 18(2), 87-92.
- Kreiner, G. E. (2006). Consequences of work-home segmentation or integration: a person-environment fit perspective. *Journal of Organizational Behaviour*, 27, 485-507.
- Lodanl, T. M., & Kejner, M. (1965). The definition and measurement of job involvement. *Journal of Applied Psychology*, 49, 24-33.
- Lui, S. S., & Ngo, H. Y. (2001). Inter-role Conflict as a predictor of job satisfaction and propensity to leave. A study of professional accountants. *Journal of Managerial Psychology*, 16(6), 469-484.
- Mackey, W. C., & Coney, N. S. (2000). Cultural Evolution and Gender Roles: A Re-Affirmation of J.K. Brown's Note. *International Journal of Comparative Sociology*, 36(3-4), 285-298.
- Madsen, S. R. (2003). The Effects of Home-Based Teleworking on Work-Family Conflict. *Human Resource Development Quarterly*, 14(1), 35-58.
- Major, V. S., Klein, K. J., & Ehrhart, M. G. (2002). Work Time, Work Interference with Family, and Psychological Distress. *Journal of Applied Psychology*, 87(3), 427-436.

- Marsiglio, W. (1993). Contemporary Scholarship on Fatherhood. *Journal of Family Issues, 14*, 484-510.
- Martire, L. M., Stephens, M. A. P., & Townsend, A. L. (2000) Centrality of women's multiple roles: Beneficial and detrimental consequences for psychological well-being. *Psychology and Aging, 15*(1), 148-156.
- Matzeder, M. E. & Krieshok, T. S. (1995). Career self-efficacy and the prediction of work and home role salience. *Journal of Career Assessment, 3*(3), 331-340.
- McEvoy, G. M., & Cascio, W. F. (1989). Cumulative evidence of the relationship between employee age and job performance. *Journal of Applied Psychology, 74*, 11-17.
- McGee, G. W., Ferguson, C. E. Jr., & Seers, A. (1989) Role Conflict and Role Ambiguity: do the scales measure these two constructs? *Journal of Applied Psychology, 74*(5), 815-818.
- McLaughlin, M. W. (1990). The Rand Change Agent Study Revisited: Macro Perspectives and Micro Realities. *Educational Researcher, 19*(9), 11-16.
- McNeilly, K., & Goldsmith, R. E. (1991). The Moderating Effects of Gender and Performance on Job Satisfaction and Intentions to Leave in the Sales Force. *Journal of Business Research, 22*(3), 219-232.
- Menaghan, E. (1989). Role changes and psychological well-being: variations in effects by gender and role repertoire. *Social Forces, 67*(3), 693-714
- Merton, R. (1957). *Social theory and social structure*. Illinois, The Free Press.
- Mitchell, R., Agle, B., & Wood, D. J. (1997). Towards a theory of stakeholder identification and salience: defining the principle of who and what really counts. *Academy of Management Review, 22*(4), 853-886.
- Mullen, B., & Hogg, M. A. (1999). Motivations for Group Membership: The Role of Subjective Importance and Uncertainty Reduction. *Basic and Applied Social Psychology, 21*, 91-102.

- Muncey, D. & McQuillan, P. (1991). *Some observations on the possibility of major restructuring in American schools: An ethnographic perspective*. Providence, RI: Brown University, School of Ethnography.
- Netemeyer, R., Johnston, M., & Burton, S. (1990). Analysis of role conflict and role ambiguity in a structural equations framework. *Journal of Applied Psychology*, 75(2), 148-157.
- Neuman, W. L. (1999). *Social Research Methods: Qualitative and Quantitative Approaches (4th Edition)*, Atlanta, Allyn & Bacon.
- Parasuraman, S., & Greenhaus, J. H. (2002). Towards reducing some critical gaps in work-family research. *Human Resource Management Review*, 12(3), 299 - 312.
- Perrewe, P. & Hochwarter, W. (2001). Can we really have it all? The attainment of work and family values. *Current Directions in Psychological Science*, 10(1), 29-33.
- Pettigrew, L. S., & Wolf, G. E. (1982). Validating Measures of Teacher Stress. *American Educational Research Journal*, 19(3), 373-396.
- Pettigrew, A., Ferlie, E., & McKee, L. (1992). *Shaping strategic change*. London, Sage.
- Quinones, M. A., Ford, J. K., & Teachout, M. S. (1995). The relationship between work experience and job performance: A conceptual and meta-analytic review. *Personnel Psychology*, 48(4), 887-910.
- Raju, P. M., & Srivastava, R. C. (1994). Factors contributing to commitment to the teaching profession. *International Journal of Education Management*, 8(5), 7-13.
- Reitzes, D. & Mutran, E. (1994). Multiple roles and identities: factors influencing self-esteem among middle Aged working men and women. *Social Psychology Quarterly*, 57(4), 313-325.
- Rizzo, J., House, R. J., & Lirtzman, S. L. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15, 150-163.

- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
- Rosenblatt, Z. (2001). Teachers' Multiple Roles and Skill Flexibility: Effects on Work Attitudes. *Educational Administration Quarterly*, 37(5), 684-708.
- Rowley, T. I., & Moldoveanu, M. (2003). When will stakeholder groups act? An interest - and identity-based model of stakeholder group mobilization. *Academy of Management Review*, 28(2), 204-219.
- Sanders, R. E. (2006). *Career and Family Priorities of College Students*. Loyola University-New Orleans.
- Schumacher, E., Drenkard, K., & Tornabeni, J. (1997) Care delivery innovation in an integrated health system. *Nurse Leader*, 2(1), 52-55.
- Scott, G. (1999). *Change Matters. Making a difference in education and training*, St Leonards, NSW, Allen and Unwin.
- Seashore, S., Lawler, E., Mirvis, P., & Cammann, C. (1982). *Observing and measuring organizational change: A guide to field practice*. Secondary York, Wiley.
- Senge, P. M. (1994). *The Fifth Discipline: The Art and Practice of the Learning Organisation*. New York, Currency.
- Settles, I. H., Sellers, R. M., & Damas, A. (2002). One Role or Two? The Function of Psychological Separation in Role Conflict. *American Psychological Association*, 87(3), 574-582.
- Seiber, S. (1974). Towards a theory of role accumulation. *American Sociological Review*, 39, 567-578.
- Shelton, L. M. (2006) Female Entrepreneurs, Work-Family Conflict, and Venture Performance: New Insights into the Work-Family Interface. *Journal of Small Business Management*, 44(2), 285-297.



- Shirom, A., Gilboa, S. S., Fried, Y., & Cooper, C. L. (2008). Gender, age and tenure as moderators of work-related stressors relationships with job performance: A meta-analysis. *Human Relations, 61*, 1371-1399.
- Smith, C. S., Tisak, J., & Schmieder, R. A. (1993). The measurement properties of the role conflict and role ambiguity scales: A review and extension of the empirical research. *Journal of Organizational Behavior, 14*(1), 37-48.
- Smyrnios, K. X., Romano, C. A., Tanewski, G. A., Karofsky, R. M., & Yilmaz, M. R. (2003). work-family conflict: A Study of American and Australian Family Businesses. *Family Business Review, 16*(1), 35-52.
- Snoek, D. (1966). Role strain in diversified role sets. *American Journal of Sociology, 4*, 363-372.
- Stryker, S. (1968). Identity salience and role performance; the relevance of symbolic interaction. Theory for family research. *Journal of Marriage and the Family, 30*, 558-564.
- Stryker, S. (1980). *Symbolic interactionism: A social structural version*. Menlo Park, Benjamin Cummings.
- Stryker, S. & Serpe, R. (1994). Identity salience and psychological centrality: Equivalent, overlapping or complementary concepts? *Social Psychology Quarterly, 57*(1), 16-35.
- Tajfel, H. & Turner, J. C. (1979). Individual-Group continuity in cooperation and competition under varying communication conditions. *Current research in Social Psychology, 6*(12), 166-181.
- Thoits, P. (1983). Multiple identities and psychological well-being: A reformulation and test of the social isolation hypothesis. *American Sociological Review, 48*, 174-187.
- Thoits, P. (1986). Multiple identities; examining gender and marital status differences in distress. *American Sociological Review, 51*, 259-272.

- Thoits, P. (1992). Identity structures and psychological well-being: Gender and marital status comparisons. *Social Psychology Quarterly*, 55, 236-256.
- Thornton, W. J. L., & Dumke, H. A. (2005). Age differences in everyday problem-solving and decision-making effectiveness: A meta-analytic review. *Psychology and Aging*, 20(1), 85–99.
- Todnem, R. (2005). Organisational change management: A critical review. *Journal of Change Management*, 5(4), 369-380.
- Tubre, T., & Collins, J. (2000). Jackson and Schuler (1985) revisited: a meta analysis of the relationship between role ambiguity, role conflict, and job performance. *Journal of Management*, 26(1), 22-36.
- Turner, R. (1985). *Unanswered questions in the convergence between structuralist and interactionist role theories. Micro-Sociological Theory : Perspectives on Sociological Theory*. H. Helle and Eisenstadt. Beverly Hills - California, SAGE.
- Tracey, L., & Johnson, T. W. (1981). What do the role conflict and role ambiguity scales measure? *Journal of Applied Psychology*, 66(4), 464-469.
- van Leeuwen, E., van Knippenberg, D., & Ellemers, N. (2003). Continuing and changing group identities: the effects of merging on social identification and ingroup bias. *Personality and Social Psychology Bulletin*, 29(6), 679-690.
- Wallace, J. E. (1997). It's about Time: A Study of Hours Worked and Work Spillover among Law Firm Lawyers. *Journal of Vocational Behavior*, 50, 227-248.
- Waldman, D. A., & Avolio, B. J. (1986). A meta-analysis of Age differences in job performance. *Journal of Applied Psychology*, 71, 33–8.
- Wallace, J. E. (1997). It's about time: A study of hours worked and work spillover among law firm lawyers. *Journal of Vocational Behavior*, 20, 797-816.
- Wiley, M. G. (1991). Gender, work and stress: the potential impact of role-identity salience and commitment. *Sociological Quarterly*, 32, 495-510.

Wood, A. (2003). Interrelationships of role conflict, role ambiguity, and work-family conflict with different facets of job satisfaction and the moderating effects of gender. *Journal of Personal Selling & Sales Management*, (March), 1-37.

Yang, N., Chen, C. C., Choi, J., & Zou, Y. (2000). Sources of work-family conflict: A Sino-US comparison of the effects of work and family demands. *Academy of Management Journal*, 43(1), 113-123.

## **Appendix A – Survey Questionnaire**

INFORMATION LETTER TO PARTICIPANTS

TITLE OF PROJECT: A study of Inter-role Conflict in the context of change management practices in Catholic Schools.  
PRINCIPAL INVESTIGATOR: Professor Jeffrey Dorman  
STUDENT RESEARCHER: Wayne Hellmuth  
PROGRAMME IN WHICH ENROLLED: MEd Research

Dear Participant,

You are invited to complete the enclosed survey that focuses on the work balance of those educators who currently hold multiple roles within their work position e.g. Classroom teacher and Coach or Positions of Added Responsibility (PAR) positions etc.

It is anticipated that this survey should only take 15 minutes of your time.

Currently there is a requirement of teachers in schools, to take on many and varying roles. Some of these roles are transient by nature; some are well defined and resourced, while other roles are less clear. Achieving an understanding of what the effects are of holding multiple roles are for each individual, is important in ensuring balanced work demands within the education profession. Your participation in this survey will enhance our understanding of what constitutes a balanced work life for educators.

Participants in this survey are free to refuse to participate altogether without having to justify their decision and they may discontinue participation in the study at any time without giving a reason. Withdrawal from this research will not prejudice your current or future employment.

This study has been approved by the Human Research Ethics Committee at Australian Catholic University. Confidentiality of your responses will be ensured during the conduct of the research, and in any report or education publication arising from it.

If you have any questions regarding the contents or procedures contained within this study, or if you wish to be provided with feedback / results of this study, please contact either the Principal Investigator or the Student Researcher. These contact details are listed on the next page.

In the event that you have any complaint or concern about the way you have been treated during the study, or if you have any query that the Investigator or Supervisor and Student Researcher has (have) not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee care of the nearest branch of the Research Services Unit. Any complaint or concern will be treated in confidence and fully investigated. The participant will be informed of the outcome.

QLD: Chair, HREC  
Australian Catholic University  
Brisbane Campus  
PO Box 456  
VIRGINIA QLD 4014  
Tel: 07 3623 7429  
Fax: 07 3623 7328

If you agree to participate in this project, you should complete the survey, and return it in the Reply Paid envelope that has been included with the survey correspondence. Please return this survey by the 15<sup>TH</sup> OF APRIL, 2008.

We thank-you very much for your time and contribution towards this research.

Regards



Professor Jeffrey Dorman  
(Principal Investigator)  
(07) 3623 7159  
PO Box 456  
Virginia QLD 4014



Wayne Hellmuth  
(Student Researcher)  
(07) 3357 3340  
PO Box 456  
Virginia QLD 4014

## ROLE DEVELOPMENT QUESTIONNAIRE

Thank you for participating in this survey. This survey forms part of a Masters in Education (Research) degree. Your participation is anonymous, and at no time will your identity be disclosed to the researcher. You may withdraw from this survey at any time up until submission of the survey. Once the surveys have been submitted, you will be unable to withdraw because individual surveys are anonymous, and are therefore non-identifiable. If you do decide to take part in this survey, please make sure that you complete ALL the relevant questions. The survey begins at page 1 and ends at page 4 (bottom of the page). This survey focuses on exploring what effects holding multiple roles in your job, has on you. It is anticipated that the results of this study will influence the number, quality, and the way that new roles are introduced or changed within schools.

COMPLETION OF THIS SURVEY WILL BE TAKEN AS CONSENT TO PARTICIPATE

### Instructions

You are asked to give your opinion on statements about your current roles and responsibilities within your school.

Questions 1,2 and 3 requires that you to carefully read the question instructions. For the remainder of the questions, please answer by circling the number under Strongly Agree, Agree, Not Sure, Disagree, or Strongly Disagree.

### Question 1 - Please Circle

- a. What is your Gender?      M / F
- b. What is your Age?      20-25, 26-30, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60, >61
- c. How many years of teaching have you completed?      0-5, 6-10, 11-15, 16-20, 21-25, 26-30,
- d. Which of the following describes your School-Level Focus?      Primary, Secondary, P-12

### Question 2

From the list below, tick () the roles that you currently hold within your school.

<input type="checkbox"/> Principal	<input type="checkbox"/> Literacy Coordinator	<input type="checkbox"/> Teacher - Librarian
<input type="checkbox"/> Head of Secondary	<input type="checkbox"/> Voc. Ed. Coordinator	<input type="checkbox"/> Instrumental Teacher
<input type="checkbox"/> Head of Primary	<input type="checkbox"/> Sport Coordinator	<input type="checkbox"/> Tuckshop Convenor
<input type="checkbox"/> APA	<input type="checkbox"/> School Chaplain	<input type="checkbox"/> Campus Minister
<input type="checkbox"/> APRE	<input type="checkbox"/> Counsellor	<input type="checkbox"/> BCE Program Coordinator eg. Lincs 3
<input type="checkbox"/> Head of Department	<input type="checkbox"/> Sport Coach	<input type="checkbox"/> CTP Project Coord. eg. Boys in Ed.
<input type="checkbox"/> Classroom Teacher	<input type="checkbox"/> Lab Assistant	<input type="checkbox"/> Other 1 (specify here)
<input type="checkbox"/> Year Coordinator	<input type="checkbox"/> Teacher Aide	<input type="checkbox"/> Other 2(specify here)
<input type="checkbox"/> Subject Coordinator	<input type="checkbox"/> Special Needs Teacher	<input type="checkbox"/> Other 3(specify here)

### Question 3

From the roles that you have selected in the list above state the role that is most important **to you** and the role that is least important **to you**.

- a. Most important role to you chosen from the above list \_\_\_\_\_(Primary Role)
- b. Least important role to you chosen from the above list \_\_\_\_\_(Secondary Role)

**Please read each question and respond how this question relates to both your Primary role (most important to you) and also your Secondary role (least important to you).**

**Role Ambiguity (Rizzo, House and Lirtzman, 1970)**

4. I am corrected or rewarded when I really don't expect it in this role.

5. I feel certain of how I will be evaluated for a promotion.

6. I am told how well I am doing in this role.

7. I do not know if my work, in this role, will be acceptable to my line manager.

8. I have clear, planned goals and objectives for this role.

9. I experience a lack of policies and guidelines to help me.

10. I know what my responsibilities are in this role.

11. I have to 'feel my way' in performing my duties.

12. I know exactly what is expected of me in this role.

13. I am uncertain as to how my role is linked to the school plan.

14. The explanations are clear of what has to be done in this role.

15. I have to work under vague directives or orders.

**Role Conflict – Rizzo, House and Lirtzman, 1970**

16. I perform tasks that are too easy or are not sufficiently challenging.

17. I have to do things that should be done differently.

18. I work on unnecessary things in this role .

19. I perform work that suits my values in this role.

20. I have enough time to complete my work in this role.

21. I receive tasks without the resources to complete it.

22. I receive tasks that are not within my training and capability in this role.

23. I work under incompatible policies and guidelines.

	PRIMARY ROLE						SECONDARY ROLE				
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree		Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
4. I am corrected or rewarded when I really don't expect it in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I feel certain of how I will be evaluated for a promotion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I am told how well I am doing in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I do not know if my work, in this role, will be acceptable to my line manager.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I have clear, planned goals and objectives for this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I experience a lack of policies and guidelines to help me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I know what my responsibilities are in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I have to 'feel my way' in performing my duties.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I know exactly what is expected of me in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I am uncertain as to how my role is linked to the school plan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. The explanations are clear of what has to be done in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I have to work under vague directives or orders.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I perform tasks that are too easy or are not sufficiently challenging.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I have to do things that should be done differently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I work on unnecessary things in this role .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I perform work that suits my values in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I have enough time to complete my work in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I receive tasks without the resources to complete it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I receive tasks that are not within my training and capability in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I work under incompatible policies and guidelines.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	PRIMARY ROLE						SECONDARY ROLE				
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree		Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
24. I have to 'bend' a rule or policy in order to carry out a task in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I receive incompatible requests from two or more people in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. I do things that are accepted by one person and not accepted by others in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. This role requires that I act differently than I do in other roles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. I work with two or more groups who operate quite differently, in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. The expectations of my work behaviour and attitudes are incompatible between this role and other roles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. I feel that this role interferes with my other work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. It is not easy to be a good employee in this role and an ideal teaching professional at the same time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. The work procedures and practices of my school sometimes deviate from the standard practices expected in the teaching profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. The way I do my work in this role is more accepted, than in other roles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Role Overload – Pettigrew and Wolf - 1982</b>											
34. I feel constant pressure from others to improve the outcomes in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. I find that I have extra work beyond what should normally be expected of me, in order to meet the demands of this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. The criteria of performance for this role is too unrealistic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. I am given too much responsibility without adequate authority in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Having work / a career that is interesting and exciting to me is my most important life goal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



	PRIMARY ROLE					SECONDARY ROLE				
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
<b>Role Salience – Ameata (1986)</b>										
39. I expect this role to give me more real satisfaction than anything else I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. Building a name and reputation for myself through this role is not one of my life goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. It is important to me that I have a specific role in which I can achieve something of importance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. It is important to me to feel successful in this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. I want to work, but I do not want to have a role that is too demanding.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. I expect to make as many sacrifices as are necessary in order to advance within this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. I value being involved in this role and expect to devote the time and effort needed to develop it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. I expect to devote a significant amount of my time to building this role and developing the skills necessary to advance within this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. I expect to devote whatever time and energy it takes to improve or to be recognised within this role.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Inter-role Conflict (Madsen, 2003)</b>										
48. I have to miss the fun things in teaching due to the amount of time spent on this role's responsibilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. I am often so drained from this role that it prevents me from contributing to other aspects of teaching life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. The problem solving behaviour I use in this role is not effective in resolving problems in other areas of teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

END OF SURVEY

THANK YOU FOR YOUR PARTICIPATION

## Appendix B – ACU Ethics Approval

Australian Catholic University  
Brisbane Sydney Canberra Ballarat Melbourne



### Human Research Ethics Committee

#### Committee Approval Form

**Principal Investigator/Supervisor:** Associate Professor Jeffrey Dorman Brisbane Campus  
**Co-Investigators:** Dr Pam Hanifin Brisbane Campus  
**Student Researcher:** Mr Wayne Hellmuth Brisbane Campus

**Ethics approval has been granted for the following project:**  
 A study of inter-role conflict in the context of change management practices in the Catholic teaching profession. (A study of inter-role conflict).  
**for the period:** 14 February 2008 to 31 December 2008  
**Human Research Ethics Committee (HREC) Register Number:** Q200708 10

The following standard conditions as stipulated in the *National Statement on Ethical Conduct in Research Involving Humans (2007)* apply:

- (i) that Principal Investigators / Supervisors provide, on the form supplied by the Human Research Ethics Committee, annual reports on matters such as:
  - security of records
  - compliance with approved consent procedures and documentation
  - compliance with special conditions, and
- (ii) that researchers report to the HREC immediately any matter that might affect the ethical acceptability of the protocol, such as:
  - proposed changes to the protocol
  - unforeseen circumstances or events
  - adverse effects on participants

The HREC will conduct an audit each year of all projects deemed to be of more than low risk. There will also be random audits of a sample of projects considered to be of negligible risk and low risk on all campuses each year.

Within one month of the conclusion of the project, researchers are required to complete a *Final Report Form* and submit it to the local Research Services Officer.

If the project continues for more than one year, researchers are required to complete an *Annual Progress Report Form* and submit it to the local Research Services Officer within one month of the anniversary date of the ethics approval.

Signed: \_\_\_\_\_ Date: 14 February 2008  
 (Research Services Officer, McAuley Campus)

## Appendix C – Brisbane Catholic Education Ethics Approval



243 Gladstone Road, Dutton Park  
GPO Box 1201, Brisbane 4001 Australia  
Phone: (07) 3033 7000 - Fax: (07) 3844 5101  
www.brisbanecatholicschools.com.au

A11.071 LE:em ref:444  
26 February 2008

Mr Wayne Hellmuth  
29 Inwood Street  
WOOLOOWIN QLD 4030

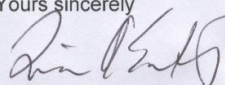
Dear Mr Hellmuth

Thank you for your email regarding permission to approach Brisbane Catholic Education schools for your research on '*A study of inter-role conflict in the context of change management practices in the Catholic teaching profession*'. Permission is granted to approach schools within the Archdiocese of Brisbane.

I would ask you to contact the principal of each of the respective schools seeking their involvement in the project. Please note that participation in your study is at the discretion of the principal.

If you have any further queries, please contact me on (07) 3033 7427.

Yours sincerely



**Mrs Lisa Eastment**  
Research Coordinator  
Catholic Education  
Archdiocese of Brisbane

## Appendix D – BCEC Reform Programs

### National programs

- National Literacy and Numeracy testing Years 3, 5, 7, 9
- Years 4, 6, 9, Standardised testing of ‘Essential Learnings’.
- National Consistency of Reporting Framework

### Queensland

- Queensland Certificate of Education
- Queensland Curriculum and Assessment Reporting Framework,
- Introduction of Prep Year Curriculum Guidelines
- Review of Syllabuses in the Senior Phases of Learning
- Education and Training Reform for the Future (ETRF)
- District Youth Achievement Plans
- Prep Years

### Brisbane Catholic Education

- Catching Fire
- Stepping Out (Literacy)
- Numeracy (Trial Project)
- Strategic Renewal Framework

### School Based

- Boys in Education Initiatives
- Middle School Reform

### Information Technology Based (I.T.)

- As an indication of the number of potential I.T. projects that may be currently undertaken in Catholic Education schools and organisations, July 2006 to June 2007 saw Brisbane Catholic Education undertaking 17 separate I.T. projects for improving the administrative processes and functions within the organisation. *Source: Brisbane Catholic Education (2007)*