

Measuring Self-Control: Using Structural Equation Modeling



Introduction

- Individuals with higher levels of self-control are less likely to engage in deviant or illegal behavior.
- Several statistical scales have been developed to measure self-control in different ways using survey data.
- Marcus (2003) created his Retrospective Behavioral Self-Control Scale (RBS) and argued that it outperformed the Grasmick scale.

Methods

- This study compares the RBS to the Grasmick scale to see if the complexity of the RBS has added value.
- Marcus uses three small German samples, so we will be comparing cross culturally by using a large U.S. sample of 1,300 respondents.
- We will be using several structural equation models to measure self-control as a latent factor with different observed variables as predictors.
- Self-control is multidimensional, so will be examining different models to determine which scale is best.

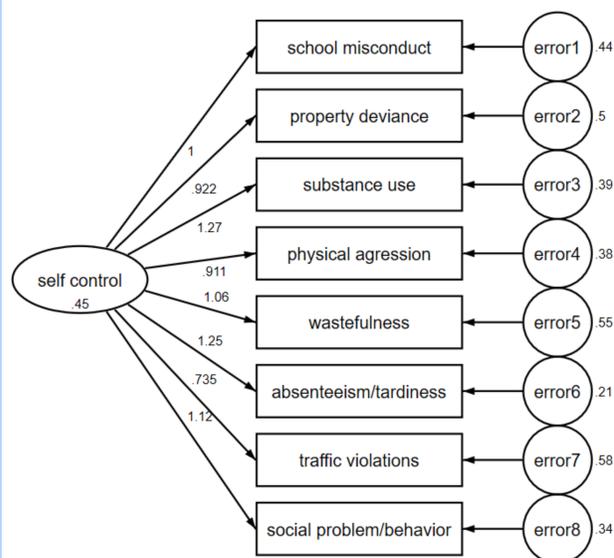


Figure 1. Simple One Factorial Model for the RBS Content Categories

Results

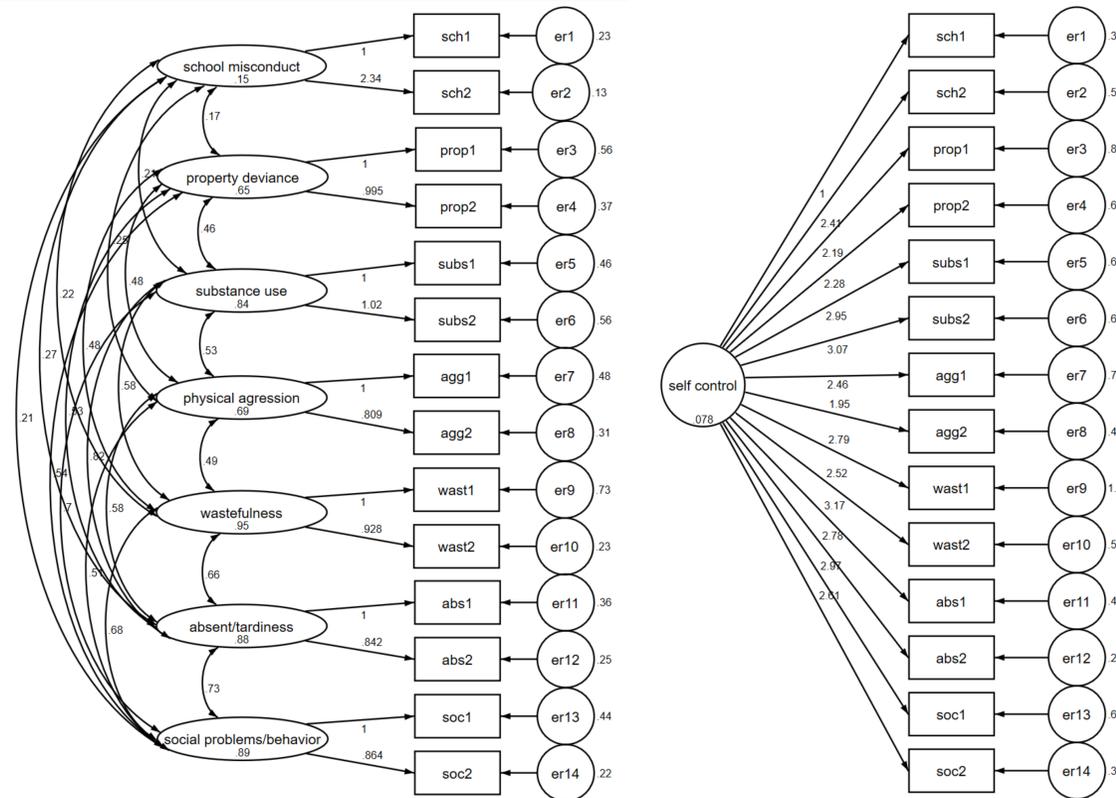


Figure 2. Eight Correlated First Order Factor for the RBS

Figure 3. One First Order Factor for the RBS

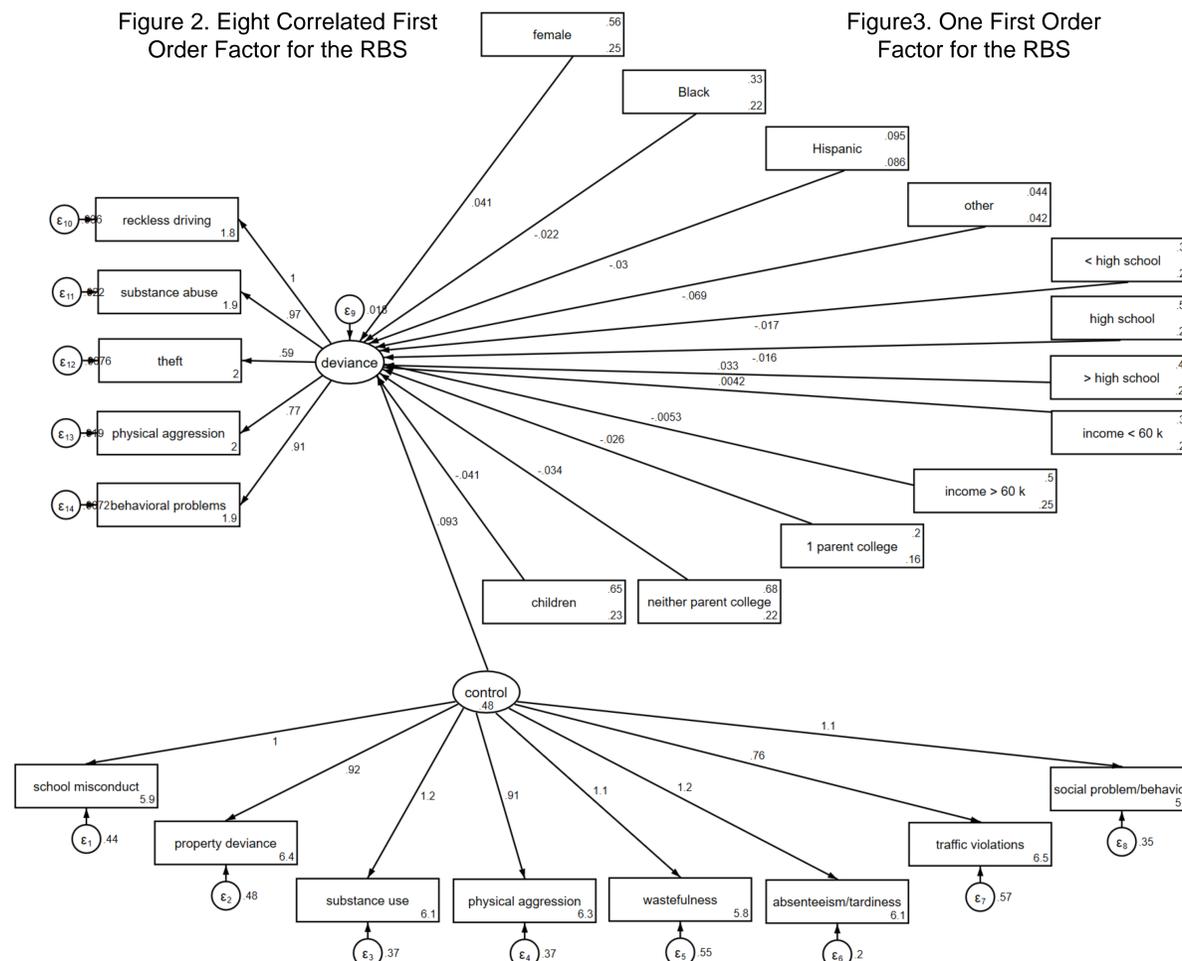


Figure 4. Factorial Model for the RBS with a Deviance Scale and Control Variables

Conclusion

- While the cross-cultural difference between these scales is limited, the additional sophistication of the RBS scale does not change our predictions of how self-control shapes deviant behavior.
- Since the statistical differences between the two scales are so minimal, we can conclude that the Grasmick scale is a better approach to measuring self-control because of how straightforward it is.

Relevance of Study

- This study provides an unbiased comparison of the two self-control scales and expands on the limited research of the RBS in the United States.

References

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- Grasmick, H. G., Tittle, C. R., Bursik, R. J. Jr., and Arneklev, B. K. (1993) Testing the core empirical implications of Gottfredson and Hirschi's general theory of crime. *Journal of Research in Crime and Delinquency*, 30, 5-29.
- Marcus, B. (2003). An empirical examination of the construct validity of two alternative self-control measures. *Educational and Psychological Measurement*, 63(4), 674-706.

