Relationship Quality among Married Couples

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Abstract

What factors impact relationship quality among married couples? To answer this question, a regression model was estimated using a dataset created by the National Center for Family and Marriage Research through a survey of Married and Cohabiting Couples. Based on the regression, we find that there is no evidence of multicollinearity, serial correlation, or heteroskedasticity and that 49% of the variation in Y can be explained by the regression adjusted for degrees of freedom. The conclusions of this study were that listening, communicating well, showing affection and love, and encouragement are all important factors in determining relationship quality of married couples.

Variables

The variables used were as follows: the dependent variable of relationship quality using a rating of 1-10, number of children under the age of 18 in the household, a dummy variable for how satisfied the person was with how well he or her spouse listens, a dummy for if the spouse showed love and affection, a dummy for if the spouse gives encouragement, a dummy for if the person thinks the spouse will not cheat, a dummy for if the couple avoids discussing difficult topics, the number of times the person had been married, a dummy for whether the person had lived with the spouse before marriage, a dummy for the age of the person, a dummy for the type of home the individual lived in such as a one family home, duplex, an apartment, and a mobile home, a dummy for family income, a dummy for the employment status of the person, a dummy for whether the person had a college education or not, and a dummy variable to account for the different races of white, black, and Hispanic.

Tests

• To test for Serial Correlation, I used a Durbin Watson d-test. I found a value of 1.666, so this means there is no positive serial correlation.
• To test for multicollinearity, I ran a VIF test and found four variables that showed evidence of severe multicollinearity which means they have VIFs greater than 5 (one family home- 32.240, duplex- 14.578, apartment-16.202, and mobile home- 7.626). These high values are not something to worry about because we often see multicollinearity when there are several dummy variables for one specific thing.
• To test for Heteroskedasticity, I used a Park Test on the number of marriages variable. I chose this variable because its range was a lot larger than I expected. This test showed that there was no heteroskedasticity.

Graph for Heteroskedasticity

The graph shows that there is no heteroskedasticity.

Results

Yi = 4.787 - 0.048X1i - 0.038X2i + 1.267X3i + 1.338X4i + 1.148X5i + 0.937X6i - 2.40X7i + .001 (0.015) (0.011) (0.112) (1.33) (0.083)

ln = 1.560 \ (1.560) \ - 2.554 \ (1.560) \ 11.363 \ (1.560) \ 11.532 \ (1.560) \ 10.290 \ (1.560) \ 7.053 \ (1.560) \ -2.899

-0.062X4i - 0.094X5i + 0.031X6i + 0.013X7i - 0.134X8i - 0.180X9i + 0.071X10i - 0.208X11i + 0.063 (0.072) (0.150) (0.125) (0.113) (0.108) (0.067) (0.071)

-0.973 \ (0.973) \ 1.304 \ (0.973) \ -0.201 \ (0.973) \ -0.154 \ (0.973) \ -1.157 \ (0.973) \ 1.167 \ (0.973) \ 1.069 \ (0.973) \ -0.926

-0.354X11i + 0.021X12i + 2.234X13i + (0.247) (0.128) (0.170)

n=1403

F = 84.716

Acknowledgement

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Relevant Literature

• This study found that cohabitators have lower relationship quality.
• They used a similar dependent variable in their research.
• Conger, Katherine J. Conger, Rand D; Elder, Glen H; Lorenz, Frederick O; Simons, Ronald L;Whitbeck, Les B; Huck, Shirley; Melby, Janet N. "Linking Economic Hardship to Marital Quality and Instability." Journal of Marriage and Family 52.3 (1990): 643-656.
• This study used a similar dependent variable. Their research variables were how spouses see their marital quality. Their results suggested that economic conditions do not directly influence the couples' interactions with one another.
• They used the same dependent variable for their research.
• Used variables such as race and age.

Data

The data I retrieved was from a study done by the National Center for Family and Marriage Research in 2010. The data set was based on a survey of 2,150 married and cohabiting couples. http://www.icpsr.umich.edu/icpsrweb/DSDR/studies/31322

Results

Yi = 4.787 - 0.048X1i - 0.038X2i + 1.267X3i + 1.338X4i + 1.148X5i + 0.937X6i - 2.40X7i


-0.062X4i - 0.094X5i + 0.031X6i + 0.013X7i - 0.134X8i - 0.180X9i + 0.071X10i - 0.208X11i + 0.063

-0.973 1.304 -0.201 -0.154 -1.157 1.167 1.069 -0.926

-0.354X11i + 0.021X12i + 2.234X13i

n=1403

F = 84.716

Conclusion

• It is apparent that great listening skills, showing love and affection, giving encouragement, and being able to discuss difficult topics with your spouse are all important factors in determining the relationship quality of a married couple.
• Since many of these factors are personal choices that only the person in the relationship or marriage can change and work on, the policies that can be suggested cannot be directed toward the government, so we direct our attention to the married couples themselves and make suggestions as to what they can do to increase their relationship quality. First, people in relationships need to learn to express their feelings in a way that shows they care. Another piece of advice for these couples is for them to make an effort to listen and talk within their relationship no matter how difficult it is to talk about. Doing both of these things will make the overall relationship quality better by giving both people confidence in the relationship and help keep the relationship more positive.
• For further research, we could study interracial couples or gay couples. We could also study cohabiting couples instead of married couples.