Factors Affecting Adolescent Happiness in the United States

Samuel Doerle, Vivek Jasti, Richard Adams Ph.D.

Background:

- Happiness has been shown to be vital to health and subjective well-being.1,2
- Teenage happiness is not as well understood3 and not very widely studied.
- Literature has shown that happiness is related to biological sex, physical activity, sedentary behavior, sleeping habits, parental relationships, perceived quality of friendship, peer acceptance, and religiosity.4,14,15,16
- Hypothesis: The effect of parental relationships and religiosity on happiness is achieved through substance use control and prohibition of deviant behaviors.

Methods:

- This study is a secondary analysis of the 1994 National Longitudinal Study of Adolescent to Adult Health (ADD Health).
- The survey had 46,000 respondents and an overall response rate of 79%.2,17
- Dependent variable: Happiness – a scale was created to measure level of happiness quantitatively. Three variable looked at were suicidal tendency, depression, and life satisfaction. Each of the variables were scaled, and responses were given corresponding point values, and then z score standardized. The suicide and depression scales were then inverted, to create a happiness index.
- This index was dichotomized about the average for bivariate Ch2 analysis with nominal variables.
- Similar scales were made for Religiosity, and Mother/Father Relationships.
- Bivariate analyses between each independent variable with either the happiness index or the dichotomized happiness index were performed.
- Two multivariate analyses (linear regressions) were performed, one with substance use and deviance, and one without. This was done to explore the mediating effect parental relationships had on these variables.

Results:

There were slightly more women than men in the survey (51.61% vs. 48.39%) and the survey overrepresented minorities compared to 1994 US Census Data.28 as was the intention of the purposive selection process. Bivariate analysis of each independent variable with the happiness scale showed very significant associations (p-values <0.001). For example, men scored higher on the happiness index than expected. Also, those who reported “Excellent” or “Very Good” health were more likely to score above average on the happiness index while those who reported “Good” to “Poor” health were less likely to score below average. In the first multivariate analysis, religiosity, mother relationship quality, and father relationship quality were significantly positively associated (p-values <0.001) with increased happiness (Cof. 0.038, 0.028, and 0.018 respectively) with an R² of 0.3060. When substance use and deviance were added to the analysis, religiosity, mother relationship quality, and father relationship quality were still significantly positively associated; however, their coefficients fell (Cof. 0.0149, 0.0173, and 0.011 respectively) while the R² value increased to 0.3938.

Conclusions:

- As our hypothesis predicted, parental relationships and religiosity both had significant positive associations with the happiness index.
- When substance use and deviance were added to the multivariate linear regression, the coefficients for parental relationships and religiosity fell, while the total variance explained by the analysis increased (R²).
- This suggests that parental relationships and religiosity affect happiness, at least partly, via the prohibition of substance use and deviant behaviors.
- Future research should explore this mediation further to determine if this relationship holds true with today’s adolescents and to determine if the causal pathway leads from happiness to less substance use/deviance or vice versa.

Limitations:

- The data is from over 20 years ago and may not be generalizable to current U.S. adolescents.
- The ADD Health survey did not use standardized question sets for variables such as depression, so the validity of these measures may be imperfect.
- This data-set is cross-sectional in nature and cannot show how these factors affect happiness over time.