

University of Massachusetts Medical School

eScholarship@UMMS

Implementation Science and Practice Advances
Research Center Publications

Psychiatry

2005

Do Adult MH Services Need to be Developmentally Appropriate?

Maryann Davis

University of Massachusetts Medical School

Et al.

Let us know how access to this document benefits you.

Follow this and additional works at: https://escholarship.umassmed.edu/psych_cmhsr



Part of the [Health Services Research Commons](#), [Psychiatric and Mental Health Commons](#), [Psychiatry Commons](#), and the [Psychiatry and Psychology Commons](#)

Repository Citation

Davis M, Williams VF. (2005). Do Adult MH Services Need to be Developmentally Appropriate?. Implementation Science and Practice Advances Research Center Publications. Retrieved from https://escholarship.umassmed.edu/psych_cmhsr/634

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in Implementation Science and Practice Advances Research Center Publications by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.

Do Adult Mental Health Services Need to be Developmentally Appropriate?

Maryann Davis, Ph.D., & Valerie Williams, M.A., Center for Mental Health Services Research, Department of Psychiatry, University of Massachusetts Medical School

INTRODUCTION

Background

- State level adult mental health administrators express little belief in needing developmentally appropriate services for *young* adults, and few such programs exist across the country

Study Questions

- Does individual functioning differ across adult age groups within individuals with psychiatric disorders?
- Is the rate of developmental change different in younger than older adults with psychiatric disorders?

Statistical Methods

- Weighted data-nationally representative (Kessler, 1994).
- Preliminary findings (unadjusted variance)
- Question 1** 1st 2 age groups (younger) & 2nd 4 age groups (older) compared with Chi-square
- Question 2** Multiple regression and Quangles

Methods

National Comorbidity Study

- Nationally representative household sample (n=8,098)
- Used CIDI to assess DSM-III-R disorders
- Interviews conducted 1990 - 1992
- Ages 15-54

Quangles?

- Detects a single shift in mean level of a sequence of observations (e.g. rates over an age range).
- The observed rates for each age produce a sequence of rates over the age range, with a minimum and maximum rate value.
- Rates (e.g. not working) are transformed into an angle Θ , by the formula:

$$\Theta = \pi/2 + (\pi * (\Delta(t,k) - \min) / (\max - \min))$$
- A unit vector is then constructed, with co-ordinates (cos(Θ), sin(Θ)), for each rate and these vectors are summed and plotted.

Kott, Samuel, and Norman L. Johnson, eds. *Encyclopedia of Statistical Sciences*. New York: J. Wiley, 1981

This Analysis

- 1110 subjects with a current psychiatric diagnosis
- Significant age differences in race but not gender see *Table 1*

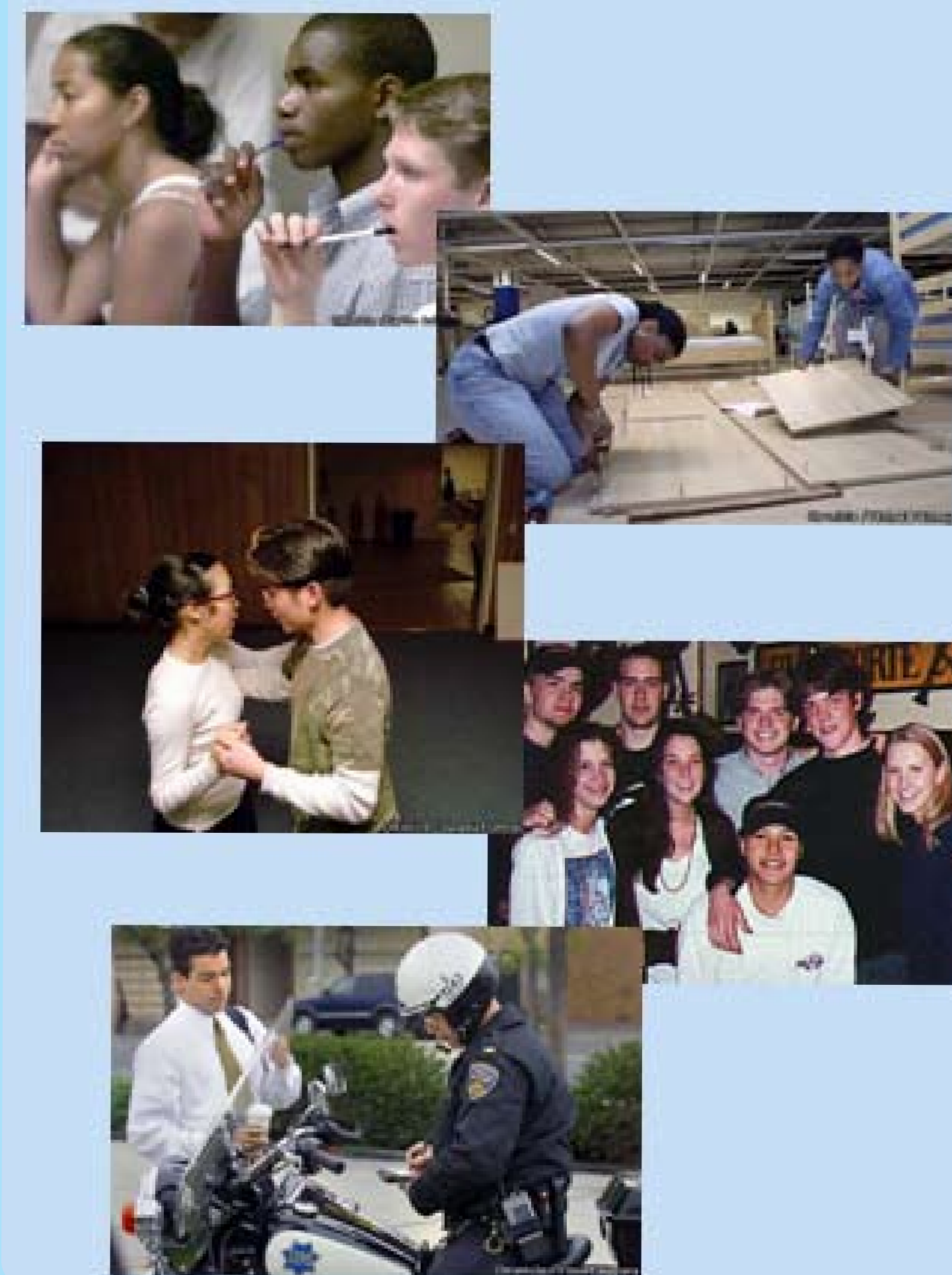
Table 1
Demographics by Age Group

	% of age groups					Total
	18-21 yr olds N=174	22-30 yr olds N=372	35-40 yr olds N=228	41-45 yr olds N=150	46-50 yr olds N=130	
White Non*	67.8	72.3	78.9	80.0	80.8	91.1
Hispanic	10.9	13.2	11.4	7.3	9.2	5.4
Black	13.8	10.5	7.5	10.0	6.2	3.6
Other Race	7.5	4.0	2.2	2.7	3.9	0
Male†	40.2	32.5	38.6	35.6	30.2	26.8

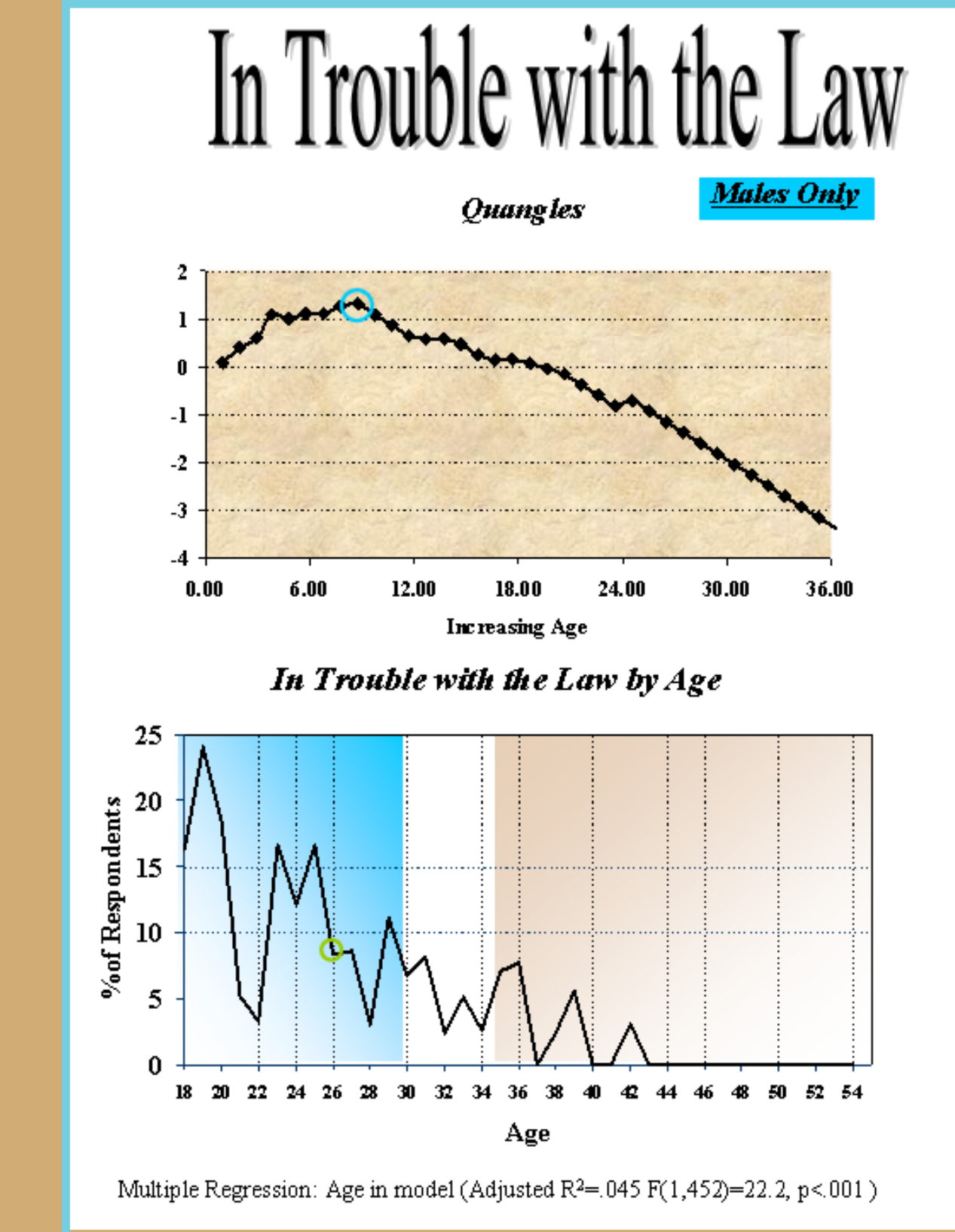
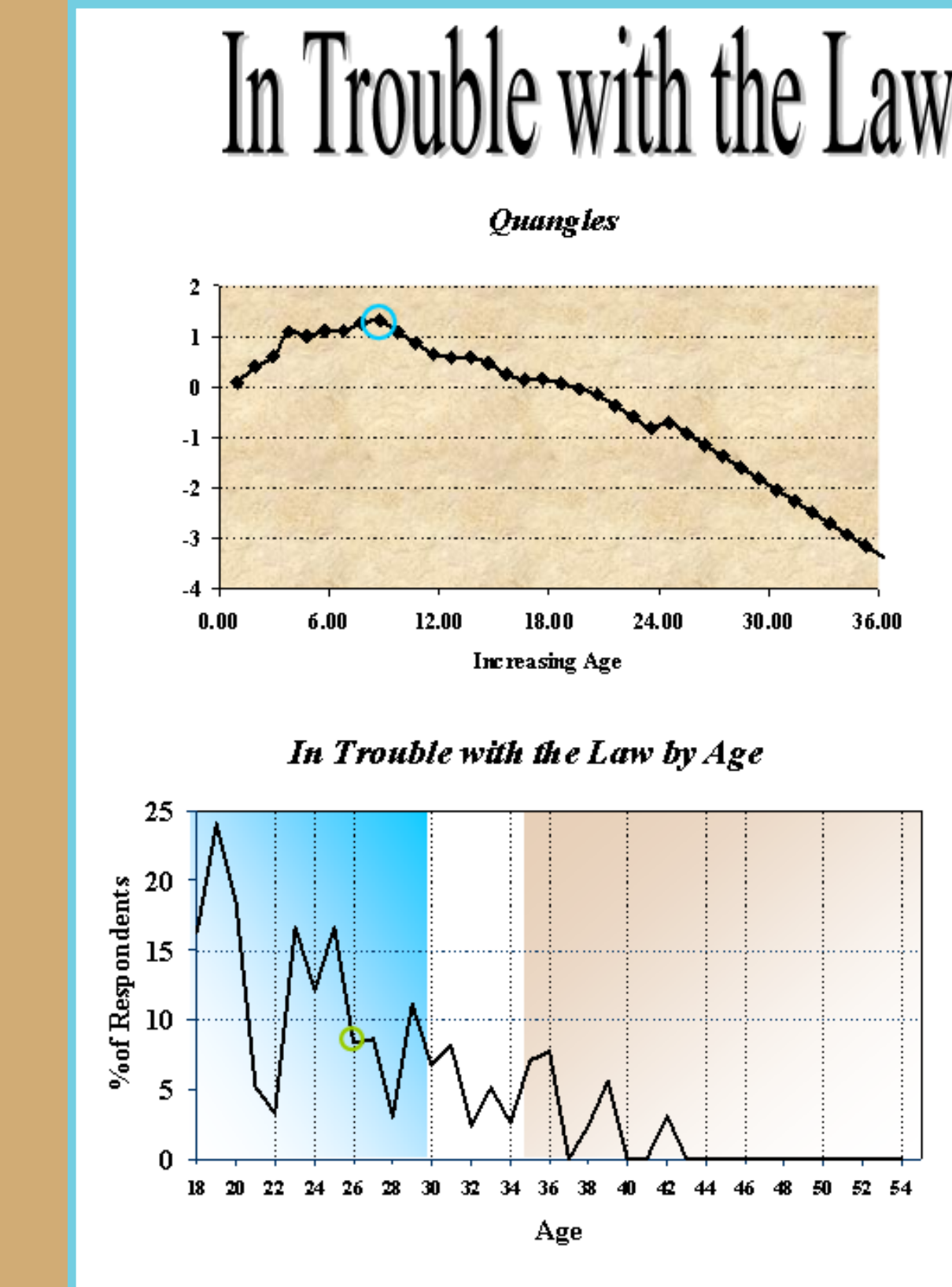
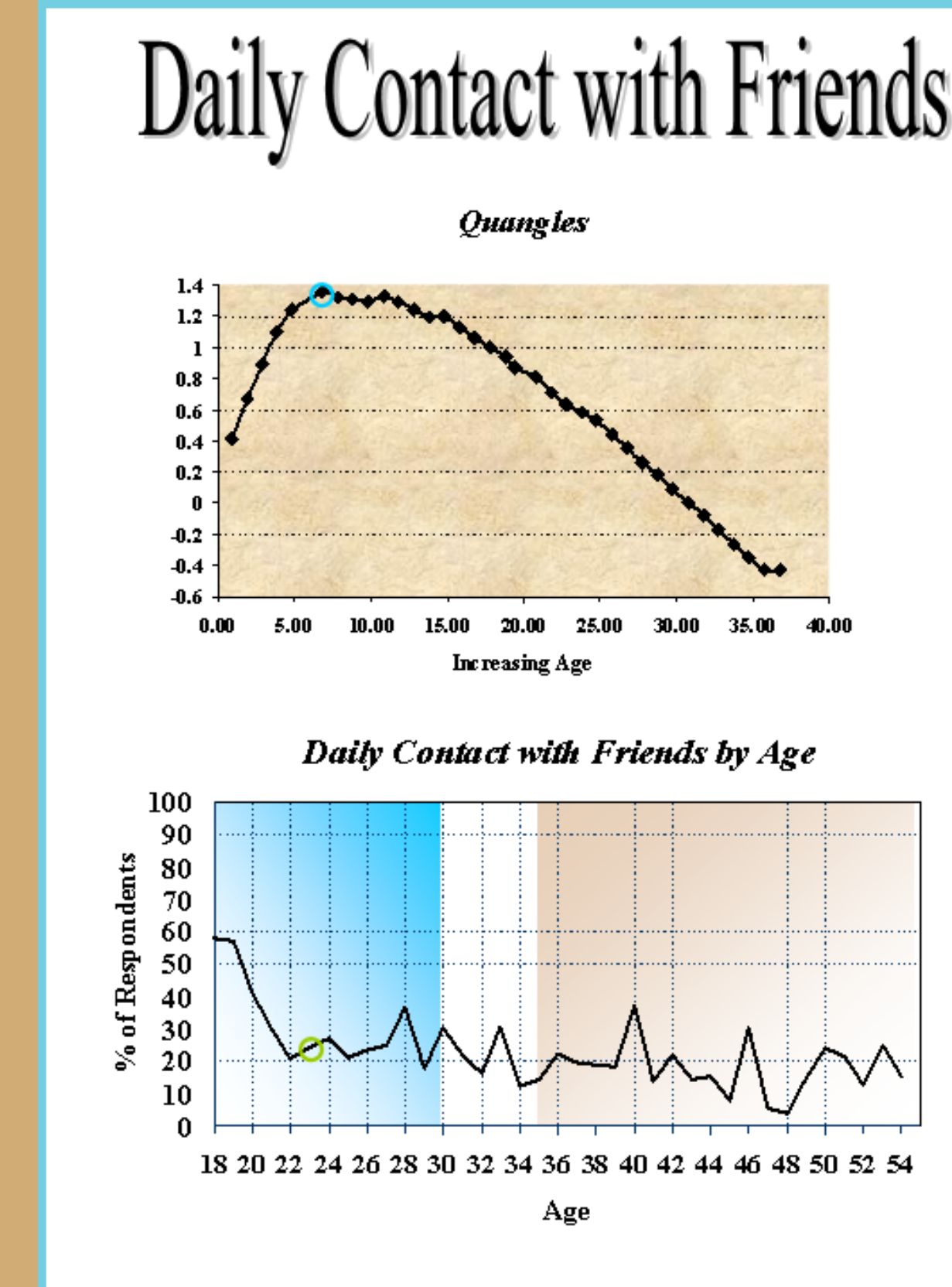
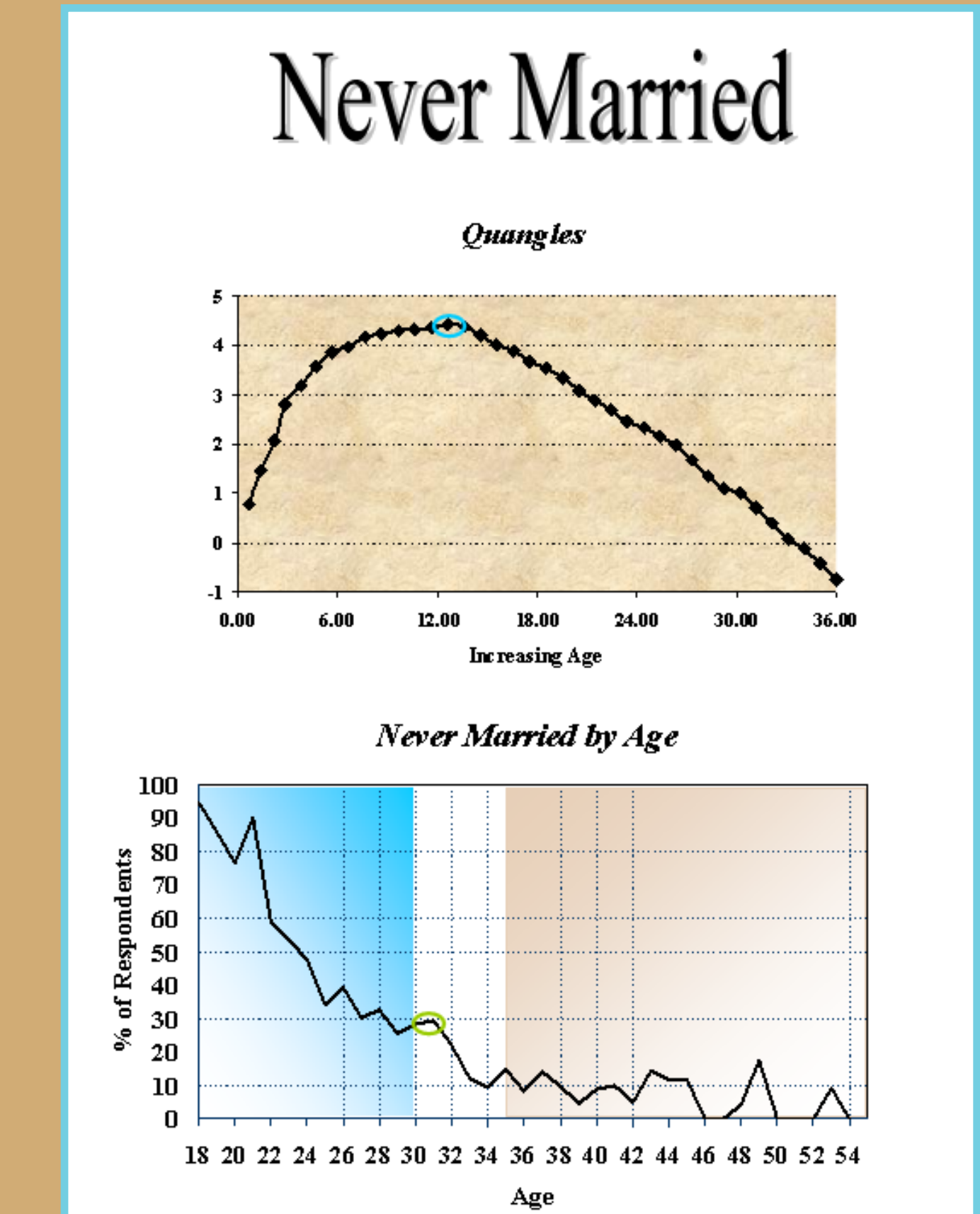
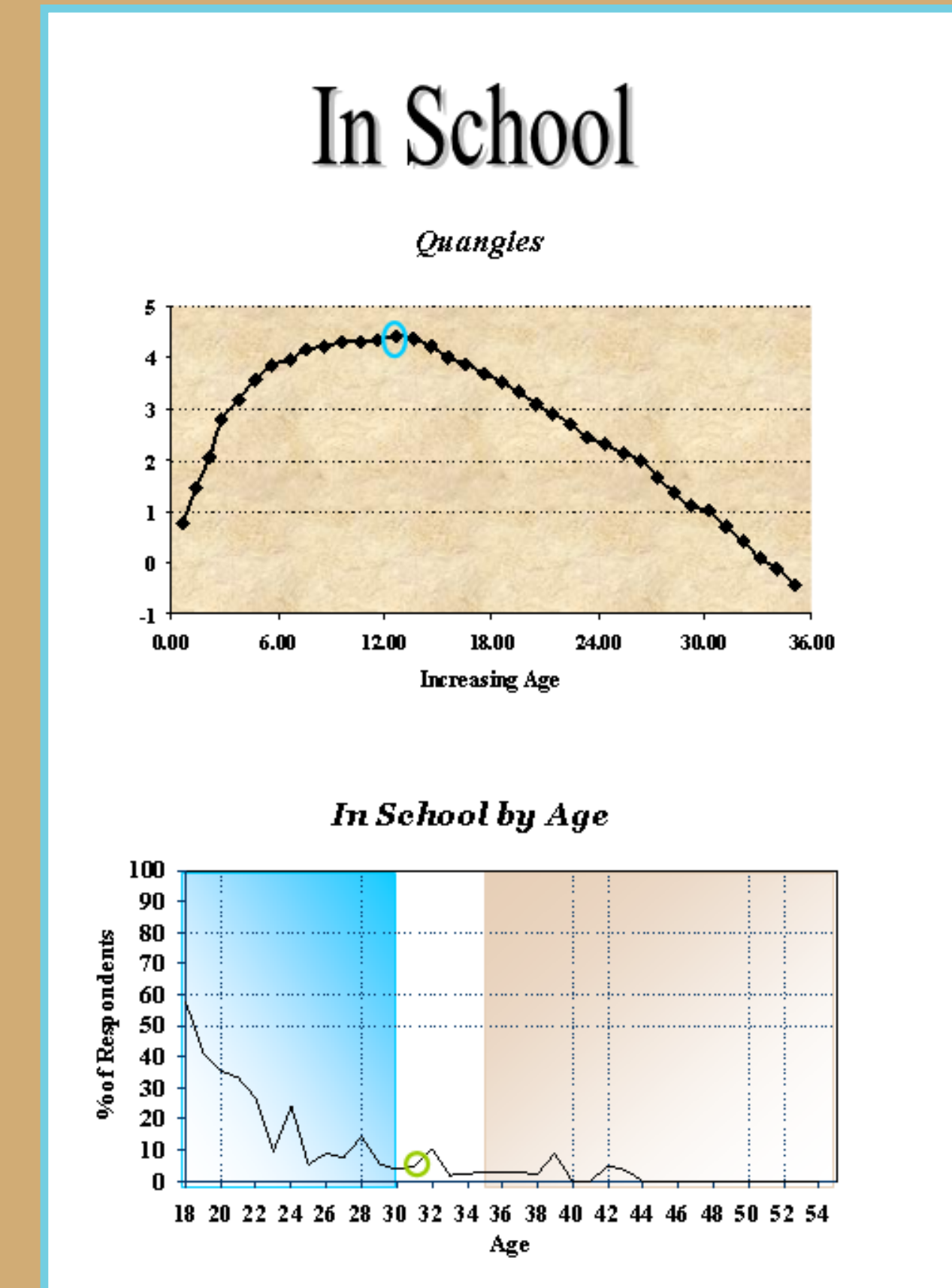
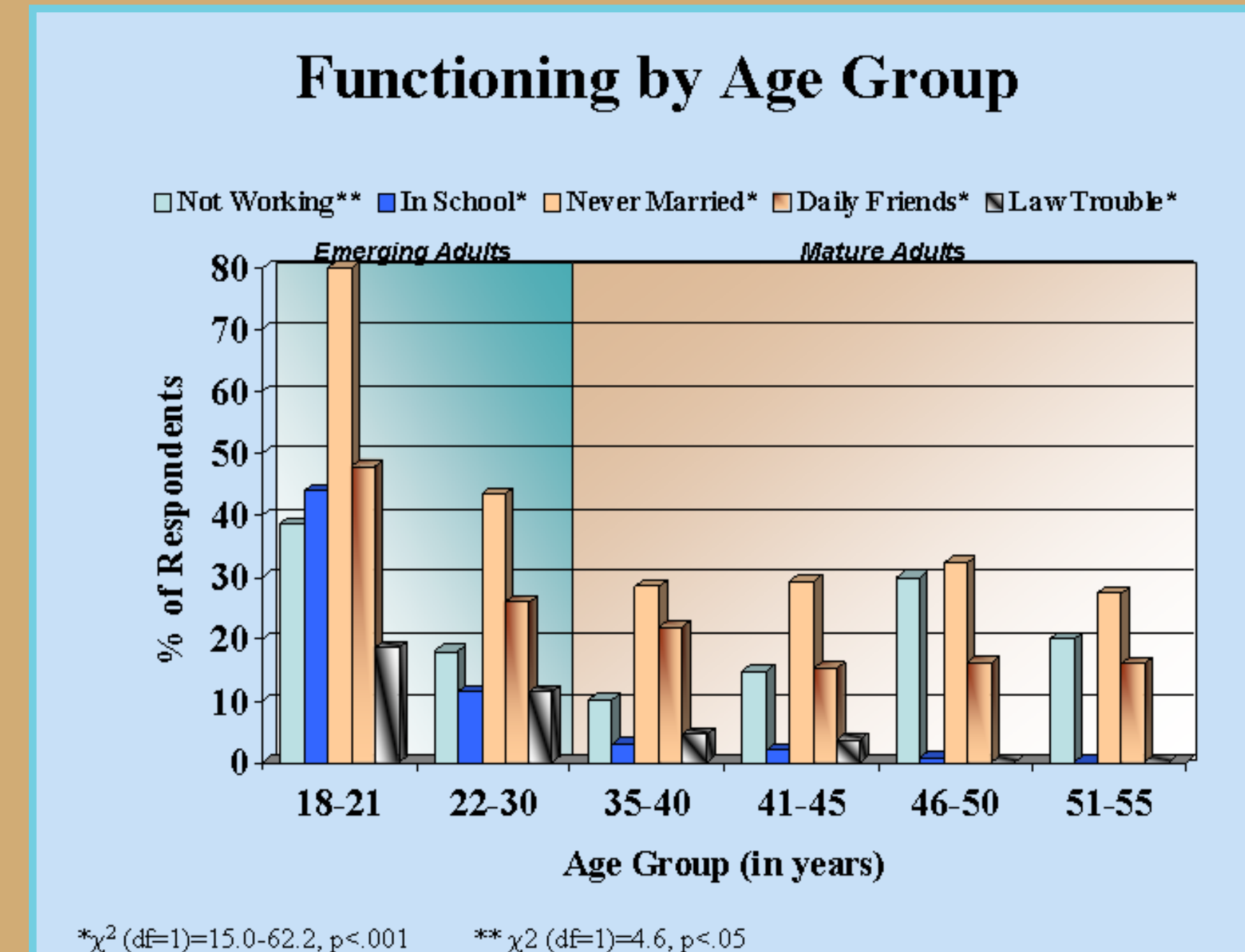
* $\chi^2(df=5)=29.2, p=.015$
 † $\chi^2(df=9)=7.4, p=.10$

ACKNOWLEDGEMENT

The Substance Abuse and Mental Health Data Archive and Inter-University Consortium for Political and Social Research at the University of Michigan provided these data.



RESULTS



Conclusions

- Important developmental changes in functioning occur between emerging adulthood and older adulthood.
- Rapid changes occur during emerging adulthood, with less variability among older individuals.
- Adult mental health services need a developmental perspective
- Specialized services or approaches for young adults are needed

REFERENCES:

- Cochran, W. G. (1952). The Chi-square tests of goodness of fit. *Annals of Mathematical Statistics*, 23, 315-345.
- Kessler, R. C. (1994). The National Survey of the United States. *International Review of Psychiatry*, 6(4), 365-376.