## "WHAT DO I WANT TO DO TODAY?": STATE VOCATIONAL INTERESTS, OUTCOMES, AND PREDICTORS OF VARIATION

By

Jacob Bradburn

## A DISSERTATION

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

Psychology – Doctor of Philosophy

#### ABSTRACT

## "WHAT DO I WANT TO DO TODAY?": STATE VOCATIONAL INTERESTS, OUTCOMES, AND PREDICTORS OF VARIATION

By

### Jacob Bradburn

Current theory and research in the organizational sciences considers vocational interests to be stable trait preferences, neglecting any short-term within-person variability that occurs. This research project posits that vocational interests display non-trivial state variability, that these state vocational interests differ theoretically from other extant interest constructs, and details a program of research in which the usefulness and nature of these state vocational interests are evaluated. Results suggest that state vocational interests display variability of different forms day-to-day, and this variability cannot be attributed to measurement error alone. Individuals were found to differ in the degree to which their interests vary, with several individual difference variables predicting greater variability. State vocational interest congruence was predictive of daily positive affect, intrinsic motivation, engagement, and perseverance. However, state vocational interest congruence did not generally predict daily negative affect. Tentative support was found for situational interests predicting next day state vocational interests and for state vocational interests predicting situational interests, suggesting a positive feedback loop between these constructs. Theoretical and practical implications of this research are discussed.

Copyright by JACOB BRADBURN 2020 This dissertation is dedicated to our son, Carson Allen Bradburn. Your mother and I love you more that you could ever know.

#### ACKNOWLEDGEMENTS

There are so many people I would like to thank for being a part of my graduate school journey. I'd like to thank my cohort, Courtney Bryant, Mike Morrison, Jeffrey Olenick, and Ross Walker, for their support as we conquered and commiserated through the various trials of graduate school. I'd like to thank the other graduate students in my program, as I truly cherish the friendships and memories made during my time at MSU. I'd like to thank the faculty of the Organizational Psychology program, and those outside of it with who I had the pleasure to work with, for their support and guidance. My personal and professional growth during my time in graduate school could not have happened without the advice, guidance, challenge, and opportunities they provided. I would also like to thank my dissertation committee, Dr. Christopher Nye, Dr. Frederick Leong, and Dr. Jason Huang for their support and assistance throughout my dissertation journey, and for their persistence through this lengthy document. I would especially like to thank my advisor, Dr. Ann Marie Ryan. I could not have asked for a better dissertation advisor and I truly appreciate the opportunities we had to work together, and the ability to learn from such an accomplished and student-dedicated scholar.

I would like to thank my wife, Brittney Bradburn, for her patience and support during this process. I would not be here without her encouragement and support, and I am truly thankful than I have her in my life. I would like to thank my parents, Steve and Seneca Bradburn, and my sister Taylor for their unwavering support as well. Though my name is on this dissertation, they all undertook this journey with me and stood beside me through all the trials and triumphs of graduate school. For this, I am truly grateful.

V

# TABLE OF CONTENTS

LIST OF TABLES	viii
LIST OF FIGURES	xxi
INTRODUCTION	
Short-Term Within-Person Variability of Individual Differences	
Perspectives on Interests	
Organizational Sciences Perspective	
Educational Perspective	
State Vocational Interests	
Variability in Vocation Interests	
Interests and Whole Trait Theory	
Theoretical Argument for Variability	
Forms of Variability	
Individual Differences in Variability	
Openness to Experience	
Curiosity	
Implicit Interest Theory	
Self-Assessment of Variability	
State Vocational Interests and Prediction	
State Vocational Interests and Interest Development	
Situational Interest Driven Change Theory.	
Congruence-Incongruence Driven Change Theory	
METHODOLOGY & RESULTS	29
Study 1	
Sample	
Measures	
Results	
Study 2	
Pilot Study	
Sample	
Measures	
Results	
DISCUSSION	89
Implications for Theory	
Implications for Practice	
Limitations	
Future Research	
Conclusion	
APPENDICES	

APPENDIX A – Tables and Figures	
APPENDIX B – DSIM Item Pool	
APPENDIX C - Study 1 Consent Form	
APPENDIX D – Study 1 Debriefing Form	
APPENDIX E – Study 1 Measures	
APPENDIX F – Study 2 Consent Form	
APPENDIX G – Study 2 – Pre-Survey Measure	
APPENDIX H – Study 2 – ESM Morning Survey Measures	
APPENDIX I – Study 2 – ESM Evening Survey Measures	
APPENDIX J – Study 2 – Post-Survey Measures	
APPENDIX K – Study 2 Debriefing Form	
REFERENCES	

## LIST OF TABLES

Table 1: Item level Information for DSIM Developmental Item Pool107
Table 2: Mean, Standard Deviation, Intercorrelations, and Alpha for Variables in Study 1116
Table 3: Relationships Between Vocational Interests and Personality
Table 4: Descriptives and Intercorrelations for Between-Person Variables in Study 2
Table 5: Descriptives and Intercorrelations for Within-Person Variables in Study 2
Table 6: Descriptive for State Interest Standard Deviations
Table 7: Multilevel Regression Results of State Realistic Interest at T+1 on State RealisticInterest at T
Table 8: Multilevel Regression Results of State Investigative Interest at T+1 on StateInvestigative Interest at T.143
Table 9: Multilevel Regression Results of State Artistic Interest at T+1 on State Artistic Interest at T.
Table 10: Multilevel Regression Results of State Social Interest at T+1 on State Social Interest atT
Table 11: Multilevel Regression Results of State Enterprising Interest at T+1 on StateEnterprising Interest at T
Table 12: Multilevel Regression Results of State Conventional Interest at T+1 on StateConventional Interest at T.147
Table 13: Spearman Correlations Between Within-Individual Ranked Interests from T andT+1
Table 14: Spearman Correlations Between Days and Averaged Spearman Correlations
Table 15: Interclass Correlation Coefficient (ICC) Values for State Interests Nested Within    Individuals
Table 16: Multilevel Structural Equation Model Results for Latent Correlations Between State    Interests
Table 17: Correlation Between State Interests at T1 and State Interests at T7
Table 18: Spearman Correlations Between Within-Individual Ranked Interests from T1 and    T7

Table 19: Beta Weights for Relationships Between Individual Differences and Variability of    State Vocational Interests
Table 20: Regression Results of Hypothesized Individual Differences Predicting AverageStandard Deviation of State Interests155
Table 21: Results for Polynomial Regression and Related Models for State Realistic InterestPredicting Daily Positive Affect156
Table 22: Polynomial Regression Fit Line Coefficients for State Realistic Interest Congruence       Predicting Daily Positive Affect
Table 23: Results for Polynomial Regression and Related Models for State Investigative Interest    Predicting Daily Positive Affect
Table 24: Polynomial Regression Fit Line Coefficients for State Investigative InterestCongruence Predicting Daily Positive Affect
Table 25: Results for Polynomial Regression and Related Models for State Artistic Interest       Predicting Daily Positive Affect
Table 26: Polynomial Regression Fit Line Coefficients for State Artistic Interest Congruence       Predicting Daily Positive Affect
Table 27: Results for Polynomial Regression and Related Models for State Social Interest    Predicting Daily Positive Affect
Table 28: Polynomial Regression Fit Line Coefficients for State Social Interest Congruence       Predicting Daily Positive Affect
Table 29: Results for Polynomial Regression and Related Models for State Enterprising Interest       Predicting Daily Positive Affect
Table 30: Polynomial Regression Fit Line Coefficients for State Enterprising Interest       Congruence Predicting Daily Positive Affect
Table 31: Results for Polynomial Regression and Related Models for State Conventional Interest       Predicting Daily Positive Affect
Table 32: Polynomial Regression Fit Line Coefficients for State Conventional Interest       Congruence Predicting Daily Positive Affect
Table 33: Results for Polynomial Regression and Related Models for State Realistic Interest    Predicting Daily Negative Affect

Table 34: Polynomial Regression Fit Line Coefficients for State Realistic Interest CongruencePredicting Daily Negative Affect
Table 35: Results for Polynomial Regression and Related Models for State Investigative Interest    Predicting Daily Negative Affect  170
Table 36: Polynomial Regression Fit Line Coefficients for State Investigative InterestCongruence Predicting Daily Negative Affect
Table 37: Results for Polynomial Regression and Related Models for State Artistic InterestPredicting Daily Negative Affect.172
Table 38: Polynomial Regression Fit Line Coefficients for State Artistic Interest Congruence    Predicting Daily Negative Affect.
Table 39: Results for Polynomial Regression and Related Models for State Social Interest    Predicting Daily Negative Affect
Table 40: Polynomial Regression Fit Line Coefficients for State Social Interest Congruence    Predicting Daily Negative Affect
Table 41: Results for Polynomial Regression and Related Models for State Enterprising Interest    Predicting Daily Negative Affect.
Table 42: Polynomial Regression Fit Line Coefficients for State Enterprising Interest       Congruence Predicting Daily Negative Affect
Table 43: Results for Polynomial Regression and Related Models for State Conventional Interest    Predicting Daily Negative Affect
Table 44: Polynomial Regression Fit Line Coefficients for State Conventional Interest       Congruence Predicting Daily Negative Affect
Table 45: Results for Polynomial Regression and Related Models for State Realistic Interest       Predicting Daily Intrinsic Motivation
Table 46: Polynomial Regression Fit Line Coefficients for State Realistic Interest Congruence       Predicting Daily Intrinsic Motivation
Table 47: Results for Polynomial Regression and Related Models for State Investigative InterestPredicting Daily Intrinsic Motivation
Table 48: Polynomial Regression Fit Line Coefficients for State Investigative Interest       Congruence Predicting Daily Intrinsic Motivation       183

Table 49: Results for Polynomial Regression and Related Models for State Artistic Interest       Predicting Daily Intrinsic Motivation
Table 50: Polynomial Regression Fit Line Coefficients for State Artistic Interest CongruencePredicting Daily Intrinsic Motivation
Table 51: Results for Polynomial Regression and Related Models for State Social InterestPredicting Daily Intrinsic Motivation
Table 52: Polynomial Regression Fit Line Coefficients for State Social Interest CongruencePredicting Daily Intrinsic Motivation
Table 53: Results for Polynomial Regression and Related Models for State Enterprising InterestPredicting Daily Intrinsic Motivation
Table 54: Polynomial Regression Fit Line Coefficients for State Enterprising InterestCongruence Predicting Daily Intrinsic Motivation189
Table 55: Results for Polynomial Regression and Related Models for State Conventional Interest       Predicting Daily Intrinsic Motivation
Table 56: Polynomial Regression Fit Line Coefficients for State Conventional Interest       Congruence Predicting Daily Intrinsic Motivation
Table 57: Results for Polynomial Regression and Related Models for State Realistic InterestPredicting Daily Engagement
Table 58: Polynomial Regression Fit Line Coefficients for State Realistic Interest Congruence       Predicting Daily Engagement
Table 59: Results for Polynomial Regression and Related Models for State Investigative Interest    Predicting Daily Engagement.    194
Table 60: Polynomial Regression Fit Line Coefficients for State Investigative Interest       Congruence Predicting Daily Engagement
Table 61: Results for Polynomial Regression and Related Models for State Artistic Interest       Predicting Daily Engagement
Table 62: Polynomial Regression Fit Line Coefficients for State Artistic Interest Congruence    Predicting Daily Engagement
Table 63: Results for Polynomial Regression and Related Models for State Social Interest       Predicting Daily Engagement

Table 64: Polynomial Regression Fit Line Coefficients for State Social Interest Congruence       Predicting Daily Engagement.       199
Table 65: Results for Polynomial Regression and Related Models for State Enterprising Interest    Predicting Daily Engagement.
Table 66: Polynomial Regression Fit Line Coefficients for State Enterprising Interest       Congruence Predicting Daily Engagement
Table 67: Results for Polynomial Regression and Related Models for State Conventional Interest    Predicting Daily Engagement.  202
Table 68: Polynomial Regression Fit Line Coefficients for State Conventional Interest       Congruence Predicting Daily Engagement
Table 69: Results for Polynomial Regression and Related Models for State Realistic Interest    Predicting Daily Perseverance
Table 70: Polynomial Regression Fit Line Coefficients for State Realistic Interest Congruence       Predicting Daily Perseverance       205
Table 71: Results for Polynomial Regression and Related Models for State Investigative Interest    Predicting Daily Perseverance  206
Table 72: Polynomial Regression Fit Line Coefficients for State Investigative Interest       Congruence Predicting Daily Perseverance
Table 73: Results for Polynomial Regression and Related Models for State Artistic Interest    Predicting Daily Perseverance
Table 74: Polynomial Regression Fit Line Coefficients for State Artistic Interest Congruence    Predicting Daily Perseverance  209
Table 75: Results for Polynomial Regression and Related Models for State Social Interest    Predicting Daily Perseverance
Table 76: Polynomial Regression Fit Line Coefficients for State Social Interest Congruence       Predicting Daily Perseverance
Table 77: Results for Polynomial Regression and Related Models for State Enterprising Interest    Predicting Daily Perseverance  212
Table 78: Polynomial Regression Fit Line Coefficients for State Enterprising Interest       Congruence Predicting Daily Perseverance

Table 79: Results for Polynomial Regression and Related Models for State Conventional Interest    Predicting Daily Perseverance  214
Table 80: Polynomial Regression Fit Line Coefficients for State Conventional InterestCongruence Predicting Daily Perseverance
Table 81: Results for Polynomial Regression and Related Models for Trait Realistic Interest       Predicting Daily Positive Affect
Table 82: Regression Results for Polynomial Trait and State Congruence for Realistic Interest       Predicting Daily Positive Affect
Table 83: Results for Polynomial Regression and Related Models for Trait Investigative Interests    Predicting Daily Positive Affect
Table 84: Regression Results for Polynomial Trait and State Congruence for Investigative       Interests Predicting Daily Positive Affect
Table 85: Results for Polynomial Regression and Related Models for Trait Artistic Interest       Predicting Daily Positive Affect
Table 86: Regression Results for Polynomial Trait and State Congruence for Artistic Interest       Predicting Daily Positive Affect
Table 87: Results for Polynomial Regression and Related Models for Trait Social Interest       Predicting Daily Positive Affect
Table 88: Regression Results for Polynomial Trait and State Congruence for Social Interest    Predicting Daily Positive Affect
Table 89: Results for Polynomial Regression and Related Models for Trait Enterprising Interest    Predicting Daily Positive Affect
Table 90: Regression Results for Polynomial Trait and State Congruence for Enterprising       Interest Predicting Daily Positive Affect
Table 91: Results for Polynomial Regression and Related Models for Trait Conventional Interest    Predicting Daily Positive Affect
Table 92: Regression Results for Polynomial Trait and State Congruence for Conventional    Interest Predicting Daily Positive Affect
Table 93: Results for Polynomial Regression and Related Models for Trait Realistic Interest    Predicting Daily Negative Affect.

Table 94: Regression Results for Polynomial Trait and State Congruence for Realistic InterestPredicting Daily Negative Affect.229
Table 95: Results for Polynomial Regression and Related Models for Trait Investigative Interests    Predicting Daily Negative Affect
Table 96: Regression Results for Polynomial Trait and State Congruence for Investigative       Interests Predicting Daily Negative Affect
Table 97: Results for Polynomial Regression and Related Models for Trait Artistic Interest    Predicting Daily Negative Affect.
Table 98: Regression Results for Polynomial Trait and State Congruence for Artistic Interest       Predicting Daily Negative Affect.       .233
Table 99: Results for Polynomial Regression and Related Models for Trait Social Interest    Predicting Daily Negative Affect.
Table 100: Regression Results for Polynomial Trait and State Congruence for Social Interest       Predicting Daily Negative Affect.       .235
Table 101: Results for Polynomial Regression and Related Models for Trait Enterprising Interest    Predicting Daily Negative Affect.  236
Table 102: Regression Results for Polynomial Trait and State Congruence for EnterprisingInterest Predicting Daily Negative Affect
Table 103: Results for Polynomial Regression and Related Models for Trait ConventionalInterest Predicting Daily Negative Affect
Table 104: Regression Results for Polynomial Trait and State Congruence for ConventionalInterest Predicting Daily Negative Affect239
Table 105: Results for Polynomial Regression and Related Models for Trait Realistic InterestPredicting Daily Intrinsic Motivation
Table 106: Regression Results for Polynomial Trait and State Congruence for Realistic InterestPredicting Daily Intrinsic Motivation
Table 107: Results for Polynomial Regression and Related Models for Trait Investigative       Interests Predicting Daily Intrinsic Motivation
Table 108: Regression Results for Polynomial Trait and State Congruence for InvestigativeInterests Predicting Daily Intrinsic Motivation

Table 109: Results for Polynomial Regression and Related Models for Trait Artistic Interest    Predicting Daily Intrinsic Motivation
Table 110: Regression Results for Polynomial Trait and State Congruence for Artistic InterestPredicting Daily Intrinsic Motivation
Table 111: Results for Polynomial Regression and Related Models for Trait Social InterestPredicting Daily Intrinsic Motivation
Table 112: Regression Results for Polynomial Trait and State Congruence for Social InterestPredicting Daily Intrinsic Motivation
Table 113: Results for Polynomial Regression and Related Models for Trait Enterprising InterestPredicting Daily Intrinsic Motivation
Table 114: Regression Results for Polynomial Trait and State Congruence for EnterprisingInterest Predicting Daily Intrinsic Motivation
Table 115: Results for Polynomial Regression and Related Models for Trait ConventionalInterest Predicting Daily Intrinsic Motivation
Table 116: Regression Results for Polynomial Trait and State Congruence for ConventionalInterest Predicting Daily Intrinsic Motivation
Table 117: Results for Polynomial Regression and Related Models for Trait Realistic Interest    Predicting Daily Engagement
Table 118: Regression Results for Polynomial Trait and State Congruence for Realistic Interest    Predicting Daily Engagement
Table 119: Results for Polynomial Regression and Related Models for Trait InvestigativeInterests Predicting Daily Engagement
Table 120: Regression Results for Polynomial Trait and State Congruence for Investigative       Interests Predicting Daily Engagement
Table 121: Results for Polynomial Regression and Related Models for Trait Artistic Interest    Predicting Daily Engagement
Table 122: Regression Results for Polynomial Trait and State Congruence for Artistic InterestPredicting Daily Engagement.257
Table 123: Results for Polynomial Regression and Related Models for Trait Social Interest    Predicting Daily Engagement

Table 124: Regression Results for Polynomial Trait and State Congruence for Social Interest    Predicting Daily Engagement.    259
Table 125: Results for Polynomial Regression and Related Models for Trait Enterprising Interest    Predicting Daily Engagement.  260
Table 126: Regression Results for Polynomial Trait and State Congruence for EnterprisingInterest Predicting Daily Engagement
Table 127: Results for Polynomial Regression and Related Models for Trait ConventionalInterest Predicting Daily Engagement
Table 128: Regression Results for Polynomial Trait and State Congruence for ConventionalInterest Predicting Daily Engagement
Table 129: Results for Polynomial Regression and Related Models for Trait Realistic Interest    Predicting Daily Perseverance  264
Table 130: Regression Results for Polynomial Trait and State Congruence for Realistic Interest    Predicting Daily Perseverance
Table 131: Results for Polynomial Regression and Related Models for Trait Investigative       Interests Predicting Daily Perseverance
Table 132: Regression Results for Polynomial Trait and State Congruence for Investigative       Interests Predicting Daily Perseverance       267
Table 133: Results for Polynomial Regression and Related Models for Trait Artistic Interest    Predicting Daily Perseverance  268
Table 134: Regression Results for Polynomial Trait and State Congruence for Artistic InterestPredicting Daily Perseverance269
Table 135: Results for Polynomial Regression and Related Models for Trait Social Interest    Predicting Daily Perseverance    270
Table 136: Regression Results for Polynomial Trait and State Congruence for Social Interest    Predicting Daily Perseverance
Table 137: Results for Polynomial Regression and Related Models for Trait Enterprising Interest    Predicting Daily Perseverance  272
Table 138: Regression Results for Polynomial Trait and State Congruence for Enterprising    Interest Predicting Daily Perseverance

Table 139: Results for Polynomial Regression and Related Models for Trait Conventional       Interest Predicting Daily Perseverance
Table 140: Regression Results for Polynomial Trait and State Congruence for ConventionalInterest Predicting Daily Perseverance
Table 141: Results for Polynomial Regression for Full RIASEC Model Congruence Predicting    Daily Positive Affect
Table 142: Results for Polynomial Regression for Full RIASEC Model Congruence Predicting    Daily Negative Affect
Table 143: Results for Polynomial Regression for Full RIASEC Model Congruence Predicting    Daily Intrinsic Motivation
Table 144: Results for Polynomial Regression for Full RIASEC Model Congruence Predicting    Daily Engagement.
Table 145: Results for Polynomial Regression for Full RIASEC Model Congruence Predicting    Daily Perseverance
Table 146: Results for Prior Situational Realistic Interest (T) and Related Models Predicting       Next Day Realistic Interest (T+1)
Table 147: Results for Prior Situational Investigative Interest (T) and Related Models PredictingNext Day Investigative Interest (T+1)
Table 148: Results for Prior Situational Artistic Interest (T) and Related Models Predicting Next       Day Artistic Interest (T+1)
Table 149: Results for Prior Situational Social Interest (T) and Related Models Predicting Next    Day Social Interest (T+1)
Table 150: Results for Prior Situational Enterprising Interest (T) and Related Models Predicting       Next Day Enterprising Interest (T+1)
Table 151: Results for Prior Situational Conventional Interest (T) and Related Models PredictingNext Day Conventional Interest (T+1)
Table 152: Results for State Realistic Interest and Related Models Predicting Realistic    Situational Interest
Table 153: Results for State Investigative Interest and Related Models Predicting Investigative    Situational Interest

Table 154: Results for State Artistic Interest and Related Models Predicting Artistic Situational       Interest.
Table 155: Results for State Social Interest and Related Models Predicting Social Situational    Interest.
Table 156: Results for State Enterprising Interest and Related Models Predicting Enterprising       Situational Interest
Table 157: Results for State Conventional Interest and Related Models Predicting Conventional    Situational Interest.
Table 158: Results for Polynomial Regression and Related Models for State Realistic Interest (T)Predicting Next Day Realistic Interest (T+1)
Table 159: Polynomial Regression Fit Line Coefficients for State Realistic Interest CongruencePredicting Next Day Realistic Interest (T+1)
Table 160: Results for Polynomial Regression and Related Models for State InvestigativeInterest (T) Predicting Next Day Investigative Interest (T+1)
Table 161: Polynomial Regression Fit Line Coefficients for State Investigative InterestCongruence Predicting Next Day Investigative Interest (T+1)
Table 162: Results for Polynomial Regression and Related Models for State Artistic Interest (T)Predicting Next Day Artistic Interest (T+1)
Table 163: Polynomial Regression Fit Line Coefficients for State Artistic Interest CongruencePredicting Next Day Artistic Interest (T+1)
Table 164: Results for Polynomial Regression and Related Models for State Social Interest (T)Predicting Next Day Social Interest (T+1)
Table 165: Polynomial Regression Fit Line Coefficients for State Social Interest CongruencePredicting Next Day Social Interest (T+1)
Table 166: Results for Polynomial Regression and Related Models for State Enterprising Interest(T) Predicting Next Day Enterprising Interest (T+1)
Table 167: Polynomial Regression Fit Line Coefficients for State Enterprising InterestCongruence Predicting Next Day Enterprising Interest (T+1)
Table 168: Results for Polynomial Regression and Related Models for State ConventionalInterest (T) Predicting Next Day Conventional Interest (T+1)

Table 169: Polynomial Regression Fit Line Coefficients for State Conventional InterestCongruence Predicting Next Day Conventional Interest (T+1)
Table 170: Bivariate Within-Person Relationships Between State Interests and    Resources
Table 171: Multilevel Regression Results for Relationships Between State Realistic Interests and Resources
Table 172: Multilevel Regression Results for Relationships Between State Investigative Interests and Resources
Table 173: Multilevel Regression Results for Relationships Between State Artistic Interests and    Resources
Table 174: Multilevel Regression Results for Relationships Between State Social Interests and    Resources
Table 175: Multilevel Regression Results for Relationships Between State Enterprising Interests    and Resources
Table 176: Multilevel Regression Results for Relationships Between State Conventional Interests and Resources.
Table 177: Bivariate Relationships Between Daily Activities and    Resources
Table 178: Multilevel Regression Results for Relationships Between Realistic Daily Activities    and Resources
Table 179: Multilevel Regression Results for Relationships Between Investigative Daily    Activities and Resources
Table 180: Multilevel Regression Results for Relationships Between Artistic Daily Activities    and Resources
Table 181: Multilevel Regression Results for Relationships Between Social Daily Activities and Resources
Table 182: Multilevel Regression Results for Relationships Between Enterprising Daily    Activities and Resources
Table 183: Multilevel Regression Results for Relationships Between Conventional Daily    Activities and Resources

Table 184: Within-Person Correlation Between State Interests and Daily    Activities
Table 185: Multilevel Regression Results for Relationships Between Realistic Daily Activities    and State Realistic Interest
Table 186: Multilevel Regression Results for Relationships Between Investigative Daily       Activities and State Investigative Interest.       321
Table 187: Multilevel Regression Results for Relationships Between Artistic Daily Activities       and State Artistic Interest.       322
Table 188: Multilevel Regression Results for Relationships Between Social Daily Activities and       State Social Interest.
Table 189: Multilevel Regression Results for Relationships Between Enterprising Daily       Activities and State Enterprising Interest
Table 190: Multilevel Regression Results for Relationships Between Conventional DailyActivities and State Conventional Interest
Table 191: Correlation Between Pre and Post Trait Interests for DSIM and       BPDRM
Table 192: Correlations of Trait Interest Change from Pre to Post       Survey.       327

# LIST OF FIGURES

Figure 1: Plot of CFA for State Realistic Interest
Figure 2: Plot of CFA for State Investigative Interest
Figure 3: Plot of CFA for State Artistic Interest
Figure 4: Plot of CFA for State Social Interest
Figure 5: Plot of CFA for State Enterprising Interest
Figure 6: Plot of CFA for State Conventional Interest
Figure 7: Plot of CFA for State Interests Replicating Holland Structure
Figure 8: Plot of Structural Equation Model for Latent Correlation Between Realistic State Interests (T) and Next Day Realistic State Interest (T+1)
Figure 9: Plot of Structural Equation Model for Latent Correlation Between Investigative State Interests (T) and Next Day Investigative State Interest (T+1)
Figure 10: Plot of Structural Equation Model for Latent Correlation Between Artistic State Interests (T) and Next Day Artistic State Interest (T+1)
Figure 11: Plot of Structural Equation Model for Latent Correlation Between Social State Interests (T) and Next Day Social State Interest (T+1)
Figure 12: Plot of Structural Equation Model for Latent Correlation Between Enterprising State Interests (T) and Next Day Enterprising State Interest (T+1)
Figure 13: Plot of Structural Equation Model for Latent Correlation Between Conventional State Interests (T) and Next Day Conventional State Interest (T+1)
Figure 14: Example of Response Surface curvature expected for Hypotheses 3a through 3e341
Figure 15: Response Plot of Congruence Between State Realistic Interests and Daily Realistic Activities Predicting Daily Positive Affect
Figure 16: Response Plot of Congruence Between State Investigative Interests and Daily Investigative Activities Predicting Daily Positive Affect
Figure 17: Response Plot of Congruence Between State Artistic Interests and Daily Artistic Activities Predicting Daily Positive Affect
Figure 18: Response Plot of Congruence Between State Social Interests and Daily Social Activities Predicting Daily Positive Affect
Figure 19: Response Plot of Congruence Between State Enterprising Interests and Daily Enterprising Activities Predicting Daily Positive Affect

Figure 20: Response Plot of Congruence Between State Conventional Interests and Daily Conventional Activities Predicting Daily Positive Affect	47
Figure 21: Response Plot of Congruence Between State Realistic Interests and Daily Realistic Activities Predicting Daily Negative Affect	48
Figure 22: Response Plot of Congruence Between State Investigative Interests and Daily Investigative Activities Predicting Daily Negative Affect	49
Figure 23: Response Plot of Congruence Between State Artistic Interests and Daily Artistic Activities Predicting Daily Negative Affect	50
Figure 24: Response Plot of Congruence Between State Social Interests and Daily Social Activities Predicting Daily Negative Affect	51
Figure 25: Response Plot of Congruence Between State Enterprising Interests and Daily Enterprising Activities Predicting Daily Negative Affect	52
Figure 26: Response Plot of Congruence Between State Conventional Interests and Daily Conventional Activities Predicting Daily Negative Affect	53
Figure 27: Response Plot of Congruence Between State Realistic Interests and Daily Realistic Activities Predicting Daily Intrinsic Motivation	54
Figure 28: Response Plot of Congruence Between State Investigative Interests and Daily Investigative Activities Predicting Daily Intrinsic Motivation	55
Figure 29: Response Plot of Congruence Between State Artistic Interests and Daily Artistic Activities Predicting Daily Intrinsic Motivation	56
Figure 30: Response Plot of Congruence Between State Social Interests and Daily Social Activities Predicting Daily Intrinsic Motivation	57
Figure 31: Response Plot of Congruence Between State Enterprising Interests and Daily Enterprising Activities Predicting Daily Intrinsic Motivation	58
Figure 32: Response Plot of Congruence Between State Conventional Interests and Daily Conventional Activities Predicting Daily Intrinsic Motivation	59
Figure 33: Response Plot of Congruence Between State Realistic Interests and Daily Realistic Activities Predicting Daily Engagement	60
Figure 34: Response Plot of Congruence Between State Investigative Interests and Daily Investigative Activities Predicting Daily Engagement	61
Figure 35: Response Plot of Congruence Between State Artistic Interests and Daily Artistic Activities Predicting Daily Engagement	62
Figure 36: Response Plot of Congruence Between State Social Interests and Daily Social Activities Predicting Daily Engagement	63

Figure 37: Response Plot of Congruence Between State Enterprising Interests and Daily Enterprising Activities Predicting Daily Engagement
Figure 38: Response Plot of Congruence Between State Conventional Interests and Daily Conventional Activities Predicting Daily Engagement
Figure 39: Response Plot of Congruence Between State Realistic Interests and Daily Realistic Activities Predicting Daily Perseverance
Figure 40: Response Plot of Congruence Between State Investigative Interests and Daily Investigative Activities Predicting Daily Perseverance
Figure 41: Response Plot of Congruence Between State Artistic Interests and Daily Artistic Activities Predicting Daily Perseverance
Figure 42: Response Plot of Congruence Between State Social Interests and Daily Social Activities Predicting Daily Perseverance
Figure 43: Response Plot of Congruence Between State Enterprising Interests and Daily Enterprising Activities Predicting Daily Perseverance
Figure 44: Response Plot of Congruence Between State Conventional Interests and Daily Conventional Activities Predicting Daily Perseverance
Figure 45: Plot of Moderation of Artistic Situational interests and Next Day State Artistic Interests Relationship by Trait Artistic Interests
Figure 46: Plot of Moderation of Social Situational interests and Next Day State Social Interests Relationship by Trait Social Interests
Figure 47: Plot of Moderation of State Investigative interests and Same Day Investigative Situational Interests Relationship by Trait Investigative Interests
Figure 48: Plot of Moderation of State Social interests and Same Day Social Situational Interests Relationship by Trait Social Interests
Figure 49: Response Plot of Congruence Between State Realistic Interests (T) and Daily Realistic Activities (T) Predicting Next Day State Realistic Interests (T+1)376
Figure 50: Response Plot of Congruence Between State Investigative Interests (T) and Daily Investigative Activities (T) Predicting Next Day State Investigative Interests (T+1)377
Figure 51: Response Plot of Congruence Between State Artistic Interests (T) and Daily Artistic Activities (T) Predicting Next Day State Artistic Interests (T+1)
Figure 52: Response Plot of Congruence Between State Social Interests (T) and Daily Social Activities (T) Predicting Next Day State Social Interests (T+1)
Figure 53: Response Plot of Congruence Between State Enterprising Interests (T) and Daily Enterprising Activities (T) Predicting Next Day State Enterprising Interests (T+1)

Figure 54: Response Plot of Congruence Between State Conventional Interests (T) and Daily Conventional Activities (T) Predicting Next Day State Conventional Interests (T+1)......381

### **INTRODUCTION**

In recent years, research into vocational interests has experienced a renaissance in the organizational sciences. This reemergence has been primarily driven by recent meta-analytic work supportive of the relationship between vocational interests and organizationally relevant outcomes (e.g. Nye, Su, Rounds, & Drasgow, 2012; 2017; Van Iddekinge, Roth, Putka, & Lanivich, 2011a) and evidence of their incremental validity over other common predictors (e.g. Stoll et al., 2017; Van Iddekinge, Putka, & Campbell, 2011b). This reemergence of interest in vocational interests in the organizational sciences has led to rapid methodological innovation within the domain, including more effective methods of modeling interest congruence (e.g. Nye, Prasad, Bradburn, & Elizando, 2018a), development of item response theory-based interest inventories (Wetzel & Hell, 2014), and innovations in response scales for interest items (e.g. Phan & Rounds, 2018).

Despite this rapid methodological advancement, authors have lamented a lack of recent theoretical development in the interests domain (see Su, Stoll, & Rounds, 2019). One area of theory and research lacking is exploration into short-term within-person variability. While other individual differences research has expanded into exploring short-term within-person variability (e.g. Cervone, 2005), this area in the organizational sciences for vocational interest research is nearly non-existent (for the exception, see Phan, Amrhein, Cho, & Rounds, 2017; Phan, 2018).

The purpose of this dissertation is to detail a research program into short-term withinperson vocational interest variability. More specifically, this paper reviews research on shortterm within-person variability of individual difference constructs, how interests are conceptualized in different research domains, and how short-term within-person vocational interests differ from extant constructs. Then, theory-based hypotheses and research questions are

put forward regarding short-term interest variability, predictors of variability at the between person level of analysis, usefulness of short-term vocational interests in prediction, and driving mechanisms of short-term interest variation. Methodology is described and results are presented regarding hypotheses and research questions put forward. Finally, the paper closes with a discussion of findings, implications, limitations, and possible future areas of research regarding short-term within-person vocational interest variability. Through this, the research project seeks to shed light on the potential benefits for the fields of organizational and vocational research, theoretically and empirically, from considering the short-term variability of vocational interests moving forward.

#### Short-Term Within-Person Variability of Individual Differences

Within individual differences research, a common distinction is made between more stable individual differences and more transient characteristics of individuals. This concept is referred to as the trait versus state distinction. A trait can be defined as, "A relatively stable, consistent, and enduring internal characteristic that is inferred from a pattern of behaviors, attitudes, feelings and habits in the individual." (VandenBos, 2006 via Baumert et al., 2017, pp. 528). A state, in contrast, refers to, "…how individuals think, feel, or behave in a given situation. They are transient and involve change and variability over short periods of time." (Allemand, Steiger, & Hill, 2013, pp. 6). In other words, traits tend to be stable individual characteristics while states vary within person over relatively short periods of time. Though traits may change or develop over time as well, these changes tend to occur slowly over relatively extended periods of time (see Fridhandler, 1986 for further discussion of distinctions). Though differing in variability and temporality, state constructs have the same content as the corresponding trait construct (e.g. McNiel & Fleeson, 2006). For example, extraversion can be defined as the

tendency to be sociable, assertive, talkative, and active (Barrick & Mount, 1991) and regardless if conceptualized as a trait or state, extraversion would still refer to these same behavioral tendencies, albeit for different lengths of time.

Though not without controversy (e.g. Allen & Potkay, 1981), trait-state research has become more commonplace in the individual differences literature in recent years (e.g. Geiser, Götz, Preckel, & Preund, 2017; Steyer, Schmitt, & Eid, 1999). For example, considerable theory utilizing a trait-state conceptualization has been seen in personality research recently (e.g. Fleeson, 2001; 2017). Trait-state research has also made inroads in the organizational sciences literature (e.g. Huang & Ryan, 2011; Judge, Simon, Hurst, & Kelley, 2014; Lievens et al., 2018; Minbashian, Wood, & Beckmann, 2010). Numerous psychological constructs have been conceptualized within the trait-state paradigm, including anger (Deffenbacher et al., 1996), hopelessness (Dunn et al., 2014), narcissism (Giacomin & Jordan, 2016), attachment security (Haak, Keller, & DeWall, 2017), curiosity (Lydon-Staley, Zurn, & Bassett, In Press; Naylor, 1981), and need for achievement (Patrick & Zuckerman, 1977).

This emerging body of research has illustrated the importance of looking at constructs at both the trait and state level. Though it might be convenient to consider relationships at the state level homologous to relationships at the trait level for the same construct, this cannot be assumed to be the case. Research has demonstrated that, in some cases, relationships between variables at the state level can be different than those found at the trait level. For example, within the medical literature the relationship between exercise and blood pressure has been found to differ depending on the level of analysis (Schwartz & Stone, 1998). Between individuals, exercise is negatively related to blood pressure in that individuals who exercise more tend to have lower blood pressure. However, within individuals exercise is related to higher blood pressure, in that individuals have higher blood pressure when exercising. Within the organizational sciences literature, self-efficacy is negatively related to performance at the within-person level of analysis but positive at the between-person level (Vancouver, Thompson, & Williams, 2001). Level of analysis matters (Kozlowski & Klein, 2000), and assuming relationships at the between-person level among constructs hold at the within-person level can be problematic.

In addition to testing the homology of constructs at differing levels, state level constructs are useful for a variety of other reasons (e.g. Gabriel et al., 2019). Due to their proximal nature, states may be more predictive of day-to-day attitudes and behaviors than more distal traits. For example, an individual's state extraversion at a networking event might more accurately predict their networking effectiveness than their trait extraversion. An individual's state curiosity may better predict reading an article than their trait curiosity. State individual differences may be better able to predict what an individual will do or how they will feel in a given situation compared to more global trait influences. Additionally, information generated from a distribution of states (Fleeson & Gallagher, 2009) can be useful in terms of incremental prediction over traits (Augustine & Larsen, 2012). Previous research has also demonstrated that it is not uncommon to find greater variability in within-person states than between-person traits (e.g. Church et al., 2013; Fleeson & Gallagher, 2009).

I agree with previous authors (e.g. Di Blas, Grassi, Carnaghi, Ferrante, & Calarco, 2017) in the sentiment that studying traits alone is not enough. If within-person fluctuation is ignored, this theoretically and empirically important variation would be missed. We must integrate trait and state level constructs within our work to improve our theory and practice. More specifically, we must integrate trait and state conceptualizations of vocational interests to better understand and utilize vocational interests.

### **Perspectives on Interests**

Interests, generally, refer to an individual's preference for specific types of work, activities, or contexts (Su et al., 2019). Interest research has had a long and rich history in the organizational sciences, with developments in this area being called one of the great contributions of applied psychology (Strong, 1943). However, interest in interests has not been unique to this field (Fouad & Kozlowski, 2019; Su, 2018). Educational psychology has also amassed an impressive body of research on this topic. However, despite a common interest in interests and recent efforts to integrate research from these domains (e.g. Su, 2018; Su et al., 2019; Renninger & Hidi, 2011), research is fragmented across fields. A major gap exists between these fields in regard to how interests are conceptualized.

#### **Organizational Sciences Perspective**

Within the organizational sciences, interests have been primarily conceptualized as "...trait-like preferences to engage in activities, contexts in which activities occur, or outcomes associated with preferred activities that motivate goal-oriented behaviors and orient individuals toward certain environments" (Round & Su, 2014, pp. 98). In other words, vocational interests are thought to be relatively stable preferences that are characterized by engagement, persistence, and enjoyment when an individual is engaged with their respective preferred stimuli (Rounds & Su, 2014). The organizational sciences have almost exclusively considered vocational interests within a trait framework, neglecting any state variation in vocational interests (Henn, 2010; Rounds & Su, 2014; Su, 2018).

Though some alternatives have been proposed (e.g. Gati, 1991), the most popular structure of vocational interests in the organizational sciences has been Holland's hexagonal

structure (1959; 1997). This model consists of six relatively broad domains of vocational interests. The first domain, Realistic, refers to a preference for, "...explicit, ordered, or systematic manipulation of objects, tools, machines, and animals..." (Holland, 1997, pp. 21). Investigative refers to a preference for, "activities that entail observational, symbolic, systematic, and creative investigation of physical, biological, and cultural phenomena." (pp. 22). Artistic refers to a preference for, "... ambiguous, free, systemized activities that entail the manipulation of physical, verbal, or human materials to create art forms or products..." (pp. 23). Social refers to a preference for, "... activities that entail the manipulation of others to inform, train, develop, cure, or enlighten..." (pp. 24). Enterprising refers to a preference for, "...manipulating others to attain organizational goals or economic gain ... " (pp. 25). Finally, Conventional refers to a preference for, "...activities that entail the explicit, ordered, systematic manipulation of data..." (pp. 26-27). Collectively, these are also known as the RIASEC model of vocational interests. These interests form a hexagonal structure in which interests closest to one another are most similar and farthest away most dissimilar (Holland, 1997). This structure has been found to replicate across racial groups (Day & Rounds, 1998) and gender (Anderson, Tracey, & Rounds, 1997; Day & Rounds, 1998).

Beyond these six vocational interest types, Holland (1997) also proposed that both individuals and contexts could be categorized according to the RIASEC codes. For instance, an individual may have a primary interest in Investigative activities while a task, occupation, or context may similarly be representative of this type of activity. Holland proposed that an individual matched to an environment consistent (i.e. congruent) with his or her interests would experience benefits, such as high satisfaction or performance. On the other hand, if an individual is placed in an environment incongruent with their vocational interests, they would be more

likely to be dissatisfied or perform poorly. These benefits are thought to emerge through increased focus on goals, energized action, and sustained effort resulting from interest alignment. These principles have been generally supported by research (e.g. Hoff, Wee, Song, Phan, & Rounds, 2018; Nye et al., 2012; 2017; 2018a).

### **Educational Perspective**

Though researchers in the organizational sciences almost exclusively focus on trait vocational interests, researchers in education utilize both a trait and state conceptualization of interests. Though these constructs are sometimes referred to by different names in the educational literature, they are regularly described as individual interests and situational interests, respectively. Individual interests are defined as "…relatively stable motivational orientation or personal disposition that develops over time in relation to a particular topic or domain and is associated with increased knowledge, value, and positive feelings…" (Hidi & Harackiewicz, 2000, pp. 152). Research has demonstrated that individuals with individual interests in activities tend to pay closer attention to, persist longer at, learn more about, and enjoy these activities more than those who do not have interests in those activities (See Hidi & Harackiewicz, 2000 for a review). Fundamentally, these individual interest traits are equivalent to the organizational sciences' trait conceptualization of vocational interests both theoretically (e.g. Su et al., 2019) and empirically (e.g. Henn, 2010).

Beyond interests as traits, researchers in education also consider a state conceptualization of interests, referred to as situational interests. Situational interest can be defined as, "...a short-term spike in a person's attention and participation in an activity and it is triggered by features of the environment..." (Azevedo, 2018, pp. 109). These interests refer to a relatively transitory feeling of captivation and engagement with a specific stimuli or task and are thought to be

triggered by aspects of the stimuli or task at hand. These interests are relatively agnostic to the actual domain content of the stimuli or task and more indicative of presentation style, such as the novelty, abstractness, unexpectedness of information, vividness, and meaningfulness (see Schraw & Lehman, 2001 for a review). For example, when developing a measure of situational interest Linnebrink-Garcia and colleagues (2010) found three factors to emerge pertaining to attention captivation, enjoyability/engagement, and perceived importance/value. These three factors are relatively agnostic to specific subject matter, and pertain more to reactions to how it is presented.

Though some researchers consider situational and individual interests to be on a continuum (e.g. Azevedo, 2018; Hidi & Harackiwicz, 2000; Krapp, 2007), these two concepts differ theoretically (Hidi & Renninger, 2006; Su et al., 2019) and empirically (Knogler, Harackiewicz, Gegenfurtner, & Lewalter, 2015; Linnenbrink-Garcia et al., 2010). According to Palmer and colleagues (2017), "Situational interest is a relatively transient reaction to highly stimulating factors in the immediate environment, whereas individual interest is a relatively long-term preference for a particular subject or activity." (pp. 731). In other words, situational interests refer to short-term effects of a task or stimuli on an individual, while individual interests refer to an individual's enduring preference for the activity or general domain of activities (Hidi & Anderson, 1992). The empirical relationship between these two constructs is unclear, with some research finding a strong relationship (e.g. Henn, 2010) and some research finding a null relationship (Knogler et al., 2015). Though the empirical relationship between these two constructs is different constructs.

#### **State Vocational Interests**

Despite the prevalence of a state-level interest construct in the educational literature, the organizational sciences do not currently, with very few exceptions, utilize a state vocational interest construct. This oversight is interesting, as anecdotally one might expect vocational interests to fluctuate somewhat over relatively short periods of time. For instance, a researcher's own momentary preference for theoretically oriented (Investigative), data analytic (Conventional), and mentoring (Social) activities may fluctuate from day-to-day.

State vocational interests represent a relatively isomorphic construct analogous to trait vocational interests in content. As with other state-level individual difference constructs, state vocational interests would have the same affective, behavioral, and cognitive content as the trait level constructs, but apply for a shorter duration. For instance, state vocational interests would, in that specific moment, refer to a preference for specific types of activities such as Investigative or Enterprising tasks. At the trait level, an individual may prefer Social activities but, in the moment, their preferences may differ representing their state interests.

At this point, it becomes necessary to distinguish this conceptualization of state vocational interests from the state interest conceptualization frequently utilized in educational research, as these two conceptualizations represent differing constructs. As previously discussed, the state construct of situational interests from educational research can be defined as, "...a short-term spike in a person's attention and participation in an activity and it is triggered by features of the environment..." (Azevedo, 2018, pp. 109). At a fundamental level, this conceptualization of interests differs from extant trait-level interest constructs in content. Situational interests are defined by the effect of the task or target object on the individual, and typically function as domain agnostic as opposed to the individual's preference for this type of

activity or another (Hidi & Anderson, 1992; See Linnenbrink-Garcia et al., 2010). By definition in the trait-state paradigm, a state must have the same affective, behavioral, and cognitive content as the trait is corresponds to. Thus, situational interests cannot represent a state level conceptualization of vocational interests.

To further illustrate the theoretical similarities and differences between situational interests, state vocational interests, and trait vocational interests, parallels, though imperfect and limited, can be drawn in regard to the emotions literature (see Gray & Watson, 2001). Within this literature, emotions, moods, and temperaments represent related constructs differing in temporality and nature in ways that relate to these differing conceptualizations of situational, state vocational, and trait vocational interests.

Emotions are short term, relatively automatic reactions related to a specific event or stimuli (Watson & Clark, 1994; Levenson, 1994). This conceptualization is similar to situational interests, which are also related to a specific stimulus and short-term in nature (Azevedo, 2018). Mood, in contrast, is more diffused than emotions. Where emotions may last mere seconds, moods can last hours or even days (Gray & Watson, 2001). Though typically longer, moods still refer to a state that fluctuates over time. Where emotions are thought of as response systems that are activated by certain stimuli, moods are not so much a reaction to specific stimuli but a summary of an individual's affective states (Gray & Watson, 2001). Like mood, state vocational interests are not tied to a specific stimulus but instead are a short-term summary of our preference for different activities, contexts, and outcomes. Like moods may be influenced by emotions, state vocational interests may be influenced by situational interests (which I expand on in the following pages). Though emotions and moods represent state constructs, temperament represents a more stable trait-like disposition. Where moods and emotions are transitory,

temperaments are more stable and can persistent for decades (Gray & Watson, 2001). While emotions are primarily stimuli driven, temperaments are a function of enduring individual characteristics. Though distinct, mood is substantially related to temperament (Parkinson, Totterdell, Briner, & Reynolds, 1996). In a similar way, trait vocational interests are relatively enduring (e.g. Low, Loon, Roberts, & Rounds, 2005) and are expected to influence state vocational interests.

Though imperfect, this parallel with the emotion literature is helpful in illustrating the theoretical differences between situational, state vocational, and trait vocational interests. Situational interests are transitory states that are primarily driven by specific immediate situations, events, or stimuli. State vocational interests are longer term states driven by recent situational interests and trait vocational interests, and trait vocational interests are relatively stable preferences.

Though state vocational interests are expected to be longer in duration than situational interests and more transitory than trait vocational interests, the lack of research into state vocational interests leaves their exact duration an open question. It is worth noting, however, that even in the more established emotions literature the length of a mood, a construct which we previously drew parallels with in regards to state vocational interests, also remains ambiguous. The duration of a mood has been described as hours, days, or even longer (Beedie, Terry, & Lane, 2005; Gray & Watson, 2001). Individuals tend to structure their activities daily and their preferences for activities may similarly follow this pattern. The natural segmentation of daily activities may lead to a similar natural segmentation of preferences. Thus, for the purposes of this dissertation I will assume that state vocational interests have a daily duration.

#### Variability in Vocation Interests

Though research into short-term variability in vocational interests is still in its infancy due to a general neglect of state interests in the organizational sciences (e.g. Hunn, 2010), research into long term changes in vocational interests at the trait level is extensive. Though most research suggests that vocational interests at the trait level are mostly stable over time (Rottinghaus, Coon, Gaffey, & Zytowski, 2007), there are some normative changes with age (Hoff, Briley, Wee & Rounds, 2018; Low et al., 2005). For example, during early adulthood trait vocational interests involving people (Artistic, Social, & Enterprising) tend to increase (Hoff et al., 2018).

### Interests and Whole Trait Theory

Though trait vocational interests are mostly stable over time, this does not preclude within-individual variability. For instance, though an individual may typically prefer Realistic type work, their day-to-day preference for this type of work may fluctuate. One model of this state variability around a trait construct is within Whole Trait Theory (WTT) (Fleeson, 2001; Fleeson & Jayawickreme, 2015; Jayawickreme, Zachry, & Fleeson, 2019). The central idea of this theory is that state and trait levels of a construct can be represented simultaneously utilizing a density distribution. A density distribution, within the context of WTT, is a distribution of an individual's state fluctuation on a construct around an individual's trait (or sometimes aggregated state mean) standing on that construct. For instance, an individual may have a relative midpoint standing on trait extraversion, but over the course of several weeks may exhibit states of both high extraversion and low extraversion. These states form a distribution around this individual's trait standing, indicting how this construct was actually manifested over the period of time. This

distribution can fluctuate in location, size, and shape like any density distribution, according to how the individual manifests the construct of interest (Fleeson & Jayawickreme, 2015).

Though WTT was conceived within and has been traditionally applied to the Five Factor Model of personality (Goldberg, 1990), researchers have discussed the applicability of WTT principles to other psychological constructs as well (Jayawickreme et al., 2019). Indeed, this density distribution approach has been utilized with other psychological constructs such as attachment theory (Haak et al., 2017) and goal orientation (Mihalecz, 2011). Within the limited research exploring vocational interest variability, interests have been considered from a density distribution perspective (e.g. Phan et al., 2017). This density distribution approach allows for a richer illustration of an individual's vocational interests than a cross-sectional trait approach can allow by acknowledging that variation can occur from this point and modeling this variation. This WTT approach does not preclude between individual vocational interest trait stability, as commonly found, and acknowledges that around this trait variation can occur (i.e. state vocational interests). The density distribution framework within WTT is the theoretical trait-state model used within this dissertation for trait and state vocational interests.

#### Theoretical Argument for Variability

In order to be considered a state-level construct, state vocational interests would need to show meaningful within-person variation over relatively short periods of time (e.g. Allemand et al., 2013). Though the empirical research into short-term variability of vocational interests is limited, there are theoretical arguments as to why one would expect significant state variation in vocational interests. Specifically, within-person variability research within the closely related domain of personality and the positive effects of skill variety within jobs provide theoretical support for short-term variability of vocational interests.

Existing individual differences research within the trait-state paradigm provides theoretical evidence that vocational interests should display short term within-person variability. More and more research within differential psychology is finding considerable state fluctuations in traditionally trait concepts (e.g. Neubauer, Voss, & Ditzen, 2018). As previously noted, this research has especially flourished in personality research (Fleeson, 2017) where the variability within-individuals in personality commonly overshadows variability between-individuals (e.g. Fleeson, 2001). Theoretically, vocational interests and personality are closely linked, to the extent that Holland (1997) considered vocational interests to be personality constructs. Given the close link between personality and vocational interests theoretically (Holland, 1997) and state fluctuation found in the personality literature, vocational interests should demonstrate state variability.

Variety is core to the human experience (e.g. Fiske & Maddi, 1961) and this individual need for variety has carried over into our theories of job design (e.g. Job Characteristics Model; Hackman & Oldham, 1975; 1980). Within the influential Job Characteristics Model, skill variety defined as, "...the degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of the employee" (Cordery & Parker, 2012, pp. 261) has been theorized as an influential variable in the prediction of work meaningfulness and a number of important outcomes. Greater skill variety has demonstrated relationships with a number of outcomes such as greater motivation, engagement, and job satisfaction (Humphrey, Nahrgang, & Morgeson, 2007), while lower skill variety has been related to burnout and depression (Karasek & Theorell, 1990; Parker, 2003). Notably many of these variables have theoretical links to vocational interest congruence (Holland, 1959; 1997; Nye et al., 2012; 2017). This need for variety suggests that vocational interests within-

individuals may vary over time, in that jobs that provide a wider variety of activities lead to better employee outcomes. In other words, these positive outcomes may be related to the variety of activities on the job being wide enough to accommodate within-person fluctuations in desire for different types of work, driven by state vocational interest fluctuation.

# Forms of Variability

Many different forms of variability exist and may be considered in regard to individual differences (Allemand et al., 2013; Tracey & Sodano, 2008). Three forms of stability that may be of particular importance for vocational interests are: Absolute stability, relative stability, and rank order stability.

Absolute Stability. Absolute stability refers to changes in individual scores over time and is one of the most common and simplest forms of stability (Tracey & Sodano, 2008). Variability in this form would refer to changes in an individual's raw vocational interests score. For instance, an individual may, on a five-point scale, score a four on Conventional interests one day and a three on the next. For vocational interests to exist at a state level, we would expect variability in scores day-to-day where an individual score on interests may vary across repeated measurements.

**Relative Stability.** Relative stability refers to invariance in the ranking of individuals relative to others (Tracey & Sodano, 2008). In other words, relative stability would suggest if individual A scored higher than individual B during the first administration, the same would be true on a subsequent administration. It is possible to have relative stability without absolute stability. For instance, if all individuals decreased in Investigative interests by .5 over time, their scores would display absolute variability (i.e. score change) but not relative variability (i.e. ranking of level of

Investigative interests relative to others). Thus, it is important to test for variability in both of these conceptualizations.

Based on the hypothesized effects driving state vocational interest changes day-to-day, discussed later in this dissertation, changes in state vocational interests would not be expected to occur uniformly across individuals. For instance, if one individual's Artistic interest increases another individual's Artistic interest may decrease, stay the same, or increase to a greater or lesser extent. Thus, we would expect the rank order of individual in terms of interests to change day-to-day. In other words, we would expect state vocational interests to display a lack of relative stability.

**Rank Order Stability.** Rank order stability refers to stability in the relative ordering of interests within individuals (Allemand et al., 2013; Tracy & Sodano, 2008). For example, if state vocational interests display rank order stability and Investigative was an individual's top interest one day, it will likely be their dominating interest the next. A lack of rank order stability in vocational interests could be of substantial concern given the importance of rank ordering vocational interests for congruence indices (e.g. Brown & Gore, 1994; Camp & Chartrand, 1992). Note that rank order stability is focused on the rank stability of individual interests, which differs from profile stability which refers to the stability of an individual's full profile of interests tested simultaneously.

Again, based on the hypothesized effects driving state vocational interest change day-today, discussed later in this dissertation, changes in state vocational interests would not be expected to occur uniformly across interests within individuals as well. For instance, an individual's Conventional interests may increase from one day to the next while that individual's Enterprising interests may decrease, stay the same, or increase to a greater or lesser extent. Thus,

we would not expect rank order stability as relative rankings of interests within individuals may fluctuate.

Concerning variability, utilizing only one conceptualization of consistency may be deficient for the purposes of capturing the true variable nature of a construct. Differing conceptualizations of consistency may be important, as they may be both theoretically and empirically independent (Allemand et al., 2013). Based on the outlined rationale, I propose variability in daily vocational interests, indicative of state vocational interests, of the following forms:

Hypothesis 1a: State vocational interests will display day-to-day absolute variability.

Hypothesis 1b: State vocational interests will display day-to-day relative variability.

Hypothesis 1c: State vocational interests will display day-to-day rank order variability.

#### **Individual Differences in Variability**

If variability in state vocational interests exists, it may be the case that some individuals display greater variability than others (Allemand et al., 2013). For instance, one individual may see their interest in Social activities vary considerably over a week's time, while another individual may exhibit little fluctuation in their desire for Social activities, contexts, or outcomes. Personality trait-state research conceptualized within the WTT density distribution framework has theorized that each individual is likely to have a unique distribution of their personality states, including degree of variability (Fleeson, 2001). Indeed, research has found differences in personality state variability across individuals (e.g. Fleeson & Law, 2015). If variability in state vocational interests exists, it would similarly be expected, based on WTT, that there would be individual differences in the degree of variability of interests across individuals.

If differences in the degree of variance exists across individuals in state vocational interests, it would be useful to know if specific individual differences are related to a greater or lower degree of variability. In other words, what individual differences at the between person level would predict variability in state vocational interests across individuals? Three individual differences are hypothesized as predictors of this variance:

# **Openness to Experience**

Trait openness to experience is related to an individual's tendency to be broadminded, original, curious, and imaginative (Barrick & Mount, 1991). Individuals high in openness to experience tend to be open to new opportunities, activities, and contexts. Due to this tendency, I would expect individuals high in openness to display a higher degree of variability in state vocational interests. In other words, I would expect individuals higher in openness to desire more diverse experiences in the tasks that they do from day-to-day, and this desire to be reflected within their variance in state vocational interests. Thus, I hypothesize that:

*Hypothesis 2a:* Trait openness to experience will be positively related to variability in state vocational interests, where a higher degree of openness to experience will be related to greater variability in state vocational interests.

# Curiosity

Trait curiosity has been characterized by exploratory behavior and a drive towards novel stimuli (see Loewenstein, 1994). Individuals high in curiosity would be expected to possess greater variability in their state vocational interests, due to this propensity towards exploration and novelty seeking. For instance, an individual high in curiosity may desire variety in the

activities, contexts, and outcomes of their work day-to-day and seek out novel and diverse tasks to fulfill this need. Thus, I hypothesize that:

*Hypothesis 2b*: Trait curiosity will be positively related to variability in state vocational interests, where a higher degree of curiosity will be related to greater variability in state vocational interests.

### Implicit Interest Theory

Dweck's concept of implicit fixed versus growth mindset (see Dweck, 1999) has been recently extended to the interests literature (O'Keefe, Dweck, & Walton, 2018). Individuals have been characterized as having a fixed theory of personal interests, where they believe that interests are inherent and relatively unchangeable, or having a growth theory of interests, where they believe interests may not be fully formed and may develop over time. Individuals with a fixed implicit theory of interests should display less variability in state vocational interest, as they see their own interests as unchanging and would see little value in exploration outside of their main interests. In contrast, individuals with a growth implicit theory of interests would be expected to have a higher degree of variability in state vocational interest, as they see their own activities, contexts, and domains than their typical interests in the spirit of possible interest development. Indeed, in past research individuals with fixed implicit theories of interests were less likely to explore interests outside of their existing interests (O'Keefe et al., 2018). Thus, I hypothesize that:

*Hypothesis 2c:* A growth theory of interests will be positively related to variability in state vocational interests, where a high degree of growth theory endorsement will be related to greater variability in state vocational interests.

### Self-Assessment of Variability

In addition to these individual differences as predictors of state vocational interest variability, some research suggests that individuals may be able to self-report their own variability on constructs with some accuracy (e.g. Lievens et al., 2018). It would be useful to know if individuals are capable of accurately reporting the degree to which their interests fluctuate from day-to-day, in regard to their convergence with actual degree of interest fluctuation gauged through repeated measurement of state interests. Some past research has found poor convergence between subjective perceptions and objective measures (Edwards, Cable, Williamson, Lambert, & Shipp, 2006). Due to conflicting past research (e.g. Edwards et al., 2006; Lievens et al., 2018), I put forward a research question:

*Research Question 1:* Will self-reported level of variability regarding state vocational interests converge with actual degree of state vocational interest variability?

### **State Vocational Interests and Prediction**

As mentioned previously, much of the impetus for the resurgence of vocational interest research in the organizational sciences was due to meta-analytic evidence supportive of the relationship between interests and outcomes (Nye et al., 2012:2017; Van Iddekinge et al., 2011a), as opposed to older research more critical of their predictive capability (e.g. Ployhart, Schneider, & Schmitt, 2006; Schmidt & Hunter, 1998). The view persisted that interests may lead to occupational choice, but after that other individual differences take over in terms of prediction (Su, 2018). However, new evidence emerged to challenge this viewpoint. This new evidence found support for the usefulness of vocational interests in relation to a wide variety of outcomes of interest to organizational researchers and practitioners, including job performance (Nye et al., 2012, 2017; Van Iddekinge et al., 2011a), training performance (Van Iddekinge et al.,

2011a), turnover intentions (Van Iddekinge et al., 2011a), turnover (Van Iddekinge et al., 2011a), organizational citizenship behaviors (Nye et al., 2012, 2017), persistence (Nye et al., 2012, 2017), and job satisfaction (Hoff et al., 2018).

Though this evidence is strong support for the criterion validity of trait vocational interests, these relationships cannot be generalized to state vocational interests without additional research, as relationships between predictors and outcomes at one level may not hold at different levels of analyses (i.e. lack of homology). Beyond the existence of relationships, the comparability of magnitude across levels for relationships can also be called into question. For example, the relationship between personality and exercise differs in strength depending on if the relationship is examined at the trait or state level (Mõttus, Epskamp, & Francis, 2017). Based on past research alone, it is unclear if state vocational interests will predict outcomes in a similar manner as trait vocational interests.

Trait vocational interests are theorized to predict outcomes due to the enhanced engagement, persistence, and enjoyment that comes from interacting with a preferred stimulus (Rounds & Su, 2014). It's expected that the same engagement, persistence, and enjoyment would occur when state vocational interests are matched to a preferred stimulus, leading to similar relationships with outcomes. However, it is important to consider matching of predictors and criteria in terms of level, similar to the arguments made in other areas of individual differences research (Schneider, Hough, & Dunnette, 1996). For example, an individual might generally prefer a high degree of enterprising activities and may be involved in a high number of enterprising activities on a particular day, but if their state enterprising interests are low a high degree of state satisfaction is unlikely to occur. General (i.e. trait) vocational interests should predict general (i.e. global) outcomes, where state vocational interests should predict state outcomes. For

example, an individual's trait vocational interest congruence with their general occupational duties should predict an individual's overall job satisfaction. However, an individual's state vocational interest congruence with their current task should predict their satisfaction with their job right then (e.g. state job satisfaction).

Though research in this area is lacking, the relationships between state vocational interest congruences and state outcomes are expected to be homologous to trait vocational interest congruence and global level outcomes relationships due to similar underlying mechanisms of action (e.g. increased engagement, persistence). Based on theory (e.g. Holland, 1959; 1997; Rounds & Su, 2014) and empirical results at the trait level (e.g. Hoff et al., 2018; Nye et al., 2012: 2017; 2018a; Van Iddekinge et al., 2011a), I propose five outcomes related to state vocational interest congruence: positive affect, negative affect, intrinsic motivation, engagement, and perseverance.

At the trait level, interest congruence is theoretically (Rounds & Su, 2014) and empirically (e.g. Hoff et al., 2018) related to affect based outcomes, with greater congruence related to more positive affective outcomes such as job satisfaction. Mirroring this relationship between congruence and positive affective outcomes at the trait level, I propose the following hypotheses at the state level:

*Hypothesis 3a:* State vocational interest congruence will be positively related to state positive affect, where a greater degree of state interest congruence will be related to higher state positive affect.

*Hypothesis 3b:* State vocational interest congruence will be negatively related to state negative affect, where a greater degree of state interest congruence will be related to lower state negative affect.

Theory suggests that greater interest congruence leads to a greater degree of motivation (Rounds & Su, 2014). Indeed, researchers finding a link between interest congruence at the trait level and performance have speculated that may be a result of higher motivation resulting from congruence (Nye et al., 2012). Based on these results at the trait level, I hypothesize the following relationships between motivation variables and interest congruence at the state level:

*Hypothesis 3c:* State vocational interest congruence will be positively related to state intrinsic motivation where a greater degree of state interest congruence will be related to greater state intrinsic motivation.

*Hypothesis 3d:* State vocational interest congruence will be positively related to state engagement, where a greater degree of state interest congruence will be related to greater state engagement.

Though related, engagement and intrinsic motivation differ in content warranting separate explorations as outcomes of state interest congruence. Intrinsic motivation refers to engaging in behaviors for their own sake, in regards to the pleasure or satisfaction derived from performing them (Deci, 1971). However, engagement is a broader construct reflecting a state characterized by high energy levels, mental resilience, dedication, enthusiasm, and focus (Schaufeli & Bakker, 2010). For instance, an individual may exhibit enthusiasm, dedication, and focus towards a task but not necessarily be intrinsically motivated by that activity and find it enjoyable. Based on

theory (Rounds & Su, 2014) and past findings (Nye et al., 2012), both of these motivationally related outcomes would be expected from state interest congruence.

Individuals more congruent with a task or environment should persist with that task or environment for a longer time than those who are incongruent. This principle is integral to Attraction-Selection-Attrition theory (Schneider, 1987). Past research has found that individuals with a lower degree of interest congruence at the trait level demonstrate lower persistence and are more likely to leave their job (Nye et al., 2012; Van Iddekinge et al., 2011a). At the state level, I hypothesize a similar relationship between interest congruence and persistence:

*Hypothesis 3e:* State vocational interest congruence will be positively related to state perseverance, where a greater degree of state interest congruence will be related to greater state perseverance.

As previously discussed, state vocational interest congruence should better predict state outcomes than trait interest congruence. In addition to testing relationships between state congruence and these five outcomes, additional analyses will be conducted to determine if state congruence displays incremental predictive validity over trait interest congruence with an individual's daily activities. It is expected based on work within other individual differences research (Schneider et al., 1996) that state congruence should predict state outcomes over and above trait congruence.

## **State Vocational Interests and Interest Development**

If state vocational interests are expected and found to vary, a natural question might be what would cause them to fluctuate day-to-day. To this end, I put forward two hypothesized mechanisms that are predicted to influence these fluctuations. One of these is an extension of the

Trait-State Interest Dynamics model of trait vocational interest development (Su et al., 2019) based on the influence of situational interests, while the other is based on the congruence or incongruence of desired and actual activities leading to subsequent changes in state interests.

#### Situational Interest Driven Change Theory

Both the fields of organizational science and education have made substantial theoretical progress in determining the origins of trait interests (e.g. Hidi & Renniger, 2006; Krapp, 2003; Su et al., 2019). Recently, the Trait-State Interests Dynamics model (TSID) (Su et al., 2019) of interest development has been introduced. The TSID model (Su et al., 2019) is particularly notable as it is a cross-disciplinary framework of trait interest development, integrating interest research from organizational science and educational perspectives. Within this model, trait interests direct, energize, and sustain individual effort and engagement with tasks in socio-cultural contexts. As a result of this, trait interests predict outcomes such as performance and persistence. These traits then direct individuals towards situations where they experience situational interest through affective reactions to the object, task, or context. This process then leads to increased or decreased interest in the object, task, or context as an abstract concept and iterates in a dynamic fashion to develop a person's trait interests over time. The tenets of this model generally find support in the literature (e.g. Palmer et al., 2017; Rotgans & Schmidt, 2017).

Within this model of interest development, situational interest and trait interests interact in a dynamic, reciprocal fashion. However, I posit that the concept of state vocational interests represents a meso-level construct between these two. This idea of a meso-level construct linking situational interest to trait interest development can also be found in Hidi and Renniger's (2006) Four-Phase Model of Interest Development. Within this model, four phases are thought to lead to

trait interest development: Triggered situational interest, maintained situational interest, emerging (less-developed) individual interest, and well-developed interest. State vocational interests are most similar to maintained situational interest and emerging individual interest. Maintained situational interest within this model refers to, "...a psychological state of interest that is subsequent to a triggered state, involves focused attention and persistence over an extended episode in time, and/or reoccurs and again persists." (Hidi & Renniger, 2006, pp. 114). Emerging individual interest in this model refers to, "...a psychological state of interests as well as to the beginning phases of a relatively enduring predisposition to seek repeated reengagement with particular classes of content over time." (Hidi & Renniger, 2006, pp. 114). The state vocational interest concept in regard to interest development refers to a blend of these two concepts, borrowing most heavily from emerging interests. State vocational interests are also a state, more enduring than situational interests, and are theorized to lead to reengagement with types of stimuli over time, but instead of representing less fully formed trait interests the construct is more of a transitory state that fluctuates over time and influences the development of trait interests.

Situational interests can be thought of as affective and cognitive reactions to a specific stimulus, such as an object, task, or context (Su et al., 2019). These reactions can either be positive or negative. A positive reaction can be defined as a positive affective reaction to the stimuli, assigning the stimuli positive valence or value, and identifying with the stimuli, as represented in the TSID framework (Su et al., 2019). A negative reaction can be considered the opposite. I posit that depending on if this reaction is positive or negative, the individual will develop either a greater or reduced state vocational interest in the abstract concept the stimuli represents. An individual's standing on the vocational interest trait serves as an anchor for the

state interest to fluctuate around (e.g. Fleeson, 2001), where interactions with domain representative stimuli act as an additive or subtractive force based on positive or negative experiences with the stimuli, respectively, causing state deviation from the trait standing. These deviations around the trait represent state vocational interests.

For an illustrative example, consider an individual who has a rather moderate interest in Realistic activities, such as building or repairing things. However, this individual attends a captivating lecture on engineering which sparks their situational interests due to positive feelings towards, personal meaning from, and personal identification with the materials. TSID theory posits that this individual's situational interests in this domain would be triggered. I posit that state interest in the abstract domain this material pertains to (i.e. Realistic) would be increased, as a function of their typical interest in the activity (i.e. trait Realistic standing) and the increase in interest derived from their positive reaction to the material (i.e. high situational interests). After this lecture, the individual should feel more interested in this type of activity in the moment than they did previously. In contrast, if this individual attended a rather dull lecture on engineering with little situational interest generated, their state interest in Realistic activities should be reduced as a function of their typical trait standing and negative reaction to the experience (i.e. low situational interest). Based on the tenets of the TSID theory and rationale described, I hypothesize that:

*Hypothesis 4:* Changes in state vocational interests are predicted by situational interests, in that greater or lower situational interests within a domain one day will lead to an increase or decrease in state interests within that domain the following day, respectively.

Though situational interests are hypothesized to drive changes in state vocational interests, it is plausible that higher state vocational interests in a domain lead to higher situational

interests in that domain. However, situational interests pertain to an individual's affective reactions to, cognitive appraisal of value towards, and identification with an object, task, or context within the TSID model (Su et al., 2019). Just because an individual has high interests in a domain, does not necessarily mean they will react in an affectively positive matter to, see value in, and identify with activities in that domain. As previously noted, situational interests are typically represented as a function of content agnostic components of an activity or environment, such a presentation style, as opposed to a reflection of content (Linnebrink-Garcia et al., 2010). Though situational interests are expected to drive changes in state vocational interests, reverse causality where state vocational interests drive subsequent situational interests will also be assessed.

# Congruence-Incongruence Driven Change Theory

Within the vocational interests literature, individuals seek out activities, contexts, and outcomes associated with their interests. In other words, individuals are driven to activities or environments that fulfill their vocational interests (Holland, 1997; Rounds & Su, 2014). I posit that when an individual's desire for a specific type of activity or environment is not satisfied, this incongruence will lead to a subsequent increase in the desire for that type of activity or environment. Alternatively, when an individual experiences more of a type of activity or environment than they desire, this will lead to a subsequent decrease in the desire for that type of activity or environment. When state vocational interests match activities or environments experienced, subsequent state vocational interests would not be expected to change. In other words, incongruence of an individual's daily interests and activities drives subsequent change in state vocational interests.

For an illustrative example, consider a researcher who has a moderate preference for Conventional activities. This researcher has focused exclusively on teaching and mentoring activities during the day (Social activities), to the point that they have not gotten to fulfill their desire for Conventional activities. We would expect this researcher's state desire for Conventional work to increase the next day due to this incongruence. Conversely, consider a situation where a manuscript revision has forced this researcher to focus exclusively on data analysis (a Conventional activity) for the day, well beyond their preferences. Due to this excess of Conventional interests beyond their preferences, the researcher is likely to desire less of this type of work the following day.

Based on these tenets, an individual's day-to-day interests (i.e. state vocational interests) should fluctuate depending on the congruence between the prior day's state interests and activities undertaken. If the prior day's activities did not meet the desired level for an interest, this interest should be enhanced. If the prior day's activities exceeded the individual's desire for that type of activity, this interest should be reduced. Thus, I hypothesize that:

*Hypothesis 5*: The congruence between an individual's state vocational interests and activities the previous day will predict an individual's state vocational interest in the next, such that less of an activity than desired will elicit greater state vocational interest in that domain the following day and more of an activity than desired will elicit lower state vocational interest in that domain the following day.

#### **METHODOLOGY & RESULTS**

In order to test these research hypotheses and questions, a two-study design is necessary. The purpose of the first study was to design a state vocational interest inventory, as the current

inventories do not fill this need well (discussed below). The purpose of the second study was to test research hypotheses and questions put forward utilizing experience sampling methodology (ESM), utilizing the validated state vocational interest measure from Study 1.

#### Study 1

For the hypotheses and research question outlined, it is necessary to create a vocational interest measure which can measure state vocational interests appropriately. This study outlines the development and validation of the Daily Short Interest Measure (DSIM) in order to address limitations of current inventories and serve as an interest measure suitable for testing research hypotheses and questions put forward. The new measure overcomes three limitations of current measures.

First, the measure is short enough to utilize effectively within an ESM study, like the methodology used for Study 2. Many of the extant vocational interest inventories are extensive, commonly reaching over 100 items (Chernyshenko, Stark, & Nye, 2019). Even brief scales number almost 50 items (e.g. Armstrong, Allison, & Rounds, 2008).

Most of the existing measures of vocational interests consist of asking individuals to indicate their preferences for certain activities. For instance, the Brief Public Domain RIASEC Marker Scales (Armstrong et al., 2008) asks for individual preferences regarding activities such as "Work on an offshore oil-drilling rig", "Make a map of the bottom of an ocean", and "Negotiate contracts for professional athletes". It is unlikely individuals have experience in these domains and can accurately compare their preferences with the activities these tasks actual consist of, especially undergraduate age populations of which Study 2 utilizes. Instead, the inventory developed utilizes overarching principles from these types of work which may be more reasonable to utilize as oppose to contextualizing these interests in tasks individuals would likely have little experience with. For example, instead of preference for negotiating contracts for professional athletes, an item measuring Enterprising interests may ask for preference for tasks involving negotiation.

Interest congruence refers to the match between an individual's preferred activities, contexts, and outcomes with the activities, contexts, and outcomes in their environment (Nye et al., 2012). To assess state vocational interests in Study 2 individuals were asked their preferred types of activities in the morning, and then asked to report the degree to which they engaged in these preferred activities during the day that evening. Utilizing current interest inventories contextualized within specific tasks would not have been feasible for this. For instance, asking individuals if they preferred to "Lay brick or tile" (Armstrong et al., 2008) that day, then asking them in the evening if they "Laid brick or tile" would not likely result in an accurate measure of satisfaction of an individual's Realistic interests. Instead, measuring Realistic interests using a more general statement such as if today they'd prefer to "work with their hands" and in the evening asking if they had "worked with their hands" during the day would likely represent a more accurate measurement of Realistic interest congruence than situating it within highly specific tasks.

Based upon the limitations of current vocational interest inventories and the inability to utilize or adapt these measures to measure state vocational interests appropriately to test the research hypotheses and question put forward, a new state vocational interest inventory was developed and validated in Study 1, outlined below.

In order to develop items for the DSIM measure, a deductive method was followed based on the six vocational interests outlined by Holland (1959;1997). Items were written to correspond to each of the six vocational interests outlined by this theory. Specific item content

was derived from Holland's writings (1959; 1997), previous published work on vocational interests (e.g. Nye et al., 2012; Rounds & Su, 2014), existing vocational interest inventories (e.g. Armstrong et al., 2008), and vocational interest information available from O\*NET.

For the DSIM, the ideal length of the measure would be five items per vocational interest resulting in 30 items total, given the space constraints inherent in ESM methodology and potential participant fatigue from a longer measure. Previous authors have recommended four to six items for measuring a construct (See Hinkin, 1998 for a discussion). It has been recommended that twice the number of items needed for a scale should be pilot tested in development, as many items may need to be dropped for the final measure (Hinkin, Tracey, & Enz, 1997). Thus, the goal of item generation was to write 60 items to pilot, with 10 items based upon each vocational interest. See Appendix B for the 60 items generated for pilot testing.

For these items, individuals were prompted with, "People may prefer to engage in different activities. Please indicate how much you would prefer to do the following activities **today**. 'Today, I would prefer to do activities that involve...'" and asked to rate these statements on a 7-point scale. Research general supports the use of a 5 or 7-point scale based on reliability and validity concerns (See Maitland, 2009). Scale point utilized consisted of "Strongly disagree", "Disagree", "Somewhat disagree", "Neither disagree or agree", "Somewhat agree", "Agree", and "Strongly agree". Research indicates that these intervals have roughly equal psychological distance from one another, which if not the case could attenuate relationships (Casper, Edwards, Wallace, Landis, & Fife, 2019).

Individuals were administered the developmental item pool for the DSIM electronically, along with a number of other measures, at a single timepoint to establish appropriate factor structure and convergent validity.

# Sample

433 undergraduate students from Michigan State University's SONA subject pool were administered a survey questionnaire in exchange for course credit. Individuals were given ½ hour of SONA credit for their participation. A copy of the consent form and debriefing form for this study can be found in Appendix C and D, respectively.

In regard to data cleaning, responses were removed based on duplicate participant IDs, completion percentage, attention checks, and time per page. Previous research has indicated that data cleaning based on attention checks and response time can be an effective method for removing low quality data (see Curran, 2016; Huang, Curran, Keeney, Poposki, & DeShon, 2012; Huang, Liu, & Bowling, 2015; Meade & Craig, 2012). If an individual had taken the survey more than once, as indicated by duplicate participant IDs, the response where the participant progressed the farthest in the survey was retained. If participants completed the same proportion of the survey for multiple responses, the most recent response was retained. If an individual had completed less than 10% of the survey, their response was removed. If respondents missed more than one of the three attention checks (e.g. Choose "Like very much" for this statement), their response was removed due to inattentive responding. Finally, responses were removed based on response times for each page of the survey containing questions, with the exception of the page containing demographic questions. Of these seven survey pages, if individuals responded faster than 2 seconds on average to questions on more than two of these pages their responses were removed due to likely inattentive responding. These data cleaning procedures resulting in a final sample of 341 responses, or 78.8% of the original sample.

Within the final sample of individuals, 79.8% (272) of respondents identified as female, 19.9% (68) as male, and less than .01% (1) as non-binary. The average age of participants was

19.4 years old (SD = 1.74). 70.4% (240) of individuals identified as White, 7.9% (27) identified as Black or African American, 7.3% (25) as East Asian, 4.1% (14) as Hispanic or Latinx, 4.1% (14) as South Asian, 2.9% (10) as Multiracial, 2.1% (7) as Other, and 1.2% (4) preferred not to specify racial or ethnic identity. 31.6% (108) of respondents were undergraduate freshman, 34.6% (118) were sophomores, 23.2% (79) juniors, and 10.6% (36) seniors. Fifty-two majors were represented within these data, with the most common being Psychology (29.6%), Human Biology (7.9%), Kinesiology (6.5%), Neuroscience (5.3%), and Advertisement Management (4.1%). 5.6% of individuals identified as "Undecided/Undeclared".

# Measures

A number of measures were administered to determine if the measure in development displayed convergent validity with theoretically and empirically related constructs, along with collecting calibration information for the ESM timing and pilot testing additional measures created for Study 2. A full list of items administered for Study 1 can be found in Appendix E, with the exception of the three response check items interspersed within scales (e.g. Please select "Agree a little" for this statement). In cases when item-level missing data was present, the average of non-missing items from the scale were utilized to represent the construct as recommended by Newman (2014). Within scales, item ordering was randomized across participants.

**Daily Short Interest Measure (DSIM) Developmental Item Pool.** Individuals were administered the full 60 drafted items of the DSIM developmental item pool, which were used to determine the items used for a final 30-item measure. See Appendix B for a full list of items for this measure.

**Brief Public Domain RIASEC Marker Scales** – **Set A.** Individuals were administered the Brief Public Domain RIASEC Marker Scale – Set A (BPDRM) (Armstrong et al., 2008). This scale is a 48-item measure of trait vocational interests based on Holland's (1959; 1997) model of vocational interests. Individuals were presented with activities (e.g. "Direct a play", "Lay brick or tile") and asked the degree to which they would like these tasks on a 5-point Likert scale ("Dislike very much" to "Like very much"). Past research has found acceptable internal consistency for this measure ( $\alpha = .79$  to .94), and strong convergent validity evidence with other measures of vocational interests (O\*NET Occupational Interest Measure: Peterson, Mumford, Borman, Jeanneret, & Fleishman, 1999; Strong Interest Inventory: Harmon, Hansen, Borgen, & Hammer, 1994). Within the current study, the scales demonstrated adequate reliability ( $\alpha = .76$  to .90).

**Trait Personality.** Individuals were administered the Big Five Inventory - 2 (BFI-2; Soto & John, 2017). The BFI-2 is a 60-item trait personality inventory based on the Five Factor Model of personality (see Digman, 1990). Individuals were presented with a number of characteristics (e.g. "Is outgoing, sociable", "Often feels sad") and are asked if they believe these characteristics pertain to themselves on a 5-point scale ("Disagree strongly" to "Agree strongly"). This inventory measures all five factors, as well as three narrower facets within each factor. Research has shown strong convergent validity evidence for this assessment and other personality inventories and generally adequate internal consistency reliability at the factor level ( $\alpha = .83$  to .90) and facet level ( $\alpha = .66$  to .85) (Soto & John, 2017). Within the current study, scales at the factor level displayed adequate reliability ( $\alpha = .74$  to .89),

Additional Developed Measures. Individuals in this study were also administered two additional measures developed for the purpose of this study: Self-assessed variance in state

interests (3 items) and importance of interests (3 items). Self-assessed variance in state interests is focal to Study 2 and importance of interests is included for exploratory purposes and not necessarily integral to the purpose of Study 1. Thus, these measures are discussed in more detail in Study 2. The purpose of including self-assessed variance in state interests and importance of interests measures in the Study 1 data collection was to ensure adequate reliability and interpretability before including in Study 2.

Lay Theories of Interest Variability. In order to assess lay perceptions individuals may have regarding interest variability, respondents were prompted with the following question and provided an open-ended format to respond: "Do you think your preferences for different types of activities change day to day? If so, what do you think may drive this change? If not, why do you think they might not change? Please write a few sentences or more regarding your thoughts." The purpose of collecting lay perceptions of interest change was to assess participant perceptions as to if interests change day-to-day and, if they believe they do change, what may cause this change with the possibility of informing data collection and/or analyses for Study 2.

**Experience Sampling Method Calibrating Questions.** Individuals were asked four questions to inform administration times for the morning and evening ESM surveys in Study 2: "On a typical day, approximately what time do you wake up in the morning? "On a typical day, approximately what time do you first check email?", "On a typical day, approximately what time do you go to bed at night?", "On a typical day, approximately what time do you check email for the last time?". Individuals were given a drop-down menu with options in 30-minute intervals.

Academic Major. Individuals were asked to self-select their academic major from a drop-down list of majors available at MSU. If their major wasn't listed, the option was available to self-report their major.

**Demographics.** Individuals were asked to self-report their demographic information, including age, gender, race/ethnicity, and college standing (e.g. Freshman, Sophomore).

#### Results.

To determine which items to retain for the final DSIM measure for each of Holland's (1959; 1997) six vocational interests, item means, standard deviations, average correlations with other items within each respective interest, median correlations with other items within each respective interest, max correlations with other items within each respective interest, correlations with the BPDRM interests (e.g. Armstrong et al., 2008), EFA factor loadings, and alpha if the item was removed from a scale using all the ten developmental items were considered, along with the theoretical breadth of the items to capture each respective vocational interest. An EFA utilizing principal axis factoring and Promax rotation with all 60 DSIM developmental items was conducted to determine the extent of cross loadings for each item. Principal axis factors was utilized as it is suggested for non-multivariate normal data (Costello & Osborne, 2005) and the 60 items were assessed to be non-multivariate normal (p < .05) based on the Mardia's test, Henze-Zirkler's Test, Doornik-Hansen's test, Royston's test, and the E-statistic from the "mvn" R statistical package (see Korkmax, Goksuluk, & Zarasiz, 2014). Promax rotation was utilized as factors are expected to be correlated and this rotation is popular for oblique rotation methods (Goretzko, Pham, & Bühner, 2019).

In choosing the number of factors to retain for the EFA, multiple criteria were considered. Parallel analyses (utilizing the "paran" R package: Dinno, 2018) suggested 7 factors should be retained. However, theory (e.g. Holland, 1959; 1997) and the Kaiser criterion (Kaiser, 1960) of retaining factors with eigenvalues greater than one suggested retaining six factors. Additionally, BIC relative fit indices were compared for EFAs retaining 1 to 10 factors, with 6

factors displaying the best relative fit. Weighing the evidence, 6 factors were retained. EFA results are reported in Table 1.

Five items were retained for each of the RIASEC dimensions for the final DSIM scales. For Realistic, "Using tools", "Fixing", Building", "Physical activity", and "Working with gadgets" were retained. For Investigative, "Research", "Science", "Analytic thinking", "Intellectual tasks", and "Academics" were retained. For Artistic, "Creativity", "Imagination", "Art", "Creating", and "Creative writing" were retained. For Social, "Helping others", "Working with others", "Guiding others", "Communicating with others", and "Providing services" were retained. For Enterprising, "Persuading others", "Selling", "Negotiation", "Managing others", and "Managing projects" were retained. For Conventional, retained items were "Routine", "Structure", "Systematic work", "Organizing information", and "Repeated tasks". Alpha was calculated for these final DSIM scales. Reliability was adequate for Realistic (.75), Investigative (.78). Artistic (.84), Social (.81), Enterprising (.77), and Conventional (.73) scales.

See Table 2 for N, mean, standard deviation, intercorrelations, and alpha for the final DSIM measures, trait vocational interests, personality, the revised interest importance measure (see below), and self-assessed interest variance.

Confirmatory factor analyses were conducted for each of the DSIM scales individually to determine model fit, with each of the five items loading on the latent RIASEC factor. When model modifications were undertaken to improve model fit based on modification indices, deviations from this model are noted. Listwise deletion was used for CFA analyses, as missing data for items was very small. N for analyses ranged from 340 to 341. For Realistic, model fit for the CFA was adequate ( $X^2(5) = 12.92$ , p = .02, RMSEA = .07, CFI = .98, SRMR = .03). For Investigative, model fit for the CFA was generally acceptable ( $X^2(5) = 28.95$ , p < .00, RMSEA =

.12, CFI = .95, SRMR = .04). However, modification indices suggested that items "Research" and "Science" should be allowed to covary, which seemed reasonable as much of science involves research. In a revised model allowing this modification, model fit was considerably improved ( $X^2(4) = 9.50$ , p = .05, RMSEA = .06, CFI = .99, SRMR = .03). For Artistic, model fit for the CFA was excellent ( $X^2(5) = 8.51$ , p = .13, RMSEA = .05, CFI = 1.00, SRMR = .02). For Social, model fit was generally acceptable ( $X^2(5) = 27.30$ , p < .00, RMSEA = .12, CFI = .96, SRMR = .04). However, modification indices suggested that items "Working with others" and "Communicating with others" should be allowed to covary, which seemed reasonable as item structure was similar and working with others almost invariably involves communicating with others. In the revised model allowing this modification, model fit was considerably improved  $(X^{2}(4) = 11.10, p = .03, RMSEA = .07, CFI = .99, SRMR = .03)$ . For Enterprising, model fit for the CFA was generally poor ( $X^2(5) = 66.66$ , p < ...00, RMSEA = .19, CFI = .87, SRMR = .07). However, modification indices suggested that items "Managing others" and "Managing projects" should be allowed to covary, which seemed reasonable given the common managerial component and that managing one often entails managing the other. In the revised model allowing this modification, model fit was acceptable ( $X^2(4) = 13.33$ , p = .01, RMSEA = .08, CFI = .98, SRMR = .02). For Conventional, model fit for the CFA was adequate  $(X^{2}(4) = 14.44, p =$ .01, RMSEA = .07, CFI = .97, SRMR = .03). CFA plots for these final models can be found in Figure 1 through 6.

Convergent validity of the DSIM was assessed utilizing an established measure of trait RIASEC interests (i.e. BPDRM: Armstrong et al., 2008) and an established trait measure of the Five Factor Model of personality (BFI-2: Soto & John, 2017). Though the BPDRM is a measure of trait vocational interests and the DSIM is a measure of state vocational interests, a correlation would still be expected between respective RIASEC dimensions. In other words, we would expect a relationship between corresponding individual trait interests and state interests. Across the RIASEC dimensions, considerable relationships were found between BPDRM trait and DSIM state Realistic (r = .53, p < .01), Investigative (r = .45, p < .01), Artistic (r = .63, p < .01), Social (r = .51, p < .01), Enterprising (r = .42, p < .01), and Conventional (r = .33, p < .01) interests supporting the convergent validity of the DSIM measure.

In addition to assessing convergent validity of the DSIM with an established trait vocational interest measure, convergent validity was also assessed with an established trait personality measure. Trait personality and trait vocational interests have displayed considerable relationships in past research (e.g. Larson, Rottinghaus, & Borgen, 2002). Though the DSIM is a state vocational interest measure and past research has found a relationship between trait vocational interests and trait personality, we would still expect relationships between trait personality and state vocational interests as assessed by this measure to hold. Table 3 displays relationships based on meta-analytic research (i.e. Larson et al., 2002) between trait vocational interests and trait personality variables, relationships between trait vocational interests (i.e. BPDRM: Armstrong et al., 2008) and trait personality variables (BFI-2: Soto & John, 2017) within the present study, and relationships between state vocational interests assessed utilizing the DSIM and trait personality variables (BFI-2: Soto & John, 2017) within the present study. Of the 30 relationships between state RIASEC dimensions and Five Factor Model personality variables, 14 were statistically significant (p < .05). All of these 14 significant relationships between state vocational interests and trait personality were directionally consistent with metaanalytic relationships found between trait personality and trait vocational interests. Within each of the RIASEC dimensions, the most robust meta-analytic relationship between trait vocational

interests and personality variables were also found and were the relationships of greatest magnitude for state vocational interests and trait personality relationships (e.g. artistic and openness). Taken as a whole, the relationships between state vocational interests and trait personality are generally consistent with what would be expected based on prior empirical research on the relationship between trait vocational interests and trait personality within the literature.

Within the vocational interests literature, Holland's (1959; 1997) hexagonal structure of six vocational interests is a widely used and accepted model of trait interests. However, it is unclear if this model would fit state vocational interests. To test the fit of the Holland hexagonal structure of interests to state vocational interests, a CFA was conducted in which each of the five items for each of the six interests loaded onto their respective interest, and the six latent interest variables were allowed to correlate. Listwise deletion was utilized with missing data, as less than 1% of cases had missing data, resulting in a final sample size of 339 for analyses. Results indicated mixed evidence of fit for this model to the state vocational interests data ( $X^{2}(390) =$ 968.03, p < .01, RMSEA = .07, CFI = .84, SRMR = .07). A second model was fit to the data, allowing the modifications for the CFAs of individual RIASEC interests previously noted. Results indicated a small increase in model fit, but there was still mixed evidence of fit for this model to the state vocational interests data ( $X^2(387) = 904.19$ , p < .01, RMSEA = .06, CFI = .86, SRMR = .07). Based on information from modification indices, four items were allowed to cross load. "Systematic work" was allowed to cross load on Realistic, "Routine" was allowed to cross load on Investigative, "Managing others" was allowed to cross load on Social, and "Managing projects" was allowed to cross load on Conventional. Based on these modifications, the resulting model demonstrated adequate fit  $(X^2(383) = 752.34, p < .01, RMSEA = .05, CFI = .90, SRMR = .06)$ . See Figure 7 for this model plotted.

Based upon the analyses conducted, the DSIM displays adequate reliability, adequate fit for CFAs modeling each individual interest, and reasonable convergent validity with trait vocational interests and personality. The DSIM vocational interest measure fills a research need within study 2 and the interests literature for a short, state vocational interest inventory. Through the results of study 1, reasonable confidence can be established that the DSIM is an adequate measure of state vocational interests.

**Other Measures Under Development.** In addition to developing the DSIM within Study 1, two additional measures were tested: Self-assessed variance in state interests (3 items) and importance of interests (3 items). Alpha for self-assessed variance in state interests was acceptable ( $\alpha = .70$ ). Alpha for importance of interests was low ( $\alpha = .62$ ). Based on the alpha if removed information, the first item within this scale was dropped (i.e. "Being interested in the activities I am involved in is important to me"). The resulting alpha for the revised scale was marginal ( $\alpha = .66$ ). This revised 2-item self-assessed variance in state interests scale is utilized in Study 2.

**Qualitative Results.** Individuals were asked if they thought their preference for different activities changed day-to-day, and if so, what may drive this change. Respondents reported a variety of lay theories as to why their interests may change day-to-day. Some lay theories were too abstract to measure (e.g. maturity), would be difficult to quantify (e.g. schedule requirements), would be too invasive to measure (e.g. money), would have little variance in our sample (e.g. weather), or seemed unlikely (e.g. food). However, three lay theories as to why interests may fluctuate that seemed plausible and reasonable to collect during Study 2 were

participant mood, sleep quality, and subjective perceptions of energy. These three measures will be included in the Study 2 morning survey and will be included in exploratory analyses to determine if they may influence state vocational interests.

#### Study 2

In order to capture within-person fluctuations in vocational interests and other constructs of interest, experience sampling methodology (ESM) was utilized (see Beal, 2015; Gabriel et al., 2019). Individuals were administered short surveys in the morning and evening, which were supplemented with pre- and post-survey information. The ESM portion of the survey lasted one week (i.e. seven days). The timeframe of one week for the ESM portion of this study was chosen to prevent participant fatigue from multiple weeks of surveys, capture natural cyclical variability of tasks and contexts over a natural unit of time (i.e. week), and allow for enough within-person data to be collected to have sufficient power for analyses.

# **Pilot Study**

Prior to Study 2, a pilot study was conducted to ensure adequate functioning for methodology, survey distribution, response rates, and length of the ESM portion of the study. Methodology was identical to Study 2 methodology, but occurred three weeks prior. 51 individuals were involved in this pilot study. As methodology was identical, pilot study participants were folded into Study 2 and included in all analyses.

### Sample

For Study 2, a student sample from Michigan State University's SONA subject pool was utilized. A student sample is commonly used in studies of interests (e.g. Nye et al., 2018a; Tracy & Sodano, 2008). For participating in this research study, individuals were compensated with

SONA research credit. Participants were compensated based on their completion rates for the various surveys (see Appendix F for details of the compensation plan within the Study 2 consent form).

A total of 178 individuals participated in this research study<sup>1</sup>. All 178 individuals completed the pre-survey. Of a possible 1,246 responses for morning and evening surveys, 1,000 responses were received for daily morning surveys (80.3% response rate) and 992 responses were received for daily evening surveys (79.6% response rate). 162 out of 178 individuals completed the post survey (91.0% response rate).

Prior to analyses, responses were removed based on completion rates, attention check items, and response times per page. For the pre-survey, individuals were excluded if they completed less than 10% of the total survey, missed two or more of the five attention check items (e.g. Choose "Like very much" for this statement"), or responded in under two seconds per item for four or more of the nine pages with scales (excluding the demographic page). These criteria resulted in a final usable sample of 176 pre-survey datapoints (98.9% of initial cases).

For morning surveys, individuals were excluded if they completed less than 10% of the survey, missed one or more of the two attention checks, or responded in under 1.5 seconds per item for two or more of the four pages of scales. These criteria resulted in a final usable sample of 953 usable morning datapoints (95.3% of initial cases).

For evening surveys, individuals were excluded if they completed less than 10% of the survey, missed one or more of the two attention checks, or responded in under 1.5 seconds per item for three or more of the five pages of scales without display logic (i.e. all individuals

<sup>&</sup>lt;sup>1</sup> Note individuals were not included in this count if they enrolled for the study, but did not attend the first in-person session required for participation in the study.

responded to). These criteria resulted in a final usable sample of 869 usable evening datapoints (87.6% of initial cases).

For the post-survey, individuals were excluded if they completed less than 10% of the survey, missed two or more of the four attention checks, or responded in under 2 seconds per item for three or more of the six pages of scales. These criteria resulted in a final usable sample of 136 usable post-survey datapoints (84.0% of initial cases).

For the 178-individual sample, demographic information was available for 176 individuals<sup>2</sup>. For these individuals, gender information was not specified for 1.7% (3) individuals, 18.2% (32) individuals identified as male, 79.5% (140) as female, and less than 1% (1) of individuals identified as non-binary. Of these 176 individuals, 15 (8.5%) individuals selfidentified as Black or African American, 19 (10.8%) individuals identified as East Asian, 13 (7.4%) individuals identified as Hispanic or Latinx, 7 (4.0%) individuals identified as multiracial, 4 (2.3%) individuals identified as South Asian, 110 (62.5%) individuals identified as White, 6 (3.4%) individuals identified as other, and 2 (1.1%) individuals declined to specify race/ethnicity information. The average age of these individuals was 19.41 years old (SD = 2.93). For these individuals thirty-seven majors were reported, with the highest numbers selfidentifying as majoring in Psychology (43, 24.4%), Human Biology (15, 8.5%), Nursing (15, 8.5%), and Neuroscience (13, 7.4%). 11 individuals (6.3%) identified as undecided or undeclared. Of these 176 individuals, 75 (42.6%) individuals reported being currently employed.

<sup>&</sup>lt;sup>2</sup> For individuals not passing data quality checks for the pre-survey, demographic information is not reported as information can not be determined as reliable. Demographic information is reported for the remaining 176 individuals.

# Measures.

Within the study, individuals were administered four different surveys: A pre-survey, daily morning surveys, daily evening surveys, and a post-survey.

The pre-survey was administered the week prior to the ESM portion of the study during an in-person session. A short 5 to 10-minute presentation was given during this in-person session outlining the study and providing instructions, such as incentive structure for SONA credits, timing of surveys, and study purpose, along with an opportunity for participants to ask questions. Individuals were then given the link to complete the pre-survey. Individuals must have attended this session to be considered for inclusion in the rest of the study. In other words, individuals who do not attend this initial session were not invited to complete the ESM portion of the study or the post-survey.

Daily surveys were sent via email in the morning and evening to participants and responded to electronically. Morning surveys were distributed at 8:00am, a reminder was sent at 11:00am to those who had not yet responded, and the survey was available to respond to until 1:00pm the same day. Evening surveys were distributed at 6:00pm, a reminder was sent at 9:00PM to those who had not yet responded, and the survey was available to respond to until midnight.

The post-survey was sent electronically to participants the week after the ESM portion of the study on the following Monday at 8:00am. A reminder email was sent if individuals had not responded to this post-survey as of Tuesday at 12:00pm. Individuals had until Wednesday at midnight to complete the final survey.

Below, measures within each of these surveys are outlined. See Appendix F for the consent form for Study 2, completed during the pre-survey. Items for each survey are available in Appendices G through J, excluding attention check items. See Appendix K for the Study 2 debriefing form.

**Pre-Survey.** See Appendix G for a full list of items composing each scale administered during the pre-survey, except for attention check items.

*Survey Identifiers.* In order to link surveys for individuals across days, individuals were asked to report their first name, last name, and MSU email address.

*Trait Vocational Interests.* Trait vocational interests were measured utilizing both the Brief Public Domain RIASEC Marker scale (Armstrong et al. 2008) and a trait version of the Daily Short Interest Measures (DSIM), created in Study 1.

*Brief Public Domain RIASEC Marker- Set A*. See previous description from Study 1. In Study 2, this measure demonstrated adequate reliability within the pre-survey ( $\alpha = .78$  to .89)

*Daily Short Interest Measure – Trait Version.* This scale was created based on results from Study 1 and consisted of 30 items measuring Holland's (1959; 1997) six vocational interests. Instead of asking individuals to indicate their daily preference individuals were asked to report their general preference, or trait vocational interests. More specifically individuals taking the pre-survey were asked to "Please indicate your preference for the following activities in general, not just for today. In general, to what extent would you like to engage in the following tasks?" This modified measure demonstrated adequate reliability ( $\alpha = .70$  to .85), except for Conventional which demonstrated poor reliability for the pre-survey ( $\alpha = .54$ ).

*Trait Personality.* See previous description from Study 1. These trait measures demonstrated adequate reliability in the pre-survey ( $\alpha = .75$  to .90)

*Curiosity.* Trait curiosity was measured utilizing the Curiosity and Exploration Inventory – II, which is a ten-item measure of curiosity and its facets (Kashdan et al., 2009). Trait curiosity as measured by this inventory demonstrated adequate reliability ( $\alpha = .85$ , Study 3) and strong convergent validity with related constructs (Kashdan et al., 2009) in previous research. In the current study, the inventory demonstrated adequate reliability ( $\alpha = .88$ )

*Trait Grit.* Grit and its subscales of consistency of interests and perseverance of effort was measured utilizing the twelve-item Grit Scale (Duckworth et al., 2007). Adequate internal consistency reliability has been found for the Grit Scale overall ( $\alpha = .85$ ), and for the consistency of interests ( $\alpha = .84$ ) facet (Duckworth et al., 2007) in previous research. In the pre-survey, adequate reliability was found for Grit ( $\alpha = .79$ ) and consistency of interests ( $\alpha = .80$ )

*Implicit Interest Theory*. An individual's implicit theory of interests was measured utilizing the four-item scale from O'Keefe et al. (2018) adapted from the Theory-of-Intelligence scale (Dweck, 1999). An example item is, "You can be exposed to new things, but your core interests won't really change." Individuals responded to these items on a six-point scale ("Strongly disagree" to "Strongly agree"). This measure demonstrated adequate internal consistency reliability in previous research (Study 1:  $\alpha = .77$ ) (O'Keefe et al., 2018). For the presurvey, this measure demonstrated adequate reliability ( $\alpha = .81$ )

*Self-Assessed Variance in State Interests.* Self-assessed variance in state interests was assessed utilizing a measure created for the present study. Individuals were asked the degree to which they agree or disagree with several statements on a seven-point scale ("Strongly agree" to

"Strongly disagree"): "The activities I'm interested in change day to day", "From day to day I enjoy doing different activities", and "I generally prefer to do the same activities every day" (reverse coded). Within the pre-survey, this measure demonstrated marginal reliability ( $\alpha = .69$ ).

*Vocational Identity*. Vocational identity was measured utilizing the 20-item Vocational Identity Measure (Gupta, Chong, & Leong, 2015). This inventory was developed to measure "how aware individuals are of their stable career goals, interests, and abilities" (Gupta et al., 2015, pp. 79). This scale has demonstrated considerable convergent validity and excellent reliability in previous research ( $\alpha = .97$ ) (Gupta et al., 2015). Individuals were asked to indicate the extent to which they agreed or disagreed with statements on a 5-point scale ("Strongly disagree" to "Strongly agree"). For the pre-this measure demonstrated excellent reliability ( $\alpha = .97$ )

*Trait Affect.* Trait affect was measured utilizing the Brief Measure of Positive and Negative Affect Scales (PANAS) which is a twenty-item measure of both positive and negative affectivity (Watson, Clark, & Tellegan, 1988). Individuals were presented with a number of mood states (e.g. "Distressed", "Inspired") and asked to identify how much they have felt that way over a specified time interval (e.g. In general, yearly, past few days, today). For the presurvey, the dispositional (i.e. in general) form was used. This form has demonstrated adequate internal consistency reliability (positive affect:  $\alpha = .88$ ; negative affect:  $\alpha = .87$ ). This scale in general has also shown considerable convergent validity with other measures of depression, distress, and affect (Watson et al., 1988). Within the pre-survey, both positive ( $\alpha = .90$ ) and negative ( $\alpha = .85$ ) trait affect scales demonstrated adequate reliability.

*Importance of Interests.* An individual's self-described importance of their interests were measured by two items developed for this research project. These items are: "I must be interested

in something for me to do it" and "I don't take part in activities that don't interest me". These items were rated on a seven-point scale, from "Strongly disagree" to "Strongly agree". Within the pre-survey, this measure demonstrated marginal reliability ( $\alpha = .66$ ).

Academic Major. See previous description from Study 1.

*Demographics.* See previous description. Two additional demographic questions were added to those collected from Study 1 participants, asking students about their employment status and number of hours worked per week, if employed.

**Daily Survey – Morning.** See Appendix H for a full list of items composing each scale administered during the daily morning surveys, excluding attention checks. Within scales, the order of items was randomized across respondents and days.

Survey Identifiers. See previous description.

State Vocational Interests. State vocational interests were measured utilizing the 30-item DSIM measure, based on the measure developed in Study 1. Individuals was asked, "People may prefer to engage in different activities. Please indicate how much you would prefer to do the following activities today. 'Today, I prefer activities that involve'" to assessment state vocational interests. These scales demonstrated adequate reliability ( $\alpha = .82$  to .89).

State Depletion. State depletion was measured utilizing a five-item subset of items from Twenge and colleagues (2004), which has been used in previous ESM research (Lanaj, Johnson, & Barnes, 2014). This reduced scale has demonstrated adequate reliability in previous research ( $\alpha = .91$ ) (Lanaj et al., 2014). Individuals were asked to indicate the extent to which they felt like the statements given on a 5-point scale ("Very slightly or not at all" to "Very much"). For the morning surveys, this measure demonstrated adequate reliability ( $\alpha = .92$ ).

Sleep Quality/Quantity. Sleep quality and sleep quantity were measured using a reduced set of modified items from the Pittsburgh Sleep Quality Index (Buysse, Reynolds, Monk, Berman, & Kupfer, 1989). For sleep quality, individuals were prompted with, "Last night, how would you rate your sleep overall?" and asked to respond on a four-point scale ranging from "Very bad" to "Very good". Sleep quantity was measured by prompting individuals with, "How many hours of actual sleep did you get last night?" paired with a drop box menu with options ranging from "Less than 1 hour" to "10 or more hours" in half hour increments.

State Affect. State affect was measured utilizing a modified version of the PANAS (Watson et al., 1988). This scale was reduced to 10 items, with 5 for both positive and negative affect, based on published factor analytic information (Watson et al., 1988) and modified to measure state affect. The full daily PANAS has shown adequate internal consistency reliability in past research (Positive affect:  $\alpha = .90$ , Negative affect:  $\alpha = .87$ ). For the morning surveys, this measure demonstrated adequate reliability (Positive affect:  $\alpha = .90$ , Negative affect:  $\alpha = .79$ ).

**Daily Survey – Evening.** See Appendix I for a full list of items composing each scale administered during the daily evening survey, excluding attention checks. Within scales, the order of items was randomized across respondents and days, with the exception of situational interests.

Survey Identifiers. See previous description.

*State Affect*. State affect was measured utilizing the reduced version of the PANAS (Watson et al., 1988) utilized within the morning survey, modified to measure affect over the previous day. The full daily PANAS has shown adequate internal consistency reliability in past

research (Positive affect:  $\alpha = .90$ , Negative affect:  $\alpha = .87$ ). Within the evening surveys, these measures demonstrated adequate reliability (Positive affect:  $\alpha = .88$ , Negative affect:  $\alpha = .82$ ).

*Daily Activities.* Daily activities were measured utilizing a modified version of the 30 item DSIM, asking what activities individuals took part in during their day instead of their preferences. More specifically, instead of asking for daily preferences individuals were prompted with, "Today, I did activities involving...". A score for how much an individual performed activities within each interest was created by averaging the scores across the items corresponding to those DSIM scales. Individuals responded to this measure utilizing a seven-point scale, ranging from "Never" to "Constantly". Reliability is not reported for these scales as they are observed counts (i.e. how much of an activity did you do today?) as opposed to representing a latent characteristic.

State Perseverance. State perseverance was measured using a modified version of the perseverance of effort subscale of the Grit Scale (Duckworth et al., 2007) to measure daily perseverance. For instance, instead of "I have overcome setbacks to conquer an important challenge", a modified item read, "Today, I overcame setbacks to conquer an important challenge. Five of the six original items were modified, except for "I have achieved a goal that took years of work" as it does not lend itself to be modified easily. For the evening surveys, this measure demonstrated adequate reliability ( $\alpha = .89$ )

*Situational Interest.* Situational interest in each of the RIASEC domains were measured utilizing items derived from Su and colleagues' (2019) conceptualization of situational interest as affective reactions, cognitive appraisal of value or valence, and cognitive appraisal of identification. Three items were written for each vocational interest, with one item measuring each of these theoretical components of situational interests within the TSID model (Su et al.,

2019), for a total of 18 items. Individuals were asked if they engaged in activities corresponding to a RIASEC interest today based on the DSIM items (e.g. Today, did you engage in activities that involved **using tools, fixing, building, physical activity, or working with gadgets**?) and asked to indicate Yes or No. Individuals were only asked for situational interests for RIASEC interests that they reported engaging in during that day. For example, if an individual indicated they did not engage in any investigative interests that day they would not be asked for their situational interests in that domain.

Individuals were asked to reflect on the final items from the DSIM pertaining to a specific vocational interest, then asked to rate their experience of these three components of situational interests within that category of activities that day. For instance, the prompt for enterprising interests stated, "Please reflect on the activities you did today that involved **persuading others, selling, negotiation, managing others, or managing projects.** While engaging in these activities, to what extent did you feel..." Individuals were then prompted with three questions answered on a seven-point scale ranging from "Not at all" to "Very Often". These questions were, "A sense of engagement with these activities (affective reactions), "like these activities were valuable" (cognitive appraisal of value or valence), and "like you identified with these activities" (cognitive appraisal of identification). Within the evening surveys, these scales demonstrated adequate reliability ( $\alpha = .86$  to .91).

State Engagement. State engagement was measured utilizing a modified state adaption of the Utrecht Work Engagement Scale (Breevaart, Bakker, Demerouti, & Hetland, 2012). Though the original empirical research was completed on the Dutch version of the scale (English translation was provided), this work demonstrated adequate internal consistency reliability ( $\alpha$  = .93). Only six of the nine items were retained for the present study in order to accommodate

space constraints, based on factor analytic evidence in the published literature (Breevaart et al., 2012) and equal coverage of the three facets of engagement. Items were adapted from a work focus to fit the context of the current research project when needed (e.g. "Today I was immersed in my activities", "Today, I was enthusiastic about my activities"). Items were assessed on a seven-point scale ranging from "Strongly disagree: to "Strongly agree". Within the evening surveys, this measure demonstrated adequate reliability ( $\alpha = .93$ ).

*State Motivation.* State intrinsic motivation was measured utilizing an adapted version of the intrinsic motivation components of the Situational Motivation Scale (Guay, Vallerand, & Blanchard, 2000). This inventory measures various forms of motivation within Self-Determination Theory (Deci & Ryan, 2000). However, only the four-item measure of intrinsic motivation was utilized in the present study. Past research with this scale has demonstrated adequate internal consistency reliability (Study 1:  $\alpha = .95$ ) and convergent validity with theoretically related constructs (Guay et al., 2000). The stem was modified to fit the design of the study (i.e. "How well do the statements below describe the reasons why you engaged in the activities you did today?"), as well as the items (e.g. "Because the activities were fun"). Within the evening surveys, this measure demonstrated excellent reliability ( $\alpha = .95$ ).

**Post-Survey.** See Appendix J for a full list of items composing each scale administered during the post-survey. Within scales, the order of items was randomized across respondents.

Survey Identifiers. See previous description.

*Trait Vocational Interests.* Both the trait vocational interest inventories administered during the pre-survey were administered. See previous description. Within the post survey, both

the trait DSIM scales ( $\alpha$  = .81 to .89) and BPDRM scales ( $\alpha$  = .81 to .88) demonstrated adequate reliability.

*Trait Personality.* See previous description of this scale. Trait scales demonstrated adequate reliability in the post-survey ( $\alpha = .80$  to .88).

*Week Affectivity.* Positive and negative affectivity from the past week was assessed with the same modified 10-item version of the PANAS (Watson et al., 1988) from the morning and evening ESM surveys. However, the inventory asked about affect during the previous week as opposed to the preceding day. Within the post-survey, this measure demonstrated adequate reliability (Positive Affect  $\alpha = .87$ , Negative Affect  $\alpha = .79$ ).

*Academic Satisfaction.* Academic satisfaction was measured utilizing the five-item academic satisfaction scale from Schmitt and colleagues (2008). This scale has demonstrated adequate internal consistency reliability in past research ( $\alpha = .81$ ) and was administered utilizing a five-point scale ("Strongly disagree" to "Strongly agree"). Within the post-survey, this measure demonstrated adequate reliability ( $\alpha = .84$ ).

**Dropout Intentions**. Intentions to dropout of Michigan State University were measured utilizing six items from previous research (Nye, Prasad, & Rounds, 2019) adapted from Drzakowski, Friede, Imus, Kim, and Shivpuri (2005). Past research has demonstrated adequate internal consistency reliability ( $\alpha = .87$ ) and convergent validity with theoretically related constructs (Nye et al., 2019). Individuals were asked to respond to items on a five-point scale ("Strongly disagree" to "Strongly agree"). Within the post-survey, this measure demonstrated adequate reliability ( $\alpha = .79$ ).

## Results

See Tables 4 and 5 for descriptive information, intercorrelations, and reliability for between person and within-person variables, respectively. Within this section and tables, T is utilized to denote temporality of variables. T represents time, where T+1 represents the following day, T+2 represents two days after T, etc.

Variability in State Vocational Interests (H1a – H1c). Hypotheses 1a through 1c pertain to variability in state vocational interests, referring to different forms of variability. Hypothesis 1a states, "State vocational interests will display day-to-day absolute variability." referring to variability in observed scores (Tracey & Sodano, 2008). In order to assess absolute variability, standard deviations were calculated for individuals across measurements of state vocational interests. There were seven possible instances in which state vocational interests were reported (i.e. within morning surveys), however there were many cases in which individuals had missed one or more of these surveys and thus did not have all seven datapoints available. In calculating standard deviations for state vocational interests, analyses were limited to individuals in which four or more state vocational interest scores were available to ensure representative standard deviations. This restriction left 148 out of a possible 178 cases available for absolute variability analyses. See Table 6 for average standard deviations for all six RIASEC state interests across individuals, median standard deviation, the standard deviation for state interests' standard deviation across individuals, and the range across the sample, as well as this information averaged across the six interests. Averaged across the six interests, the mean standard deviation for individuals was .77 on a seven-point scale day-to-day, with a median of .71. The standard deviation of this averaged variability across individuals was .40, with a range in the sample from .10 to 2.10.

It is difficult to determine what may be considered "enough" absolute variability in state vocational interests to warrant support or a lack of support for hypothesis 1a. Past research in state individual differences has compared variability in newly introduced state concepts to variability in established state constructs as evidence of absolute variability (e.g. Fleeson, 2001). Past research has found absolute variability of .60 to .84 for FFM personality states on a seven-point Likert scale (Study 2: Fleeson, 2001), similar in magnitude for absolute variability for state vocational interests (.66 to .84 across all six state RIASEC dimensions). Based on these results and comparable magnitude of absolute variability in the more established state personality literature (Fleeson, 2001; 2017), hypothesis 1a was supported. There were no clear differences across the six RIASEC state interests in terms of variability.

Hypothesis 1b states, "State vocational interests will display day-to-day relative variability." referring to changes in ranking of individuals over time in reference to one another (Tracey & Sodano, 2008). This hypothesis was tested utilizing multilevel regression, accounting for nesting within individuals, with each next day state vocational interest (T+1) regressed on the same state interest the day prior (T). Level 2 N (individual) was 165 for analyses, with 704 to 705 cases at level 1 (within-individual). See Tables 7 through 12 for results of these analyses. For all six state vocational interests, the interest the day prior (T) was a significant (p < .01) predictor of the same state interest the next day (T+1) (Realistic:  $\beta = .78$ , Investigative:  $\beta = .69$ , Artistic:  $\beta = .79$ , Social:  $\beta = .68$ , Enterprising:  $\beta = .68$ , Conventional:  $\beta = .71$ ). Based on these analyses, approximately 46.2% to 62.4% of the variance in an observed state vocational interest can be explained by the individual's observed state vocational interest the day prior.

Similar to absolute variability, it is difficult to establish how much relative variability is "enough" to warrant support or a lack of support for hypothesis 1b. Comparisons can also be made between relative variability found for state vocational interests and established state constructs. However, relative stability in the state individual differences literature frequently compares randomly selected timepoints to one another within individuals which may display more variability than consecutive timepoints (e.g. Fleeson, 2001). Alternatively, it may be useful to compare to trait individual differences research to gauge relative variability. Low and colleagues (2005) examined changes in trait vocational interests across age periods and found meta-analytic test-retest stability coefficients between  $\rho = .51$  to .77. Though correcting for measurement artifacts likely increased these coefficients, these stability coefficients are comparable to those found for state vocational interests in the present study ( $\beta = .68$  to .79). The authors conclude that trait vocational interests were, "moderately to highly stable over the life course." (pp. 732), "...but stability estimates were not so high as to warrant the conclusion that no change occurred in adulthood." (pp. 727). Based on the results and comparison to previous research as a benchmark, it may be similarly concluded that relative variability for state vocational interests is low, but existent. Thus, hypothesis 1b is supported, with the caveat of limited variability.

Hypothesis 1c states, "State vocational interests will display day-to-day rank order variability" referring to change in the ranking of interests relative to other others within individuals (Allemand et al., 2013; Tracey & Sodano, 2008). To test this hypothesis, state vocational interests within individuals were ranked from highest to lowest each day. For example, if Artistic interest is the highest RIASEC interest within an individual one day then it would receive a rank of 1, if Conventional was second highest within the same day it would receive the rank of 2, etc. Analyses were conducted utilizing Spearman rank-order correlations, or sometimes Spearman's Rho. Multilevel analyses were not utilized as there is no effect of

nesting within individuals. Within each individual for each day, state interests are ranked from 1 to 7 and any level 2 effect of the individual on state vocational interests would have been removed. Multiple Spearman correlations were conducted to evaluate hypothesis 1c. Ranked state vocational interests from T were correlated with ranked state vocational interests from T+1, simultaneously assessing the rank order variability across all days in the study. 703 cases of matched T and T+1 state vocational interests ranked within individual within day were available for analyses. See Table 13 for the results of Spearman rank order correlations of ranked state interests (T) and next day ranked state interests (T+1). For each state interest, this correlation was significant (Realistic:  $\rho = .46$ , Investigative:  $\rho = .53$ , Artistic:  $\rho = .62$ , Social:  $\rho = .44$ , Enterprising:  $\rho = .46$ , Conventional:  $\rho = .48$ ). Spearman correlations were also conducted individuals between ranked state vocational interests from day 1 to day 2, day 2 to day 3, etc. and the average Spearman correlation across these analyses were computed. See Table 14 for N and results of these analyses for each comparison. The averaged Spearman correlations across days ranged from  $\rho = .44$  to .62, and were identical to the previous simultaneous results.

Again, it is difficult to know exactly how much rank order variability is "enough" to warrant support or a lack of support for hypothesis 1c, but comparison with past research is helpful for benchmarking purposes. Roberts and DelVecchio (2000), quantitatively reviewing rank-order consistency of personality, found meta-analytic estimates of consistency ranging from .35 to .75<sup>3</sup>. The authors conclude that, "…traits are quite consistent over the life course.", but even at peak consistency the level is not high enough to, "…infer a complete lack of change in personality traits." (pp. 20). As Spearman correlations found in the current study are comparable,

<sup>&</sup>lt;sup>3</sup> Numbers represent population meta-analytic correlations

it would be reasonable to conclude as well that some day-to-day consistency occurs but changes day-to-day occur as well. Thus, hypothesis 1c is supported, with the caveat of limited variability.

*Supplementary Analyses.* In addition to analyses testing hypotheses pertaining to state vocational interest variability, additional exploratory analyses were conducted to further explore this variability. ICC values were calculated to determine the amount of variance in within-person state vocational interests that can be attributed to individuals and the reliability of these ratings within-individuals. N for analyses was 178 for level 2 (individual), and ranged from 949 to 951 for level 1 (within-individual). See Table 15 for ICC(1) and ICC(2) values for nesting of state vocational interests within individuals. Based on ICC(1) values, between 51% to 65% of variance in observed state interests can be explained by nesting within the individual. ICC(2) values were high (see Fleiss, 1986) ranging from .85 to .91, indicating high stability (i.e. reliability) in state vocational interest ratings day-to-day within individuals.

The issue could be raised that any variability in vocational state interest observed scores could be attributable to measurement error, as opposed to true variability in state vocational interests. To account for this possibility, multilevel structural equation modeling with nesting of responses within individuals was utilized to account for measurement error and find the relationship between latent state interests (T) and next day latent state interests (T+1). Latent state vocational interest variables for T and T+1 were created utilizing the five DSIM items for each interest from each respective measurement occasion. Latent state vocational interests at T were allowed to correlate with the same latent state vocational interests at T+1, with separate analyses conducted for each RIASEC dimension. Residuals for each item at T were allowed to correlate with the same item at T+1. Level 2 N for analyses was 165, and 703 to 704 level 1 cases were available where state vocational interests at T were matched to state

vocational interests at T+1. Model fit statistics for these analyses were excellent. See Table 16 for the results of these analyses and model fit statistics. See Figures 8 through 13 for plots of these models. For all state vocational interests, latent state interests at T were a significant predictor of latent state interests at T+1 (p < .01) (Realistic:  $\beta = .86$ , Investigative:  $\beta = .71$ , Artistic:  $\beta = .85$ , Social:  $\beta = .74$ , Enterprising:  $\beta = .81$ , Conventional:  $\beta = .79$ ). Based on the results of these analyses, approximately 50.4% to 74.0% of latent state vocational interest in a domain can be explained by the previous day's latent state vocational interest in that domain.

Hypotheses were focused on day-to-day variability in state vocational interests; however, the question can be raised of how stable state vocational interests are beyond this timeframe. Supplemental analyses were conducted to explore relative and rank order stability of state vocational interests across seven days, the longest period available for testing state vocational interest stability in this study. State vocational interests (T) were correlated with state vocational interests six days later (T+6). 89 to 91 cases were available where state vocational interests at T could be matched to state vocational interests at T+6. See Table 17 for results of these analyses. For all state RIASEC vocational interests, the correlations between interests at T and T+6 were significant (Realistic: r = .44, Investigative: r = .37, Artistic: r = .44, Social: r = .35, Enterprising: r = .25, Conventional: r = .48). Spearman rank order correlations were also conducted for interests at T and T+6 in a manner similar to hypotheses 1b. N for these analyses was 89. Results for these analyses can be found in Table 18. For all state RIASEC vocational interests, the Spearman rank order correlations between interests at T and T+6 were significant (p < .05) (Realistic:  $\rho = .26$ , Investigative:  $\rho = .31$ , Artistic:  $\rho = .58$ , Social:  $\rho = .26$ , Enterprising:  $\rho = .25$ , Conventional:  $\rho = .42$ ). Across all RIASEC state vocational interests, there was greater variability from T to T+6 than T to T+1.

*Summary.* Hypotheses 1a through 1c pertained to variability in state vocational interests, in order to determine if considerable variability exists day-to-day. Based on the results outlined, all six RIASEC state vocational interests display some variability day-to-day. Hypotheses 1 through 1c were supported. State vocational interests demonstrate absolute variability, with a standard deviation of nearly 1 scale point a day (on a seven-point scale) and comparable to more established state constructs (e.g. Fleeson, 2001). State vocational interests demonstrate relative variability, though based on benchmarks established in previous published research this relative variability is low. State vocational interests also demonstrate a lack of rank order stability, with less rank order stability being found day-to-day than relative stability. However, again this rank order stability may be considered low utilizing previously published research as benchmarks. Based on supplemental analyses, as the timeframe increases stability tends to decrease.

Between-Person Predictors of State Vocational Interest Variability (H2a – H2c &

**RQ1).** Hypotheses 2a though 2c and research question 1 pertain to predictors of individual differences in variability of state vocational interests. Based on the results of hypotheses 1a through 1c and supplementary analyses, state vocational interests vary day-to-day and there are individual differences in the degree to which these interests vary (see standard deviation and range in Table 7). For these analyses, variability was operationalized as the standard deviation across rating occasions for state vocational interests within a RIASEC domain. Analyses were conducted utilizing linear regression, with standard deviations of state vocational interests regressed onto each individual difference predictor, the individual's mean level of the state vocational interest, and squared mean level of the state vocational interest. The individual's mean level of the state vocational interest and squared mean level of the state vocational interest was controlled for as previous analyses have demonstrated that failing to control for these

variables when testing associations between individual differences and density distributions can lead to misleading results (e.g. Jones, Brown, Serfass, & Sherman, 2017). Note that although correlations between potential predictors of variability and variability for each individual RIASEC state vocational interest are reported in Table 19, results will only be interpreted in regards to the averaged variability across the six RIASEC domains for individuals to avoid false positives from a large number of correlations. For these analyses, the averaged standard deviation across all six RIASEC dimensions were regressed onto the individual difference, as well as the averaged and squared average level of state vocational interests averaged across all six RIASEC dimensions. Analyses were again limited to individuals who had four or more state vocational interest measurement occasions as to ensure representativeness of means and standard deviations. N for these analyses was 146. See Table 19 for results of analyses.

Hypothesis 2a states, "Trait openness to experience will be positively related to variability in state vocational interests, where a higher degree of openness to experience will be related to greater variability in state vocational interests." The relationship between trait openness to experience and averaged variability in state vocational interests was positive and significant ( $\beta = .16$ , p < .01). Thus, hypothesis 2a was supported.

Hypothesis 2b states, "Trait curiosity will be positively related to variability in state vocational interests, where a higher degree of curiosity will be related to greater variability in state vocational interests." The relationship between curiosity and averaged variability in state vocational interests was positive and significant ( $\beta = .33$ , p < .01). Thus, hypothesis 2b was supported.

Hypothesis 2c states, "A growth theory of interests will be positively related to variability in state vocational interests, where a high degree of growth theory endorsement will be related to

greater variability in state vocational interests." The relationship between growth theory of interests and averaged variability in state vocational interests was not significant ( $\beta = .06, p = .39$ ). Thus, hypothesis 2c was not supported.

Research question 1 states, "Will self-reported level of variability regarding state vocational interests converge with actual degree of state vocational interest variability?". The relationship between self-reported variability in state vocational interests and averaged variability in state vocational interests was not significant ( $\beta = .05$ , p = .49). This suggests that individuals are unable to accurately report the degree to which their interests vary.

*Supplemental Analyses.* In addition to testing the relationships between the hypothesized predictors and averaged state vocational interest variability, additional potential predictors were tested as well. These included trait conscientiousness, trait extraversion, trait agreeableness, trait negative emotionality, grit, consistency of interests, and vocational identity Analyses were conducted between these variables and averaged state vocational interest variability in the same manner as for hypothesized effects. These analyses were again limited to individuals with four or more state vocational interest measurement occasions available and the sample size for these analyses was 146. Of these variables, significant relationships were found between averaged state variability and trait conscientiousness ( $\beta = .15$ , p = .04), grit ( $\beta = .19$ , p = .01), and vocational identity ( $\beta = .16$ , p = .03). Note these results should be interpreted with caution as they were non-hypothesized and due to the number of analyses conducted.

Incremental validity of the four focal variables (openness to experience, curiosity, implicit theory of interests, and self-assessed state vocational interest variability) and the three exploratory variables demonstrating significant relationships with averaged state variability (vocational identity, grit, and conscientiousness), controlling for mean averaged state vocational

interests and squared mean averaged state vocational interests, was assessed utilizing a regression with all seven of these variables predicting average state vocational interest variability. These analyses were again limited to individuals with four or more state vocational interest measurement occasions available and the sample size for this analysis was 146. See Table 20 for the results of this analysis. Only curiosity demonstrated prediction of averaged state interest variability ( $\beta = .29$ , p < .01).

*Summary*. Of the four focal variables for analyses, curiosity and openness to experience demonstrated a significant relationship with averaged state vocational interest variability. Of the variables tested in exploratory analyses, trait conscientiousness, grit, and vocational identity were significant predictors. However, when all these variables were included in a regression to test incremental prediction, only curiosity was a significant predictor.

**Predictive Validity of State Vocational Interest Congruence (H3a – H3e).** Hypotheses 3a through 3e pertain to the predictive validity of state vocational interest congruence in predicting various theoretically linked outcomes. For these hypotheses, multilevel regressions were utilized accounting for nesting of responses within individuals. Fit was operationalized utilizing polynomial regression (Edwards, 1993), which has been put forward as an alternative to traditional fit indices and as overcoming a variety of their shortcomings (see Edwards, 1993 for a discussion). Polynomial regression has demonstrated considerable promise for operationalizing fit in previous vocational interests research (e.g. Nye et al., 2018a).

Separate analyses were conducted for each RIASEC dimension. Terms were added into the regression in three steps. The first step included individuals' state vocational interest. The second step included the state vocational interest and matching daily activities for that interest domain. The final step was the full polynomial regression model, including the state vocational interest, a squared term for the state vocational interest, the matching daily activities, a squared term for the daily activities, and an interaction between the state vocational interest and corresponding daily activities. Main effects were grand mean centered and standardized, and these centered and scaled variables were used to calculate the squared and interaction terms in the model.

Since multilevel analyses were utilized, variance explained by the model corresponds to both random (i.e. person) and fixed (i.e. within-person) effects. All terms in the polynomial regression model representing congruence are within-person variables. In other words, congruence is represented in these models by the within-person components of the multilevel regression. Due to this, the significance of congruence in predicting outcomes must be evaluated based on within-person effects, separating out the variance explained by between person effects. To separate variance explained by between and within-person effects, the model fit for the full polynomial regression models with within and between person effects were compared to model fit for a null model with only between person effects. A significant increase in fit for a model predicting outcomes with both between individual and within-individual (i.e. congruence) relative to a null model consisting of solely between person effects would indicate significant effects of congruence on the outcome. To assess if the polynomial model (i.e. between and within-person effects) fits the data better than a null model (i.e. only between person effects), likelihood ratio tests were utilized<sup>4</sup>. This test compares nested models and determines if one model fits the data better than another based on log-likelihood fit information, differences in degrees of freedom, and a Chi-squared distribution. More information regarding this test can be

<sup>&</sup>lt;sup>4</sup> Analyses were conducted utilizing the restricted maximum likelihood (REML) estimation. However, to compare nested models analyses were rerun utilizing maximum likelihood (ML) estimation, as REML comparison with different fixed effects are not meaningful. However, the pattern of significance and non-significance were identical utilizing REML and ML estimation for all polynomial analyses for hypotheses 3a through 3e.

found in Bliese (2016). Variance explained by within-person effects (i.e. congruence) is represented by marginal R<sup>2</sup>, which represents the variance explain by fixed effects in the model (i.e. within-person effects) only (see Johnson, 2014; Nakagawa & Schielzeth, 2013).

In addition to postulating a significant relationship between congruence and outcomes, hypotheses 3a through 3e hypothesizes a specific form of congruence. More specifically, these hypotheses suggest that when individuals' preferences better match their activities (i.e. greater degree of congruence), outcomes will be higher. To test this specific form of fit, response surface analyses were also utilized in conjunction with polynomial regression. To test this specific form of congruence, there would need to be significant curvilinearity of the slope along the misfit line of the response surface. The fit line within response surface methodology is when variable 1 is perfectly matched to variable 2 (for example, within this study daily activities = 3 and state vocational interests = 3). In contrast, the misfit line is when variable 1 is equal to negative variable 2 (e.g. daily activities = 3 and state vocational interests = -3). By progressing down the misfit line, from daily activities exceeding state vocational interests to a perfect match at 0,0, to state vocational interests exceeding daily activities the absolute misfit decreases (e.g. -3 and 3 =6, -2 and 2 = 4, -1 and 1 = 2, 0 and 0 = 0). The response surface for the hypothesized form of congruence should demonstrate a saddle shape, where outcomes are maximized along the line of fit and where they decrease in a curvilinear fashion as it moves away from the fit line. See Figure 14 for an example of how this response surface would be expected to look, with the exception of the negative affect outcome where the lowest point is expected to be along the line of fit increasing along the misfit line.

In order to determine the statistical significance of the slope and curvature along the fit and misfit line, bootstrapping procedures outlined in Edwards (2002) were followed. Bootstrap sampling was conducted utilizing the original sample 10,000 times, multilevel regressions accounting for nesting within individuals were conducted for each bootstrapped sample, and coefficients for each regression equation were saved. Using linear combinations of coefficients outlined in Edwards (2002), estimates of the coefficients for the slope and curvature of fit and misfit lines were obtained for the original sample. This was then repeated for the results of the bootstrapped multilevel regression to form 95% confidence intervals for these coefficients. If these confidence intervals contained 0, the respective slope or curvilinearity was not significant.

Hypothesis 3a states, "State vocational interest congruence will be positively related to state positive affect, where a greater degree of state interest congruence will be related to higher state positive affect." Level 2 N (individual) for these analyses was 165 cases, while there were 741 level 1 cases (within-individual) where morning surveys and evening surveys could be matched. See Tables 21 through 32 for results of these analyses. See Figures 15 through 20 for response surface plots from the state vocational interest congruence polynomial regressions predicting daily positive affect. For step 1, all six RIASEC state vocational interests were significant positive predictors of daily positive affect (p < .05). On days in which state vocational interests were high, daily positive affect tended to be high as well. For step 2, all six RIASEC daily activity variables were significant predictors of daily positive affect (p < .05). Individuals tended to be higher in positive affect on days in which they did more activities, regardless of the RIASEC domain of those activities. However, in step 2 none of the six RIASEC state vocational interests remained significant predictors when controlling for daily activities. This suggests that desire for more activities does not predict daily positive affect incrementally over doing more activities, and that doing more daily activities may in fact be driving this relationship between state interests and daily positive affect. In step 3, the remaining terms for the polynomial

regression were added and the response surface was plotted. Fit for a null model containing only between person effects predicting daily positive affect was compared to each RIASEC dimension's polynomial regression model with both between and within-person effects predicting daily positive affect utilizing likelihood ratio tests. In all six comparisons, the full polynomial regression model fit the data significantly better than the null model (L. ratio = 50.17 to 74.52, p < .01). In other words, congruence (i.e. within-person effects) significantly predicted daily positive affect for all six RIASEC dimensions. Marginal R<sup>2</sup>, representing variance explained by within-person effects only, ranged from .03 to .11. The bootstrapping procedure noted above was conducted to determine significance of response plot slopes. Only one of the misfit lines demonstrated significant curvature (p < .05) indicative of the anticipated congruence form. Only state Investigative interests demonstrated significant misfit line curvilinearity (b = -.25, p < .05). See Tables 23 and 24, and Figure 16 for these results. Though within-person effects representing congruence were significant predictors of daily positive affect, the forms of congruence were generally not consistent with the hypothesized effects. Thus, H3a was generally not supported.

Hypothesis 3b states, "State vocational interest congruence will be negatively related to state negative affect, where a greater degree of state interest congruence will be related to lower state negative affect." Level 2 N (individual) for these analyses was 165 cases, while there were 741 level 1 cases (within-individual) where morning surveys and evening surveys could be matched. See Tables 33 through 44 for results of these analyses. See Figures 21 through 26 for response surface plots from the state interest congruence polynomial regressions predicting daily negative affect. For step 1, none of the six RIASEC state vocational interests were significant predictors of daily negative affect. In other words, daily state vocational interests were not

significantly related to negative affect within the same day. For step 2, four of the six RIASEC daily activity variables were significant positive predictors of daily negative affect (Realistic, Investigative, Enterprising, and Conventional) (p < .05). Individuals felt more daily negative affect on days in which they took part in more Realistic, Investigative, Enterprising, and Conventional activities. In step 3, the remaining terms for the polynomial regression were added and the response surface was plotted. Fit for a null model containing only between person effects predicting daily negative affect was compared to each RIASEC dimension's polynomial regression model with both between and within-person effects predicting daily negative affect utilizing likelihood ratio tests. In five comparisons (Realistic, Investigative, Artistic, Social, and Enterprising), the full polynomial regression model did not fit the data significantly better than the null model (L. ratio = 3.99 to 10.05, p > .05). In other words, congruence (i.e. within-person effects) did not significantly predict daily negative affect for these five RIASEC dimensions. However, the polynomial regression model for Conventional fit the data significantly better than the null model (L. ratio = 13.42, p = .02). Congruence (i.e. within-person effects) for Conventional significantly predicted daily negative affect. Marginal R<sup>2</sup>, representing variance explained by within-person effects only was .01 for each RIASEC dimension. The bootstrapping procedure noted above was conducted to determine significance of response plot slopes. None of the misfit lines demonstrated significant curvature (p < .05) indicative of anticipated congruence form. Though within-person effects representing congruence for Conventional was a significant predictor of daily negative affect, congruence did not generally predict daily negative affect and the forms of congruence were generally not consistent with the hypothesized effects. Thus, H3b was not supported.

Hypothesis 3c states, "State vocational interest congruence will be positively related to state intrinsic motivation where a greater degree of state interest congruence will be related to greater state intrinsic motivation." Level 2 N (individual) for these analyses was 165 cases, while there were 741 level 1 cases (within-individual) where morning surveys and evening surveys could be matched. See Tables 45 through 56 for results of these analyses. See Figures 27 through 32 for response surface plots from the state interest congruence polynomial regressions predicting daily intrinsic motivation. For step 1, all six RIASEC state vocational interests were significant predictors of intrinsic motivation ( $p \le .05$ ). On days in which individuals had higher state vocational interests they also tended to have higher intrinsic motivation, regardless of RIASEC domain. For step 2, four of the six RIASEC daily activity variables were significant positive predictors of intrinsic motivation (Realistic, Artistic, Social, and Enterprising) (p < .05). In other words, on days in which individuals had higher intrinsic motivation individuals tended to take part in more Realistic, Artistic, Social, and Enterprising activities. However, Artistic and Enterprising state interests were no longer significant predictors of intrinsic motivation (p > .05). This suggests that the variance in daily intrinsic motivation captured by Artistic and Enterprising state vocational interests within individuals is not incremental over daily activities in those domains. In step 3, the remaining terms for the polynomial regression were added and the response surface was plotted. Fit for a null model containing only between person effects predicting daily intrinsic motivation was compared to each RIASEC dimension's polynomial regression model with both between and within-person effects predicting daily intrinsic motivation utilizing likelihood ratio tests. In all six comparisons, the full polynomial regression model fit the data significantly better than the null model (L. ratio = 19.49 to 64.05, p < .01). In other words, congruence (i.e. within-person effects) significantly predicted daily intrinsic

motivation for all six RIASEC dimensions. Marginal  $\mathbb{R}^2$ , representing variance explained by within-person effects only, ranged from .03 to .10. The bootstrapping procedure noted above was conducted to determine significance of response plot slopes. None of the misfit lines demonstrated significant curvature (p < .05) indicative of the anticipated congruence form. Though within-person effects representing congruence were significant predictors of daily intrinsic motivation, the forms of congruence were generally not consistent with the hypothesized effects. Thus, H3c was not supported.

Hypothesis 3d states, "State vocational interest congruence will be positively related to state engagement, where a greater degree of state interest congruence will be related to greater state engagement." Level 2 N (individual) for these analyses was 165 cases, while there were 741 level 1 cases (within-individual) where morning surveys and evening surveys could be matched. See Tables 57 through 68 for results of these analyses. See Figures 33 through 38 for response surface plots from the state interest congruence polynomial regressions predicting daily engagement. For step 1, all six RIASEC state vocational interests were significant predictors of daily engagement (p < .05). Individuals reported greater engagement on days in which they also reported higher state vocational interests, regardless of domain. For step 2, all six RIASEC daily activity variables were significant positive predictors of daily engagement (p < .05). On days in with individuals reported feeling more engaged, individuals tended to take part in more activities regardless of RIASEC domain. However, Conventional and Artistic state interests were no longer significant predictors of daily engagement (p > .05) suggesting these state vocational interests may not predict daily engagement incrementally over daily activities. In step 3, the remaining terms for the polynomial regression were added and the response surface was plotted. Fit for a null model containing only between person effects predicting daily engagement was

compared to each RIASEC dimension's polynomial regression model with both between and within-person effects predicting daily engagement utilizing likelihood ratio tests. In all six comparisons, the full polynomial regression model fit the data significantly better than the null model (L. ratio = 57.37 to 115.17, p < .01). In other words, congruence (i.e. within-person effects) significantly predicted daily engagement for all six RIASEC dimensions. Marginal R2, representing variance explained by within-person effects only, ranged from .08 to .17. The bootstrapping procedure noted above was conducted to determine significance of response plot slopes. Only one of the misfit lines demonstrated significant curvature (p < .05) indicative of the anticipated congruence form. Only state Investigative interests demonstrated significant misfit line curvilinearity (b = -.57, p < .05). See Tables 59 and 60 and Figure 34 for these results. Though the polynomial regression equations representing congruence were significant predictors of daily engagement, the forms of congruence were generally not consistent with the hypothesized effects. Thus, H3d was generally not supported.

Hypothesis 3e states, "State vocational interest congruence will be positively related to state perseverance, where a greater degree of state interest congruence will be related to greater state perseverance." Level 2 N (individual) for these analyses was 165 cases, while there were 741 level 1 cases (within-individual) where morning surveys and evening surveys could be matched. See Tables 69 through 80 for results of these analyses. See Figures 39 through 44 for response surface plots from the state interest congruence polynomial regressions predicting daily perseverance. For step 1, all six RIASEC state vocational interests were significant predictors of daily perseverance (p < .05). On days in which individuals reported higher state vocational interests they also tended to report higher perseverance, regardless of RIASEC domain. For step 2, all six RIASEC daily activity variables were significant positive predictors of daily

perseverance (p < .05). In other words, individuals tended to take part in more activities, regardless of RIASEC domain, on days in which they reported higher perseverance. However, Investigative, Artistic, Enterprising, and Conventional state interests were no longer significant predictors of daily perseverance (p > .05) suggesting that they might not predict daily perseverance incrementally over daily activities. In step 3, the remaining terms for the polynomial regression were added and the response surface was plotted. Fit for a null model containing only between person effects predicting daily perseverance was compared to each RIASEC dimension's polynomial regression model with both between and within-person effects predicting daily perseverance utilizing likelihood ratio tests. In all six comparisons, the full polynomial regression model fit the data significantly better than the null model (L. ratio = 47.77 to 129.58, p < .01). In other words, congruence (i.e. within-person effects) significantly predicted daily perseverance for all six RIASEC dimensions. Marginal R<sup>2</sup>, representing variance explained by within-person effects only, ranged from .07 to .16. The bootstrapping procedure noted above was conducted to determine significance of response plot slopes. None of the misfit lines demonstrated significant curvature (p < .05) indicative of anticipated congruence form. Though within-person effects representing congruence were significant predictors of daily perseverance, the forms of congruence were generally not consistent with the hypothesized effects. Thus, H3e was not supported.

*Supplemental Analyses.* In addition to if state vocational interests can predict theoretically relevant outcomes, it would be useful to know if state vocational interests can incrementally predict outcomes over trait interest. In order to test this, the same three step procedure outlined previously was conducted for each trait vocational interest individually predicting the outcomes of interest. More specifically, for step 1 multilevel regressions

accounting for nesting within individuals were conducted with each trait vocational interest predicting the outcome of interest. For step two, daily activities were entered into the equation. For step 3, the rest of the polynomial regression terms were added (i.e. squared trait interest, squared daily activities, and the interaction between trait vocational interests and daily activities). Predicted scores from this trait polynomial regression equations were saved, along with predicted scores from the state polynomial regression equations. These predicted scores were then simultaneously entered into a multilevel regression accounting for nesting within individuals to assess incremental validity of state interests over trait interests for outcomes. For these analyses, 165 cases were available at level 2 (individual) and 741 cases with matched morning and evening survey data were available for level 1 (within individual).

See Tables 81 through 92 for the results of the multilevel analyses for steps 1 through 3 for trait vocational interests and the multilevel analyses assessing incremental validity of state vocational interest polynomial regressions over trait vocational interest polynomial regressions for daily positive affect. Based on the results of the incremental validity analyses, only the state Realistic and Investigative polynomial regression predicted values predicted daily positive affect over the trait predicted values (p < .05). The polynomial regression equations for trait vocational interests were not significant in incrementally predicting daily positive affects for any RIASEC domain (p > .05).

See Tables 93 through 104 for the results of the multilevel analyses for steps 1 through 3 for trait vocational interests and the multilevel analyses assessing incremental validity of state vocational interest polynomial regressions over trait vocational interest congruence for daily negative affect. Based on the results of the incremental validity analyses, only the state Conventional polynomial regression predicted values predicted negative affect over the trait

predicted values (p < .05). Only the trait Enterprising polynomial regression incrementally predicted daily negative affect (p < .05).

See Tables 105 through 116 for the results of the multilevel analyses for steps 1 through 3 for trait vocational interests and the multilevel analyses assessing incremental validity of state vocational interest polynomial regressions over trait vocational interest polynomial regressions for daily intrinsic motivation. Based on the results of the incremental validity analyses, five RIASEC state polynomial regression predicted values (all except for Enterprising) predicted intrinsic motivation over the trait predicted values (p < .05). Trait polynomial regression equations for all RIASEC dimensions, except for Artistic, incrementally predicted daily intrinsic motivation (p < .05).

See Tables 117 through 128 for the results of the multilevel analyses for steps 1 through 3 for trait vocational interests and the multilevel analyses assessing incremental validity of state vocational interest polynomial regressions over trait vocational interest polynomial regressions for daily engagement. Based on the results of the incremental validity analyses, three RIASEC state polynomial regression predicted values (Realistic, Investigative, and Social) predicted daily engagement over the trait predicted values (p < .05). Trait polynomial regression equations for all RIASEC dimensions, except for Realistic, incrementally predicted daily engagement (p < .05).

See Tables 129 through 140 for the results of the multilevel analyses for steps 1 through 3 for trait vocational interests and the multilevel analyses assessing incremental validity of state interest polynomial regressions over trait interest polynomial regressions for daily perseverance. Based on the results of the incremental validity analyses, five RIASEC state polynomial regression predicted values (all except Enterprising) predicted daily perseverance over the trait

predicted values (p < .05). The polynomial regression equations for trait vocational interests were not significant in incrementally predicting daily perseverance for any RIASEC domain (p > .05).

In addition to incremental prediction of state vocational interest polynomial regressions over trait vocational interest polynomial regressions, multilevel analyses accounting for nesting within individuals were conducted with predicted scores for all six state vocational interest polynomial regressions and with all six state and trait vocational interest polynomial regressions to test if models for different interests predicted incrementally over others (e.g. does the polynomial regression for Conventional predict over the other RIASEC interests?) and over all trait polynomial regression models. For these analyses, 165 cases were available at level 2 (individual) and 741 cases with matched morning and evening survey data were available for level 1 (within individual). See Tables 141 through 145 for results of these analyses.

For daily positive affect, polynomial regression predicted scores for state Investigative, Artistic, Social, and Conventional predicted incrementally over other RIASEC state vocational interest predicted scores (p < .05). When predicted trait scores were included in the model, only state Investigative polynomial regression predicted scores predicted over other state and trait vocational interest predicted scores (p < .01).

For daily negative affect, polynomial regression predicted scores for state Conventional predicted incrementally over other RIASEC state vocational interest predicted scores (p < .05). When predicted trait scores were included in the model, no state polynomial regression predicted scores predicted over other state and trait vocational interest predicted scores. Only the trait Artistic polynomial regression equation predicted incrementally over all others in the model (p < .05)

For daily intrinsic motivation, polynomial regression predicted scores for state Investigative, Artistic, and Social predicted incrementally over other RIASEC state vocational interest predicted scores (p < .01). When predicted trait scores were included in the model, only state Social polynomial regression predicted scores predicted over other state and trait vocational interest predicted scores (p < .05).

For daily engagement, polynomial regression predicted scores for state Investigative and Social predicted incrementally over other RIASEC state interest predicted scores (p < .01). When predicted trait scores were included in the model, only state Investigative, trait Investigative, and trait Conventional polynomial regressions predicted scores predicted over other state and trait interest vocational predicted scores (p < .05).

For daily perseverance, polynomial regression predicted scores for state Investigative, Social, and Conventional predicted incrementally over other RIASEC state interest predicted scores (p < .05). When predicted trait scores were included in the model, only state Conventional polynomial regression and trait Artistic predicted scores predicted over other state and trait vocational interest predicted scores (p < .05).

*Summary.* Based on the results of these analyses, the congruence between state vocational interests and daily activities, represented by within-person effects within the polynomial regression equations, were significant predictors for daily positive affect, daily intrinsic motivation, daily engagement, and daily perseverance for all RIASEC dimensions. For daily negative affect, state vocational interest congruence was generally not predictive with the exception of Conventional state vocational interests. Components of the polynomial regression equation (i.e. state interests and daily activities) also display relatively consistent relationships with the outcomes of interest. Between these two components of the regression equation, the

daily activities seem to more consistently and strongly predict outcomes. When these variables and the polynomial regression terms are used to predict over trait polynomial regression equations, they generally display incremental validity for daily intrinsic motivation and perseverance, display inconsistent incremental effects for engagement, and generally nonsignificant incremental predictions over affective outcomes. Trait polynomial regression equations did not generally display incremental prediction over state polynomial regression equations for daily affective or perseverance outcomes, but displayed relatively consistent incremental prediction for motivational outcomes. When all state vocational interest polynomial regression predicted scores were included in a regression, there was inconsistent evidence for incremental prediction of these predicted values over others. When trait predicted values are also included, few state predicted values add incrementally to prediction.

**Situational Interests Predicting Day-to-Day Changes in State Vocational Interests** (H4). Hypothesis 4 states, "Changes in state vocational interests are predicted by situational interests, in that greater or lower situational interests within a domain one day will lead to an increase or decrease in state interests within that domain the following day, respectively.". In order to test this hypothesis, multilevel regressions were utilized accounting for nesting within individuals with situational interests (T) predicting state interests within that domain the following day (T+1), controlling for the previous day's state interest in that domain (T). These analyses required linking an individual's morning surveys to the same day's evening survey responses and the next morning's survey responses. In addition to this, situational interests were only assessed when individuals reported engaging in activities within that respective RIASEC domain that day. These restrictions severely limited the number of cases available for analyses for some interests. Sample size for these analyses ranged from 16 to 113 at level 2 (individual)

and 38 to 318 for level 1 (within-person). All variables were grand mean centered and standardized prior to analyses. Results of these analyses are reported in Tables 146 through 151. Within these analyses, situational interests for Investigative, Social, and Conventional significantly predicted their respective next day state interests (p < .01) (Investigative:  $\beta = .15$ , Social:  $\beta = .18$ , Conventional:  $\beta = .14$ ). In other words, higher situational interests for these three RIASEC dimensional one day was related to higher state vocational interest in that domain the next. Note that of the six regressions conducted, the three with the largest sample size available found situational interests to be a significant predictor of next day state interests. The average sample size for these analyses were roughly three times the size of the sample for the nonsignificant results (Significant: Average Level 1 = 284.33, Average Level 2 = 100.67, Non-Significant: Average Level 1 = 79, Average Level 2 = 35.5), suggesting the difference in results across interests may be a power issue. Note that controlling for trait vocational interests when testing each of the respective relationships between situational interests and state vocational interests did not change the pattern of significant results. See Tables 146 through 151 for results of these analyses. Considering the possible influence of statistical power on discrepant results across RIASEC dimensions, tentative support was found for hypothesis 4.

*Supplementary Analyses.* Supplemental analyses were conducted to determine if trait vocational interests moderate their respective situational interests to next day state vocational interest relationship. In other words, would the ability of situational interests in a domain to drive changes in that domain's state vocational interests the next day depend on an individual's trait standing on that interest? Previous day state vocational interests were controlled for, as in the previous analyses. The interaction between trait interests and state interests was created based on grand mean centered and standardized main effects. Sample size for these analyses ranged from

16 to 113 at level 2 (individual) and 38 to 318 for level 1 (within-person). Of the six possible cross-level moderating effects tested, two were significant. (p < .05). See Tables 146 through 151 for results of these analyses.

Trait Artistic vocational interests significantly moderated the relationship between Artistic situational interests and next day state Artistic vocational interests ( $\beta = .31, p < .01$ ). See Figure 45 for this interaction plotted. Among individuals with high trait Artistic vocational interests, Artistic situational interests were associated with higher next day state Artistic vocational interests. However, among individuals with low trait Artistic vocational interests, Artistic situational interests were associated with low trait Artistic vocational interests, Artistic situational interests were associated with low trait Artistic vocational interests, interests.

Trait Social vocational interests significantly moderated the relationship between Social situational interests and next day state Social vocational interests ( $\beta = -.10, p = .02$ ). See Figure 46 for this interaction plotted. Among individuals with high trait Social vocational interests, Social situational interests were associated with lower next day state Social interests. However, among individuals with low trait Social vocational interests, Social situational interests were associated vocational interests, Social situational interests were associated with lower next day state social vocational interests were associated with higher next day state social vocational interests.

Hypothesis 4 was focused on the effect of situational interests predicting next day state vocational interests, and tentative support was found for this relationship. However, the reverse may be true where state vocational interests in a domain predict situational interests in that domain. In other words, individuals may enjoy, identity, and value activities more on days in which they have a higher preference for that type of work. To test this, multilevel regressions were conducted accounting for nesting within individuals with state vocational interests collected

in the morning (T) predicting situational interests in that interest domain measured in the evening (T), controlling for previous day's situational interest (T-1).

These analyses required linking an individual's previous day's evening survey and the focal day's morning and evening surveys. In addition to this, situational interests were only assessed when individuals reported engaging in activities within that respective RIASEC domain that day. These restrictions severely limited the number of cases available for analyses for some interests. Sample size for these analyses ranged from 16 to 113 at level 2 (individual) and 38 to 318 for level 1 (within person). All variables were grand mean centered and standardized prior to analyses. Results of these analyses are reported in Tables 152 through 157. Within these analyses, state vocational interests for Investigative, Social, and Conventional significantly predicted their respective same day situational interests (p < .01) (Investigative:  $\beta = .32$ , Social:  $\beta$ = .33, Conventional:  $\beta$  = .20). In other words, for Investigative, Social, and Conventional interests having a higher degree of state interests in that domain predicted higher situational interests in that domain the same day. Note that of the six regressions conducted, the three with the largest sample size available found state vocational interests to be a significant predictor of same day situational interests suggesting similar power issues as analyses for hypothesis 4. Controlling for trait vocational interests when testing each of the respective relationships between state vocational interests and same day situational interests did not change the pattern of significant results. See Tables 152 through 157 for results of these analyses.

Analyses were also conducted to determine if trait vocational interests moderated their respective same day state vocational interest to situational interest relationships. In other words, does the effect of state vocational interests in a domain on the degree to which individuals enjoy, value, and identify activities within that domain the same day depend on an individual's trait

standing for that interest? Similar to previous analyses, prior day situational interests were controlled for. The interaction between trait vocational interests and state vocational interests was created based on grand mean centered and standardized main effects. Sample size for these analyses ranged from 16 to 113 at level 2 (individual) and 38 to 318 for level 1 (within-person). Of the six possible cross-level moderating effects tested, two were significant (p < .05).

Trait Investigative vocational interests significantly moderated the relationship between state Investigative interests and same day Investigative situational interests ( $\beta = .12, p < .01$ ). See Figure 47 for this interaction plotted. Along individuals with high trait Investigative vocational interests, the relationship between State Investigative vocational interests and same day Investigative situational interests was stronger than for those with low trait Investigative interests.

Trait Social vocational interests significantly moderated the relationship between state Social vocational interests and same day Social situational interests ( $\beta = .14$ , p = .03). See Figure 48 for this interaction plotted. Along individuals with high trait Social vocational interests, the relationship between State Social vocational interests and same day Social situational interests was stronger than for those with low trait Social vocational interests.

*Summary.* Based on the results of these analyses, tentative support was found for situational interests predicting next day state vocational interests, with higher situational interests in a domain leading to higher next day state vocational interest in that domain. Though all of these analyses did not find significant results, analyses with larger samples found support for the hypotheses suggesting not supportive results may be a result of limited sample size. Interestingly, tentative support was found for the opposite relationship as well, with state vocational interests predicting same day situational interests within the same domain. Again,

significant results were found for analyses with larger sample sizes. Moderations tested displayed inconsistent results.

## State Vocational Interest Congruence Predicting Next Day State Vocational

**Interests (H5)**. Hypothesis 5 states, "The congruence between an individual's state vocational interest in the next, such that less of an activity than desired will elicit greater state vocational interest in that domain the following day and more of an activity than desired will elicit lower state vocational interest in that domain the following day." This hypothesis was evaluated utilizing the three-step multilevel regression previously outlined for hypotheses 3a-3e and response surface analyses with bootstrap-based confidence intervals to determine significant response surface components. However, instead of the outcomes described in hypotheses 3a through 3e, these models predicted next day state vocational interests.

Support for this hypothesis was evaluated based on three components. First, in step 2 when both the state vocational interests and daily activities for this interest are included in the multilevel regression the coefficients for state vocational interests should be positive while the coefficients for daily activities should be negative. In order words, holding state vocational interests constant doing more of an activity should lead to less interest in that type of activity the next day. Holding daily activities constant, higher state vocational interests should lead to higher state vocational interests in that domain the next day. Second, the slope along the misfit line should be positive. As we move down the misfit line from daily activities exceeding the desired level of the activity to where the amount of daily activities is perfectly matched to desired level to the desired amount of the activity exceeding the amount of daily activities in that domain, the state vocational interests in that domain the following day should increase. Third, the slope along

the line of fit should be non-significant. When desired amount of an activity is perfectly matched with the amount of that activity done during that day, the state vocational interest in that domain should be the same the following day. These analyses required matching an individual's morning responses to evening responses the same day to morning responses the following data, leaving 156 cases at level 2 (individual) and 582 at level 1 (within-person) for analyses. Main effects for state interests and daily activities were grand mean centered and standardized prior to analyses and creation of squared and interaction terms.

See Tables 158 through 169 for the results of these analyses. See Figures 49 through 54 for response surfaces from the polynomial regressions. For step 2 of the multilevel regressions, all six RIASEC state vocational interests were positively related to next day state vocational interests holding daily activities constant (p < .01) in line with Hypothesis 5. However, contrary to Hypothesis 5 all six RIASEC daily activities were positively related to next day state vocational interests (p < .01). Also contrary to Hypothesis 5, all six fit lines for the response plots from the polynomial regression equations demonstrated a significant positive slope (p < .05). For three of the six RIASEC misfit lines (Investigative, Social, and Enterprising), the slope was positive and significant (p < .05) in line with Hypothesis 5.

*Summary.* Based on the analyses conducted, limited support was found for Hypothesis 5. The slopes for state vocational interests controlling for daily activities and some misfit lines were in line with the hypothesis. However, the slopes for daily activity controlling for state vocational interests and the slopes for the fit lines were not in line with the hypothesis.

**Supplementary Analyses.** In addition to analyses and supplemental analyses tied to specific hypotheses, additional supplemental analyses with the potential to further interests research not tied to specific hypotheses were conducted.

State depletion, positive state affect, negative state affect, sleep quality, and sleep quantity were collected during daily morning surveys along with state vocational interest to determine if these resource variables were significantly related to state vocational interests. Table 170 reports bivariate relationships for these variables and each RIASEC state vocational interest. N for these analyses ranged from 949 to 950. State depletion demonstrated a significant negative relationship with all six RIASEC state vocational interests (r = -.16 to -.31, p < .01), while state positive affect was significantly and positively related to all six RIASEC state vocational interests (r = .23 to .35, p < .01). As these bivariate relationships neglect nesting within individuals and possible overlap in variance explained, multilevel regressions were also conducted with state depletion, state positive affect, state negative affect, sleep quality, and sleep quantity predicting each RIASEC state vocational interest as an outcome to account for this nesting and assess incremental validity. 173 level 2 (Individual) cases, and 948 to 950 (within individual) level 1 cases were available for these analyses. See Tables 171 through 176 for the results of these analyses. State positive affect was positively related to all six RIASEC state vocational interests (p < .01). However, state depletion remained a significant negative predictor for only three state vocational interests (Investigative, Social, and Conventional (p < .05)). These results suggest that on days when individuals have higher positive affect, they also tend to display higher state vocational interests across all RIASEC domains. Additionally, on days when individuals feel depleted, they tend to desire less Investigative, Social, and Conventional activities.

In addition to testing relationships between the resource variables and state vocational interests, relationships between these variables and daily activities were also estimated. Table 177 reports bivariate relationships among resource variables and daily activities. 748 cases were

available for these analyses. State affect measured in the morning was a significant positive predictor of daily activities for all six RIASEC interests (r = .15 to .31, p < .01). See Tables 178 through 183 for the results of multilevel regressions accounting for nesting within individuals and assessing the incremental relationships between these variables and daily activities. For all six RIASEC daily activities, state positive affect was a significant positive predictor (p < .01). These results suggest that on days when individuals have higher positive affect, they tend to do more activities regardless of RIASEC domain.

A core tenant of interests theory is that interests drive the selection of activities, in that individuals who have a higher interest in a domain are more likely to seek out activities and domains congruent with those interests (Holland, 1997). The relationship between state interests and daily activities was evaluated at the within-person, daily level within the current study. See Table 184 for the bivariate correlations between state vocational interests and daily activities. N for these analyses ranged from 748 to 749. Correlations between daily state interests and daily activities ranged from r = .56 to .68. As these analyses neglect nesting within individuals, multilevel analyses were conducted regressing daily activities onto the same day state vocational interests accounting for this nesting. 167 level 2 (individual) and 748 level 1 (within person) cases were available for these analyses. See Tables 185 through 190 for the results of these analyses. Each relationship between state RIASEC interests and their respective daily activities was significant ( $\beta = .43$  to .66, p < .01). These results suggest that on days when an individual desires more of a type of activity they tend to do more of that type of activities. However, a caveat should be noted in regards to the causal relationship between state vocational interests and daily activities. Though these measures were temporally separated in a manner that would be

support causality, a third variable may responsible for these relationships (e.g. omitted variable: see Sackett, Laczo, & Lippe, 2003; Nye, Butt, Bradburn, & Prasad, 2018b).

As trait vocational interest scores were available for individuals for the pre and post survey, change in trait vocational interests during the period of the study were able to be assessed. Trait interests were available at both time points for the trait DSIM and BPDRM measure for 133 individuals. The correlations between pre and post scores for the trait DSIM measure ranged from r = .34 to .58 (p < .01) and for the BPDRM r = .72 to .87 (p < .01) (see Table 191). The lower correlation between pre and post scores for the DSIM measure as compared to the BPDRM scales is expected. Given the shorter nature of the DSIM and lower reliability, these scores likely reflect a greater degree of measurement error than BPDRM scores.

Analyses were also conducted to determine if change in trait interests from pre to post surveys could be predicted based on interests and experiences over the course of the ESM portion of this study. Correlations were conducted between interest change from pre to post for both the trait DSIM and BPDRM for each interest and average state interest in that domain over the course of the ESM, average daily activities in that domain over the course of the ESM, and the difference between the average state vocational interests in that domain over the course of the ESM minus the score in that interest domain from the pre-survey. Note that analyses were limited to cases in which 4 or more measurement occasions for the predictor of change (i.e. state interests, daily activities, or situational interests) were available similar to the restriction for analyses for standard deviation of observed scores for Hypothesis 1. This restriction led to sample sizes ranging from 32 to 133 for analyses. See Table 192 for results of these analyses.

Across all state vocational interests and the DSIM and BPDRM, the difference in average state vocational interests and pre-survey trait vocational interest scores was a significant

predictor of trait interest change (DSIM: r = .57 to .72, p < .01, BPDRM: r = .22 to .37, p < .01), with an exception for change in trait Investigative interests for BPDRM (r = .12, p = .20). In other words, when state vocational interests in a domain during the course of the ESM were higher than the individual's trait vocational interests in that domain when the study began, the individual's trait vocational interests in that domain were likely to increase from the pre-survey to the post-survey. Note that 122 cases were available for this subset of analyses.

*Summary.* Within the present study, state positive affect collected concurrently with state vocational interests in the morning was significantly related to higher state vocational interests in all six domains and higher daily activities in all six domains. This relationship remained when utilizing multilevel regression accounting for nesting and state positive affect demonstrated incremental validity over other variables included in this model for all six state interests and daily activities. State depletion collected in the morning demonstrated a significant negative bivariate relationship with all six state vocational interests, but utilizing multilevel regressions only demonstrated incremental validity over other variables also support the relationship between interests and activities at the within person level, with state vocational interests in a domain related to daily activities in that domain within the same day. Results also demonstrate that change in trait interest scores can be predicted based on state vocational interests at the times of measurement relative to an individual's trait vocational interests at the time of first measurement.

#### DISCUSSION

Within the organizational sciences, there has been nearly universal neglect of short-term within-person variability of vocational interests. However, based on the results of this research

study this neglect may be problematic. Results of analyses suggest that absolute, relative, and rank-order variability exists for state vocational interests. Though compared to benchmarks in the published literature relative and rank order variability for state vocational interests may be low, they seem to exist none the less. The comment could be raised that this variability is merely the result of measurement error. However, this is unlikely. Based on the results outlined, variability in state vocational interests can be predicted day-to-day, between individuals, and within measurement occasions suggesting this variability is substantive.

Based on the overall variability in state vocational interests, a distributional conceptualization of vocational interests based on Whole Trait Theory (Fleeson, 2001; 2017) may be appropriate where state vocational interests form a distribution around more stable trait vocational interests. More instability was typically found for rank-ordered vocational interests as compared to raw observed scores, which may be problematic for many of the fit indices commonly used in vocational interests research, as many rely on rank-ordered interests (see Brown & Gore, 1994; Camp & Chartrand, 1992). Supplemental analyses also suggest that state vocational interests display less stability as the period of time between measurements increases, as would be expected by transitory states. However, as discussed previous the correct temporality for state vocational interests as a constructs and states more generally are hard to determine.

Results of analyses also suggest that individuals can vary substantially in terms of their variability of state vocational interests. That is, the degree of variability in state vocational interests seems to be an individual difference, mirroring results found in the personality literature for personality states within Whole Trait Theory (e.g. Fleeson, 2001). Openness to experience and curiosity were found to be significant predictors of state vocational interest variability,

suggesting individual who are more dispositionally open to experiences and curious see their interests shift more day-to-day. Both self-assessed variability in interests and the consistency of interests subscale of the grit construct displayed non-significant relationships with actual state interest variability. This suggests that individuals may not be able to accurately report the degree to which their own state interests vary and this variance may need to be determined objectively with repeated measurements.

Within exploratory analyses trait conscientiousness, grit, and vocational identity was also found to predict variability in state vocational interests, where individuals with higher conscientiousness, grit, and those having a more defined vocational identity see greater changes in their state vocational interests day-to-day. Though this result for vocational identity seems counterintuitive, a post-hoc explanation may be that individuals who have worked to cultivate a stronger vocational identity are also more prone to seek out different types of experiences day-today to further cultivate this identity. Greater variability in interests may be the process by which individuals refine and develop this identity over time. However, results of these exploratory analyses should be considered with caution due to the large number of relationships assessed and their non-hypothesized nature.

Of all the hypothesized predictors and significant exploratory predictors, only curiosity demonstrated incremental validity over other predictors in relation to greater state interest variability. This suggests that much of the variance explained in predicting variability in state vocational interests by variables tested is shared, while curiosity may provide unique predictive power for state interest variability when these other variables are controlled.

Much of the resurgence of vocational interests research in the organizational sciences has been attributed to new evidence of the predictive validity of trait vocational interests for

meaningful outcomes (Nye et al., 2012; 2017; Van Iddekinge et al., 2011), and for trait interest congruence in particular (Nye et al., 2012; 2017). At the state level, vocational interest congruence seems to be predictive of outcomes as well. This finding is in contrast to the limited existing research that has explored state vocational interest congruence and outcomes (i.e. Phan, 2018). Within the current research project, state vocational interest congruence with daily activities was predictive of daily positive affect, intrinsic motivation, engagement, and perseverance. However, state vocational interest congruence was not generally predictive of negative affect.

Though state vocational interest congruence was predictive of most outcomes examined, it did not generally demonstrate the anticipated congruence form. More specifically, outcomes were generally not maximized (or in the case of negative affect minimized) along the line of fit as hypothesized. However, these results mirror results found at the trait level where outcomes are frequently not maximized when trait vocational interests and environments are perfectly matched (e.g. Nye et al., 2018a; Wiegand, 2018). For example, Wiegand (2018) found at the trait level that, depending at the specific RIASEC dimension, job satisfaction was highest when vocational interests were higher or lower than the what the environment provided. Though in the present research project there does not seem to be a consistent location where outcomes are maximized (or minimized), it did not generally seem to be along the line of fit. These results provide evidence at the state level, in addition to previous evidence at the trait level, that the match between an individual's desired level of activities and actual activities does not need to be perfect in order for outcomes to be maximized.

In addition to the predictive validity for state vocational interest congruence, components of this congruence generally displayed relationships with outcomes of interest. All six RIASEC

state vocational interests displayed significant relationships with daily positive affect, intrinsic motivation, engagement, and perseverance. These results suggest that within individuals, having higher state interests in the morning is related to higher positive affect, intrinsic motivation, engagement, and perseverance that same day. Higher daily activities across RIASEC domains also generally displayed significant positive relationships with daily positive affect, intrinsic motivation, engagement, and perseverance, along with higher negative affect. These results suggest that days in which individuals felt greater positive affect, negative affect, intrinsic motivation, engagement, and perseverance were also days in which they were also more likely to do more activities across RIASEC domains. When both state vocational interests and daily activities were included in a regression, daily activities were typically a stronger predictor of outcomes and frequently reduced the predictive validity of state vocational interests to be nonsignificant. This suggests that actually doing more activities during the day as opposed to wanting to do activities generally better predicts daily affective, motivational, and persistencebased outcomes. One interesting takeaway from these results may be that even if someone doesn't have a high desire for activities one day, pushing themselves do them despite this may be related to positive outcomes such as higher daily positive affect and intrinsic motivation.

State vocational interest polynomial regressions displayed mixed results in terms of incrementally predicting over trait vocational interest polynomial regressions. These state vocational interest polynomial regressions were generally more incremental in predicting motivational and persistence outcomes as compared to affective outcomes, though overall incremental prediction was inconsistent. This leaves the incremental contribution of considering state vocational interests in predicting outcomes over trait vocational interests a somewhat open question.

In addition to results suggesting state vocational interests fluctuate day-to-day, tentative support was found for a relationship between situational interests and changes in next day state vocational interests. Within RIASEC domains with the largest sample size, enjoying, identifying more with, and valuing activities in an interest domain was related to higher interest in that domain the following day. Interestingly, within domains with the largest sample size a relationship was found between higher state interests in a domain and higher situational interests in that domain the same day as well. Being more interested in a domain of activities was related to higher enjoyment, identification, and value assigned to activities within that domain the same day. Though these significant relationships were only found in three of the six interest domains tested, these domains had roughly three times the sample size as compared to analyses that found non-significant results, suggesting the lack of effects for those three domains may be a power issue as opposed to substantive differences.

These two results regarding situational interests and state vocational interests suggest that a positive feedback loop may be occurring for situational interests and state vocational interests and may speak to how individuals develop career interests over time. Within RIASEC domains, higher enjoyment, identification with, and value assigned to activities may lead to individuals desiring more of that activity the following day. During the next day, higher interest in a domain may lead to higher enjoyment, identification with, and value assigned to those activities, leading to higher domain interest the next day, etc. Past research into interests has put forward a feedback loop-type mechanism driving trait interest development (e.g. Su, 2019), and these results suggest that this positive feedback loop may extend to state vocational interests as well. This state feedback loop may, in time, influence trait development, discussed in the next section.

Though situational interests were found to predict next-day state vocational interests, previous day state vocational interest congruence did not relate to changes in state vocational interest in the hypothesized manner. The match or mismatch between an individual's preferences and activities in a domain did not seem to influence the next day's preference for those activities in the expected way. However, components of congruence significantly predicted the outcome of interest. State vocational interests in a domain and greater activities in that domain were consistently positively and significantly related to higher interest in that domain the following day.

Within supplemental analyses, the average state vocational interest in a domain during the daily survey component of Study 2 minus the individual's trait standing at the beginning of the study was significantly related to differences in trait interests during the course of the study for nearly all RIASEC interests across two different trait vocational interest measures. It seems that if a person has a consistently higher or lower state interest in a domain than their trait standing, their trait standing shifts towards the direction of this difference. For instance, if a person has a relatively low trait interest in Enterprising activities but over the course of a week tends to have state Enterprising interests higher than their trait tendency, at the end of the week their trait standing is likely to increase based on these results. Alternatively, if a person has a relatively high trait interest in Enterprising activities but over the course of a week tends to have state Enterprising interests lower than their trait tendency, at the end of the week state Enterprising interests lower than their trait tendency, at the end of the week their trait standing is likely to decrease based on these results.

This exploratory finding seems to demonstrate how state vocational interests influence trait vocational interests over time. However, it should be considered that instead of actually reflecting a change in trait vocational interests, the change in trait interest scores from pre to post

surveys reflect an individual's better understanding of their own interests by responding to daily surveys of these interests for the past week. Individual's may have come to better understand their own interests over the course of the study, and the relationship between average daily state vocational interests and trait interest "change" may instead be reflecting this increased selfunderstanding. Due to this possibility, as well as exploratory nature of these analyses and modest sample size, these results should be interpreted with caution.

While limitations of the present study and results must be considered, the relationships between situational interests and state vocational interests and the relationship between mean state vocational interests and interests change illustrate a compelling model of how trait vocational interests may change over time. Based on the results of analyses, situational interests relate to higher state interests in that domain the next day. Subsequent higher state interests in that domain leads to higher situational interest in that domain. Over time, this cycle is likely to push state vocational interests consistency higher than a person's trait standing, which based on the supplementary analyses suggests that trait vocational interests will shift in this direction over time. Note the opposite could also be true, where low situational interests leads to decreasing state vocational interests and over time decreases trait vocational interests.

In additional to these more substantive contributions, an additional contribution of the present study is the creation of viable measures of state vocational interests and situational interests. The DSIM represents the first measure of state vocational interests and has demonstrated adequate reliability and convergent validity within the present research study. Future research may utilize this measure, and the existence of a content valid and reliable measure of state vocational interests should hopefully spur research in this domain. Additionally, though situational interest measures have existed previously this research project created a viable

and reliable measure of situational interests based on Su's (2019) cross-disciplinary Trait State Interest Dynamic theory. With a useable measure of this conceptualization of situational interests, research into this theory and its tenants will hopefully be enhanced.

#### **Implications for Theory**

In terms of implication for theory for state vocational interests, the biggest implication is that we need theory. There has been nearly universal neglect of state vocational interests in the organizational sciences, and due to this the short-term within-person variability of vocational interests has not been integrated in or subject to most theory in our science. The biggest implication for theory from this research project is that we need to evaluate how variability of vocational interests at the state level integrates within our existing interest theory and develop theory to explain state vocational interests. For instance, do state vocational interests fit well within Holland's (1959; 1997) RIASEC interests model or warrant a different model for short-term interests? Why might state vocational interest congruence be predictive of daily positive affect but not negative affect? This research project raises more questions for theory than provides answers.

Within the state-trait literature, this research project also has theoretical implications. Based on results of this study, there is further evidence that Whole Trait Theory (Fleeson, 2001; 2017) may be a generalizable model for conceptualizing states and traits within the individual differences literature beyond its origins in personality (Jayawickreme et al., 2019). For instance, similar to results found in personality, comparable absolute variability was found for state vocational interests. Distributional aspects of density distributions for state vocational interests seem to vary person-to-person as well, such as degree of state variability. The results of this research project generally provide support for the tenants of the TSID theory of trait interest

development, with some modifications. At a high level, TSID theory suggests interests drive individuals to seek out environments congruent with those interests and situational interests in those domains over times lead to changes in trait interests, with higher situational interests leading to increases in trait interests and lower situational interests leading to decreases in the domain (Su, 2018). Results of the current study suggest that this process might be responsible for trait interest change, but the meso-level construct of state vocational interests should be incorporated into the model. State vocational interests may function as the link through which highly transitory situational interests as suggested within TSID, situational interests seem to shift state vocational interest. In turn, when state vocational interests diverge from trait vocational interests evidence suggests that trait interests shift in the direction of this divergence. State vocational interests provide a mechanism through which situational interests can shift trait interests, and this construct should be incorporated into existing and future theorizing for trait interests development.

#### **Implications for Practice**

In addition to theoretical implications outlined, this research project has a number of meaningful implications for practice. For instance, this study holds practical implications for job design. Upending conventional wisdom that preferences for different activities are stable day-to-day warrants reconsidering how we design jobs. Since day-to-day interest seems to display a fair degree of fluctuation, managers may want to design jobs to accommodate these fluctuations. This may include adding more variety to the tasks done within jobs and/or allowing greater autonomy for employees to choose tasks so that they may complete tasks as their align with their daily interests (Cordery & Parker, 2012; Humphrey et al., 2007).

The study also highlights the role of positive affect as a potent mechanism for increasing state interests, which may prove useful for managers to consider. State positive affect was associated with greater state vocational interests across all six RIASEC dimensions, suggesting that increasing state positive affect may be related to increased interest in different activities regardless of an individual's disposition. This may be useful if a manager has a task for an individual or a group that may not align with individuals' interests as an intervention to raise positive affect may be effective to raise interest in this unappealing task.

This study also illustrates potential levers that may be utilized on a day-to-day basis to shift trait interests, which may be useful in situations such as closing the gender gaps that exist in STEM occupations and majors (Wang & Degol, 2017) fueled in part due to differences in interests (Su & Rounds, 2015; Su, Rounds, & Armstrong, 2009). A reciprocal pattern was found between situational interests and state vocational interests, where situational interests predicted greater state vocational interests in that RIASEC domain and greater state vocational interests in a domain predicted greater situational interests in that domain. Supplementary analyses suggest that over time this cycle can shift trait interests, thus illustrating how both situational interests and state vocational interests may act as levers to close labor pool gaps, such as the STEM gender gap, fueled by interests. For situational interests, interventions may be designed to increase affective reactions to, identification with, and value assigned to a domain to facilitate the positive feedback loop that would lead to higher trait interests in that domain. For instance, interventions for females introducing STEM fields in an enjoyable way (i.e. increasing affective reactions), illustrating potential female role models in the STEM fields (i.e. increasing identification with), and showing the societal impact of STEM (i.e. increasing value assigned) may be effective interventions to shift situational interests and eventually trait interests. For state

vocational interests, interventions may be designed to increase state interests in a domain that would facilitate the positive feedback loop leading to higher trait interest in that domain. As previously noted, positive affect was related to higher state vocational interests across all six RIASEC dimensions and may be a useful intervention mechanism for raising state vocational interests.

#### Limitations

As with any research study, this research project was subject to a number of limitations that should be considered in regards to conclusions drawn from this study. Many of the limitations of the current study are a result of the deficient literature for state vocational interests, leading to a limited research base to consider in designing the present study. For instance, the length in which state vocational interests persists is unclear based on a review of the literature. As outlined previously, a daily timespan seems reasonable for state vocational interests but it may be the case that state vocational interest may be more transitory or persist longer than this. If this is the case, then measuring state vocational interests daily may limit the accuracy of results in regards to true state vocational interests variability and related results from this study.

Because of the limited research into state vocational interests, much of the basis of the present study was rooted in vocational interests research at the trait level, with the assumption that homology exists between state and trait vocational interests. In the present research project, some evidence of homology was found such as the general parallels in predictive validity for congruence at the state and trait levels. A lack of parallelism elsewhere might call into question assumptions on which the design of this study and measures were based. For instance, Holland's (1959; 1997) model of vocational interests was utilized to design the DSIM in study 1 and the basis for state vocational interests in study 2. However, as Holland's (1959; 1997) is a trait

model of vocational interests it is unclear if this structure of interests generalizes to the state level. In other words, it may be that there may be more or less than six vocational interests at the state level or that their interrelationships don't match onto the Holland (1959; 1997) hexagonal structure. If state vocational interests are not represented well by the RIASEC model, the results of this study may be questionable.

The sample utilized within this research project, may also be considered a limitation. The current study utilized a college student sample, and although this sample is commonly used in vocational interest research (e.g. Nye et al., 2018a), some research has found differences in interests for this population. For instance, past research has found less variability in vocational interests at the between individual level in younger age groups (Ion, Nye, Illiescu, 2019) and past research suggests vocational interests at the trait level may be less stable during typical college years than adulthood (Low et al., 2005) possibly limiting generalizability. The samples utilized also demonstrated a lack of equal representation for gender, where in both study 1 and 2 the samples utilized were nearly 80% female. Interests have been found to differ by gender (Su et al., 2009) and although many aspects of interests theory have been found to generalize across gender at the trait level (e.g. Anderson et al., 1997), this may not generalize to the state level (Kozlowski & Klein, 2000). Drawing conclusions based on such a highly gender skewed sample may be problematic as results may fail to generalize. There may also be limited ability for college students to choose what activities that partake in, impacting congruence and the relationship between state vocational interests and daily activities, due to course requirements, work requirements, lack of resources, etc. However, this limitation is present in some way for all adults. Even employees have limited ability to choose the work in which they do day-to-day. Even retirees, who have no work requirements and ample schedule flexibility, may still be

limited in terms of choice of activities by factors such as finances, weather, location, etc. No population has unlimited choice in terms of the activities they participate in; however, this limitation should still be considered within the current research project.

In addition to the source of the sample, sample size may be a limitation of the current study for some analyses. For some hypothesis-focused and exploratory analyses, the sample size available for analyses was very low. This leaves ambiguity in regard to if patterns of significant and non-significant results are due to actual substantive differences or differences in power. For instance, analyses for hypothesis 4 regarding situational interests predicting next day state vocational interests found support for the three RIASEC dimensions with the largest sample size but did not find support in the three dimensions with the lowest. It is difficult to know if these differences are due to true differences across dimensions or power differences due to sample size issues.

One issue with determining the variability of state vocational interests is determining if variability found is due to actual variability in the construct across days or simply measurement error. The state DSIM measures are relatively short with imperfect reliability, suggesting that measurement error may play a role in this variability. Latent correlations between state vocational interests day-to-day were conducted to account for this measurement error and variability was still found. Additionally, as previously outlined, variability in state vocational interests was able to be predicted across days, individuals, and measurement occasions suggesting this variability is substantive as opposed to error. However, the results must still be interpreted in light of measurement error.

#### **Future Research**

As research into state vocational interests in the organizational sciences is so sparse, ample opportunities are available for meaningful future research in this domain. For instance, within the current study state vocational interests were measured daily for a period of one week. These timeframes were based on reasonable assumptions, however future research may adjust these timeframes. It may be the case that state vocational interest vary with higher frequency, as in hour-to-hour or even moment-to-moment, which would have been variability neglected in the present study. Although the present study utilized the period of one week to measure daily state vocational interests, it would be interesting to measure state vocational interests over a longer period as well. Future research could determine if state vocational interests are cyclical in nature or display trends over days of the week. For instance, do individuals prefer conventional interest activities towards the end of the week where mental resources may be more limited relative to earlier in the week? Do individuals prefer more social activities during the weekends?

Future research could be conducted to determine the rate at which state vocational interests change and possible moderators of this change. Within the present study, a pattern emerged where the stability of state vocational interests decreased as the timeframe between measurements increased from T to T+1 to T+6. Future research could chart this decay in stability, to determine the stability over days to weeks to months and if the decay in stability is linear or curvilinear in nature. Within the current research project, individuals were found to differ in regards to the stability of their interests and predictors of this variability were found. In testing the decay of stability across timeframes, it may be that individual differences may also moderate the slope of this decay with some individuals exhibiting slower change in state vocational interests than others.

As noted previously, much of the present study relied on the assumption of homology between state vocational interests and trait vocational interests. Future research could test if parallelism can be determined between state and trait vocational interests. For instance, Holland's (1959: 1997) model of trait vocational interests was used as the basis for state vocational interests within this study. Holland's RIASEC model may represent trait vocational interests well, but may not do the same for state vocational interests.

Interestingly, in the present research study state vocational interest congruence was predictive of daily positive affect but generally not daily negative affect. At the trait level, vocational interest congruence has demonstrated only a modest, though significant, relationship with affective outcomes such as job satisfaction (Hoff et al., 2018) despite theoretical (e.g. Holland, 1959: 1997) and intuitive rationale for a stronger relationship. These results from the present study may hold insights for this modest relationship. If homology across state and trait levels holds in these relationships between congruence and positive and negative affect, trait congruence may predict positive affective outcomes well but not negative affective outcomes. For complex affective outcomes, such as job satisfaction, that likely blend positive and negative affective feelings, this lack of relationship between congruence and negative affective outcomes may explain modest relationships found for complex affective outcomes. Future research may evaluate the homology between state and trait vocational interest congruence and relationships with positive and negative affect, as well as evaluate this possible explanation for modest relationships found between trait vocational interest congruence and some affective outcomes.

#### Conclusion

After a long period of dormancy within organizational sciences, research into vocational interests is again thriving with renewed promise for academics and practitioners alike. Interest researchers are continuously looking to expand the theory of vocational interests to further understand the construct, and state vocational interests represent a valuable extension for theory and practice. Results suggest that variability day-to-day exists for state vocational interest, state vocational interests can be useful in predicting valuable outcomes, and this variability can influence trait vocational interest development. Though the organizational sciences have neglected state variability in vocational interests, the results of this research project suggest we should reevaluate our current assumptions and theories for vocational interests with an eye towards acknowledging this variability.

**APPENDICES** 

#### **APPENDIX A – Tables and Figures**

Table 1:

#### Item level Information for DSIM Developmental Item Pool.

						Mean Cor	Median Cor w/	Max Cor w/	Which
Item	Item Text	Ν	Mean	SD	Median	w/ Others	Others	Others	Max
DSIM_1_R	"Hands-on" tasks	341	5.33	1.44	6	0.25	0.25	0.31	R4
DSIM_2_R	Being outdoors	341	4.48	2.04	5	0.16	0.19	0.32	R6
DSIM_3_R	Using tools	341	3.81	1.73	4	0.32	0.25	0.57	R5
DSIM_4_R	Fixing	341	4.01	1.73	4	0.32	0.31	0.54	R5
DSIM_5_R	Building	341	3.72	1.72	4	0.34	0.29	0.57	R3
DSIM_6_R	Physical activity	341	4.81	1.78	5	0.20	0.24	0.32	R2
DSIM_7_R	Technical activities	341	3.74	1.53	4	0.31	0.35	0.44	R8
DSIM_8_R	Working with gadgets	341	3.92	1.74	4	0.28	0.20	0.49	R3
DSIM_9_R	Straight forward problems	341	5.21	1.38	5	0.13	0.13	0.34	R10
DSIM_10_R	Practical tasks	341	5.00	1.4	5	0.21	0.21	0.35	R7
DSIM_11_I	Research	341	4.06	1.84	4	0.35	0.30	0.50	I13
DSIM_12_I	Mathematics	341	3.14	1.86	3	0.21	0.23	0.34	I13
DSIM_13_I	Science	341	4.14	2.01	5	0.28	0.31	0.50	I11
DSIM_14_I	Exploration	341	5.41	1.36	6	0.19	0.17	0.38	I20
DSIM_15_I	Analytic thinking	341	4.54	1.63	5	0.37	0.37	0.53	I17
DSIM_16_I	Abstract ideas	341	4.71	1.66	5	0.25	0.24	0.50	I20
DSIM_17_I	Intellectual tasks	341	4.97	1.53	5	0.36	0.36	0.53	I15
DSIM_18_I	Individually focused tasks	340	5.1	1.41	5	0.26	0.21	0.41	I15
DSIM_19_I	Academics	341	4.46	1.62	5	0.31	0.35	0.49	I17
DSIM_20_I	New ideas	341	5.37	1.28	6	0.30	0.28	0.50	I16

							Median	Max Cor	
						Mean Cor	Cor w/	<b>w</b> /	Which
Item	Item Text	Ν	Mean	SD	Median	w/ Others	Others	Others	Max
DSIM_21_A	Creativity	341	5.33	1.47	6	0.47	0.51	0.62	A27
DSIM_22_A	Artistic expression	341	4.57	1.8	5	0.52	0.49	0.76	A26
DSIM_23_A	Innovation	341	4.81	1.45	5	0.35	0.35	0.52	A25
DSIM_24_A	Little structure	340	3.8	1.69	4	0.27	0.27	0.38	A22
DSIM_25_A	Imagination	341	5.36	1.42	6	0.48	0.52	0.59	A27
DSIM_26_A	Art	341	4.6	1.86	5	0.51	0.52	0.76	A22
DSIM_27_A	Creating	341	5.25	1.47	6	0.49	0.48	0.63	A22
DSIM_28_A	Creative writing	341	3.92	1.91	4	0.37	0.41	0.49	A26
DSIM_29_A	Music	341	5.38	1.67	6	0.31	0.30	0.46	A22
DSIM_30_A	Design	341	4.84	1.61	5	0.41	0.47	0.53	A26
DSIM_31_S	Teaching	341	4.39	1.68	5	0.29	0.32	0.41	S35
DSIM_32_S	Helping others	340	5.85	1.16	6	0.48	0.47	0.67	S33
DSIM_33_S	Caring for others	341	5.74	1.27	6	0.42	0.41	0.67	S32
DSIM_34_S	Working with others	341	5.36	1.45	6	0.41	0.42	0.51	S38
DSIM_35_S	Guiding others	341	5.11	1.42	5	0.42	0.41	0.58	S32
DSIM_36_S	Socializing	341	5.65	1.38	6	0.39	0.40	0.64	S38
DSIM_37_S	Volunteering	341	5.16	1.55	5	0.36	0.37	0.60	S39
<b>DSIM_38_S</b>	<b>Communicating with others</b>	341	5.61	1.21	6	0.40	0.43	0.64	S36
DSIM_39_S	Providing services to others	341	5.33	1.4	6	0.44	0.45	0.60	S37
DSIM_40_S	Close relationships	341	5.87	1.17	6	0.30	0.31	0.40	S36

							Median	Max Cor	
Item	Item Text	Ν	Mean	SD	Median	Mean Cor w/ Others	Cor w/ Others	w/ Others	Which Max
DSIM_41_E	Leadership	341	5.03	1.52	5	0.38	0.40	0.58	E48
DSIM_42_E	Persuading others	341	4.32	1.71	5	0.33	0.30	0.59	E45
DSIM_43_E	Selling	341	3.52	1.79	3	0.24	0.26	0.41	E42
DSIM_44_E	Strategic thinking	341	4.82	1.56	5	0.25	0.24	0.40	E50
DSIM_45_E	Negotiation	341	4.06	1.68	4	0.37	0.39	0.59	E42
DSIM_46_E	Achievement	341	5.78	1.14	6	0.22	0.29	0.36	E41
DSIM_47_E	Risk	341	4.01	1.74	4	0.24	0.24	0.32	E45
DSIM_48_E	Managing others	340	4.39	1.64	5	0.38	0.39	0.58	E50
DSIM_49_E	Making decisions	341	4.9	1.53	5	0.32	0.31	0.42	E41
DSIM_50_E	Managing projects	341	4.41	1.66	5	0.38	0.36	0.58	E48
DSIM_51_C	Routine	341	5.15	1.47	5	0.30	0.40	0.46	C56
DSIM_52_C	Organization	341	5.43	1.42	6	0.30	0.29	0.51	C59
DSIM_53_C	Structure	341	4.94	1.49	5	0.36	0.38	0.50	C56
DSIM_54_C	Systematic work	341	4.18	1.53	4	0.32	0.31	0.47	C58
DSIM_55_C	Detail focused tasks	341	4.83	1.46	5	0.29	0.29	0.38	C58
DSIM_56_C	Clear rules	340	5.14	1.45	5	0.33	0.32	0.50	C53
DSIM_57_C	Business	341	3.67	1.8	4	0.19	0.20	0.33	C54
DSIM_58_C	Analyzing data	341	3.78	1.79	4	0.27	0.26	0.47	C54
<b>DSIM_59_C</b>	Organizing information	341	5	1.52	5	0.34	0.32	0.51	C52
<b>DSIM_60_C</b>	Repeated tasks	341	3.91	1.62	4	0.30	0.28	0.43	C51

Item	Item Text	Cor w/ BPDRMS					
		R	I	A	S	E	C
DSIM_1_R	"Hands-on" tasks	0.15	0.23	0.14	0.22	0.06	0.04
DSIM_2_R	Being outdoors	0.17	0.27	0.14	0.18	0.11	0.04
DSIM_3_R	Using tools	0.46	0.20	0.23	-0.03	0.27	0.30
DSIM_4_R	Fixing	0.41	0.23	0.20	0.16	0.28	0.34
DSIM_5_R	Building	0.50	0.20	0.19	0.04	0.34	0.37
DSIM_6_R	Physical activity	0.17	0.14	-0.07	0.15	0.11	0.11
DSIM_7_R	Technical activities	0.31	0.20	0.19	-0.01	0.19	0.39
DSIM_8_R	Working with gadgets	0.34	0.16	0.19	-0.04	0.21	0.34
DSIM_9_R	Straight forward problems	-0.03	0.07	-0.04	0.23	0.13	0.13
DSIM_10_R	Practical tasks	0.03	0.13	0.02	0.18	0.12	0.19
DSIM_11_I	Research	0.11	0.43	0.11	0.05	-0.06	0.16
DSIM_12_I	Mathematics	0.20	0.26	0.00	-0.01	0.13	0.37
DSIM_13_I	Science	0.13	0.60	0.07	0.00	-0.08	0.11
DSIM_14_I	Exploration	0.06	0.21	0.23	0.21	0.10	-0.02
DSIM_15_I	Analytic thinking	0.08	0.20	0.14	-0.04	0.04	0.22
DSIM_16_I	Abstract ideas	0.11	0.04	0.36	0.16	0.17	0.07
DSIM_17_I	Intellectual tasks	-0.03	0.15	0.11	0.19	-0.01	0.14
DSIM_18_I	Individually focused tasks	-0.04	0.09	0.04	0.05	0.02	0.12
<b>DSIM_19_I</b>	Academics	-0.05	0.20	-0.07	0.07	0.01	0.21
DSIM_20_I	New ideas	0.08	0.15	0.26	0.21	0.13	0.09

Table 1 (cont'd)

Item	Item Text	Cor w/					
		BPDRMS R	BPDRMS I	BPDRMS A	BPDRMS S	BPDRMS E	BPDRMS C
DSIM 21 A	Creativity	0.09	0.07	0.44	0.16	0.13	-0.03
DSIM_22_A	Artistic expression	0.04	0.15	0.57	0.15	0.19	0.02
DSIM_23_A	Innovation	0.20	0.19	0.34	0.14	0.26	0.20
DSIM_24_A	Little structure	0.15	0.09	0.28	0.01	0.16	0.12
DSIM_25_A	Imagination	0.13	0.02	0.49	0.20	0.27	0.08
DSIM_26_A	Art	0.11	0.08	0.58	0.16	0.23	0.01
DSIM_27_A	Creating	0.12	0.12	0.47	0.17	0.21	0.03
DSIM_28_A	Creative writing	0.06	0.05	0.50	0.15	0.13	0.03
DSIM_29_A	Music	-0.05	0.03	0.49	0.18	0.16	0.02
DSIM_30_A	Design	0.13	0.03	0.38	0.09	0.26	0.09
DSIM_31_S	Teaching	0.07	0.14	0.14	0.40	0.12	0.08
DSIM_32_S	Helping others	-0.14	0.06	0.05	0.47	0.06	-0.13
DSIM_33_S	Caring for others	-0.20	0.03	0.06	0.45	-0.02	-0.15
DSIM_34_S	Working with others	-0.07	-0.03	0.03	0.35	0.12	-0.04
DSIM_35_S	Guiding others	-0.03	0.08	0.09	0.39	0.18	0.01
DSIM_36_S	Socializing	-0.11	0.00	0.12	0.23	0.11	-0.08
DSIM_37_S	Volunteering	-0.05	0.18	0.11	0.47	0.08	-0.02
DSIM_38_S	Communicating with others	-0.15	-0.04	0.05	0.28	0.09	-0.09
DSIM_39_S	Providing services to others	-0.10	0.09	0.00	0.43	0.08	-0.07
DSIM_40_S	Close relationships	-0.12	-0.01	0.12	0.28	0.03	-0.12

Item	Item Text	Cor w/ BPDRMS					
		R	I	A	S	E	C
DSIM_41_E	Leadership	0.00	0.04	0.05	0.29	0.22	0.04
DSIM_42_E	Persuading others	0.07	-0.04	0.10	0.10	0.22	0.11
DSIM_43_E	Selling	0.27	-0.05	0.13	0.02	0.50	0.35
DSIM_44_E	Strategic thinking	0.13	0.15	0.18	0.05	0.07	0.24
DSIM_45_E	Negotiation	0.16	-0.02	0.09	0.06	0.23	0.21
DSIM_46_E	Achievement	-0.10	0.15	-0.01	0.30	0.06	0.10
DSIM_47_E	Risk	0.21	0.13	0.10	0.03	0.18	0.14
<b>DSIM_48_E</b>	Managing others	0.05	0.02	0.06	0.22	0.25	0.15
DSIM_49_E	Making decisions	0.01	0.00	-0.01	0.13	0.06	0.02
DSIM_50_E	<b>Managing projects</b>	0.17	0.10	0.11	0.14	0.30	0.24
DSIM_51_C	Routine	-0.07	0.02	-0.19	0.29	0.04	0.14
DSIM_52_C	Organization	-0.13	0.02	-0.11	0.32	0.01	0.01
DSIM_53_C	Structure	0.00	0.10	0.00	0.22	0.10	0.21
DSIM_54_C	Systematic work	0.24	0.15	0.04	0.09	0.16	0.36
DSIM_55_C	Detail focused tasks	0.04	0.09	-0.02	0.08	0.05	0.18
DSIM_56_C	Clear rules	-0.07	0.10	-0.06	0.27	0.11	0.13
DSIM_57_C	Business	0.30	-0.05	0.07	-0.01	0.50	0.45
DSIM_58_C	Analyzing data	0.19	0.22	0.06	-0.05	0.10	0.38
DSIM_59_C	Organizing information	-0.07	0.09	-0.04	0.25	0.10	0.17
DSIM_60_C	Repeated tasks	0.08	-0.01	-0.08	0.18	0.14	0.26

Table 1 (cont'd)

Item	Item Text	EFA	EFA	EFA	EFA	EFA	EFA	Ten	
		Loading	Loading	Loading	Loading	Loading	Loading	Item	Alpha if
		1	2	3	4	5	6	Alpha	Dropped
DSIM_1_R	"Hands-on" tasks	0.33	0.04	-0.02	-0.07	0.09	0.35	0.77	0.75
DSIM_2_R	Being outdoors	0.26	0.02	0.03	-0.11	-0.2	0.39		0.78
DSIM_3_R	Using tools	-0.21	0.11	0	0.09	0.07	0.66		0.73
DSIM_4_R	Fixing	-0.01	0.04	0.04	0.1	0.1	0.57		0.73
DSIM_5_R	Building	-0.14	0.08	-0.09	0.1	0.12	0.71		0.73
DSIM_6_R	Physical activity	0.25	-0.24	-0.17	0.06	0.02	0.46		0.76
DSIM_7_R	Technical								
	activities	-0.19	0.08	0.21	0.13	0.23	0.38		0.74
DSIM_8_R	Working with								
	gadgets	-0.17	0.1	0.12	0.17	0.04	0.43		0.74
DSIM_9_R	Straight forward								
	problems	0.1	0.02	-0.07	-0.05	0.5	0.1		0.78
DSIM_10_R	Practical tasks	0.02	0.1	0.16	-0.01	0.4	0.08		0.76
DSIM_11_I	Research	0.02	-0.06	0.81	-0.11	-0.16	0	0.8	0.76
DSIM_12_I	Mathematics	-0.25	-0.13	0.42	0.01	0.08	0.23		0.8
DSIM_13_I	Science	0.11	-0.2	0.68	-0.26	-0.23	0.22		0.78
DSIM_14_I	Exploration	0.27	0.27	0.09	-0.1	-0.18	0.21		0.8
DSIM_15_I	Analytic thinking	-0.09	0.09	0.8	0.11	-0.06	-0.16		0.76
DSIM_16_I	Abstract ideas	0.05	0.54	0.26	0.12	-0.19	-0.01		0.79
DSIM_17_I	Intellectual tasks	0.17	0.05	0.71	0.07	-0.01	-0.22		0.76
DSIM_18_I	Individually								
	focused tasks	0.03	0.06	0.39	-0.06	0.18	-0.01		0.79
DSIM_19_I	Academics	0	-0.06	0.63	0.03	0.19	-0.18		0.77
DSIM_20_I	New ideas	0.19	0.36	0.31	-0.01	-0.07	0.04		0.78

*Note:* Items retained are in bold. EFA factor loadings in bold were the highest for each item on the six factors.

Table 1 (cont'd)

Item	Item Text	EFA	EFA	EFA	EFA	EFA	EFA	Ten	
		Loading	Loading	Loading	Loading	Loading	Loading	Item	Alpha if
		1	2	3	4	5	6	Alpha	Dropped
DSIM_21_A	Creativity	0.07	0.72	0.03	-0.04	-0.01	-0.01	0.88	0.86
DSIM_22_A	Artistic expression	-0.05	0.9	0.01	-0.24	0.07	0		0.85
DSIM_23_A	Innovation	0.08	0.36	0.12	0.11	-0.07	0.29		0.87
DSIM_24_A	Little structure	-0.12	0.41	-0.08	0.07	-0.19	0.16		0.88
DSIM_25_A	Imagination	0.08	0.67	-0.07	0.07	-0.07	0.1		0.86
DSIM_26_A	Art	-0.07	0.91	-0.04	-0.19	0.11	-0.01		0.85
DSIM_27_A	Creating	0.09	0.74	-0.03	0.02	-0.01	0.04		0.86
DSIM_28_A	Creative writing	0	0.58	0.18	0.07	-0.03	-0.26		0.87
DSIM_29_A	Music	0.04	0.55	-0.21	-0.12	0.11	-0.01		0.88
DSIM_30_A	Design	-0.01	0.61	-0.09	0.13	0.1	0.08		0.86
DSIM_31_S	Teaching	0.34	-0.01	0.13	0.05	0.16	0.28	0.86	0.86
DSIM_32_S	Helping others	0.81	-0.04	-0.03	-0.05	0	-0.03		0.84
DSIM_33_S	Caring for others	0.71	-0.01	0.01	-0.16	0.11	-0.13		0.84
DSIM_34_S	Working with								
	others	0.61	-0.01	-0.06	0.18	0.08	-0.04		0.84
DSIM_35_S	Guiding others	0.6	-0.04	-0.07	0.17	0.12	0.09		0.84
DSIM_36_S	Socializing	0.59	0.1	-0.13	0.29	-0.05	-0.1		0.85
DSIM_37_S	Volunteering	0.54	0	0.08	-0.2	0.1	0.18		0.85
DSIM_38_S	Communicating								
	with others	0.63	0.07	-0.06	0.22	0.01	-0.24		0.85
DSIM_39_S	Providing								
	services to others	0.62	0.04	0.05	-0.06	0.05	0.09		0.84
DSIM_40_S	Close								
	relationships	0.43	0.22	-0.14	0.05	0.08	-0.06		0.86

Note: Items retained are in bold. EFA factor loadings in bold were the highest for each item on the six factors.

Item	Item Text	EFA	EFA	EFA	EFA	EFA	EFA	Ten	
		Loading	Loading	Loading	Loading	Loading	Loading	Item	Alpha if
		1	2	3	4	5	6	Alpha	Dropped
DSIM_41_E	Leadership	0.48	-0.07	-0.01	0.41	0.01	0.01	0.82	0.79
DSIM_42_E	Persuading								
	others	0.19	-0.03	-0.01	0.72	-0.15	-0.1		0.8
DSIM_43_E	Selling	-0.09	0.04	-0.21	0.55	0.1	0.26		0.82
DSIM_44_E	Strategic thinking	-0.02	0.15	0.67	0.03	0	0		0.81
DSIM_45_E	Negotiation	0.1	-0.1	0.17	0.71	-0.19	0.03		0.79
DSIM_46_E	Achievement	0.43	-0.02	0.09	-0.09	0.25	0.08		0.82
DSIM_47_E	Risk	0.06	-0.02	-0.02	0.31	-0.13	0.3		0.82
DSIM_48_E	Managing others	0.36	-0.12	-0.03	0.51	0.04	0.08		0.79
DSIM_49_E	Making decisions	0.35	-0.06	0.23	0.26	-0.02	-0.06		0.8
DSIM_50_E	Managing								
	projects	0.16	-0.05	0.17	0.38	0.1	0.16		0.79
DSIM_51_C	Routine	0.12	-0.03	-0.15	-0.17	0.79	0.01	0.8	0.79
DSIM_52_C	Organization	0.34	-0.01	0.06	-0.04	0.43	-0.1		0.79
DSIM_53_C	Structure	0.09	0	0.12	-0.03	0.54	0.1		0.78
DSIM_54_C	Systematic work	-0.21	0.03	0.29	0.12	0.36	0.18		0.78
DSIM_55_C	Detail focused								
	tasks	0.05	-0.02	0.51	0	0.16	0		0.79
DSIM_56_C	Clear rules	0.18	-0.06	0.02	-0.1	0.59	0		0.78
DSIM_57_C	Business	-0.13	-0.02	0	0.62	0.05	0.22		0.81
DSIM_58_C	Analyzing data	-0.18	-0.06	0.63	0.12	0.05	0.08		0.79
DSIM_59_C	Organizing								
	information	0.17	-0.01	0.29	0.02	0.44	-0.16		0.78
DSIM_60_C	<b>Repeated tasks</b>	-0.03	-0.01	-0.04	0.12	0.56	0.02		0.79

*Note:* Items retained are in **bold**. EFA factor loadings in **bold** were the highest for each item on the six factors.

### Table 2:

	Μ	SD	1	2	3	4	5	6	7	8	9
1. State Realistic	4.05	1.23	(.75)								
2. State Investigative	4.43	1.27	.30***	(.78)							
3. State Artistic	4.89	1.28	.22***	.22***	(.84)						
4. State Social	5.45	1.01	.21***	.28***	.27***	(.81)					
5. State Enterprising	4.14	1.23	.46***	.32***	.25***	.45***	(.77)				
6. State Conventional	4.64	1.06	.33***	.43***	.04	.35***	.35***	(.73)			
7. Trait Realistic	1.86	.76	.53***	.07	.13*	13*	.20***	.06	(.90)		
8. Trait Investigative	3.08	.94	.26***	.45***	.08	.04	.00	.10	.24***	(.87)	
9. Trait Artistic	2.72	.95	.21***	.10	.63***	.06	.14*	08	.31***	.19***	(.86)
10. Trait Social	3.55	.71	.08	.07	.21***	.51***	.15***	.30***	04	.19***	.18***
11. Trait Enterprising	2.76	.84	.34***	03	.25***	.14***	.42***	.16***	.45***	.07	.40***
12. Trait Conventional	2.25	.83	.41***	.22***	.03	08	.29***	.33***	.61***	.16***	.17***
13. Trait Extraversion	3.37	.72	.07	.09	.12*	.44***	.37***	.08	12*	10	.01
14. Trait	3.79	.55	.00	02	.05	.35***	09	.05	14***	.07	04
Agreeableness											
15. Trait	3.60	.65	02	.16***	11*	.29***	.05	.32***	19***	.00	22***
Conscientiousness											
16. Trait Neuroticism	3.02	.81	21***	06	01	14*	19***	06	13*	02	.08
17. Trait Openness	3.69	.68	.06	.20***	.67***	.17***	.07	06	03	.10	.55
18. Interest Importance	4.66	1.37	02	02	08	.01	02	.05	05	08	04
19. Self-Assessed	4.48	1.11	.11*	.09	.26***	.05	.09	15***	01	.06	.25***
Interest Variance											

Mean, Standard Deviation, Intercorrelations, and Alpha for Variables in Study 1.

Note: State vocational interests represent final DSIM scales. Interest importance represents revised two item scale. Numbers on diagonals represent alphas. N = 341. \*p < .05 \*\*\* p < .01

	10	11	12	13	14	15	16	17	18	<i>19</i>
10. Trait Social	(.76)									
11. Trait Enterprising	.21***	(.84)								
12. Trait Conventional	.02	.58***	(.89)							
13. Trait Extraversion	.22***	.13*	12*	(.86)						
14. Trait Agreeableness	.34***	.01	09	17***	(.74)					
15. Trait Conscientiousness	.15***	08	.01	.20***	.40***	(.84)				
16. Trait Neuroticism	.00	17***	10	35***	23***	21***	(.89)			
17. Trait Openness	.14*	.05	05	.13*	.12*	01	02	(.85)		
18. Interest Importance	.04	.00	03	11*	10	03	.16***	15***	(.66)	
19. Self-Assessed Interest	.03	.05	13*	.21***	02	17***	11*	.31***	01	(.70)
Variance										

Note: State vocational interests represent final DSIM scales. Interest importance represents revised two item scale. Numbers on diagonals represent alphas. N = 341. \*p < .05 \*\*\* p < .01

## Table 3:

Relationships Between Vocational Interests and Personality.
---

	Trait Vocational Interest – Trait Personality Relationship (Meta-Analytic Estimate)	Trait Vocational Interest – Trait Personality Relationship (Current Study)	State Vocational Interest – Trait Personality Relationship (Current Study)		
Realistic					
Neuroticism	09	13	21		
Extraversion	.04	12	.07		
Openness	.08	03	.06		
Agreeableness	.01	14	.00		
Conscientiousness	.07	19	02		
Investigative					
Neuroticism	10	02	06		
Extraversion	.03	10	.09		
Openness	.28	.10	.20		
Agreeableness	.03	.07	02		
Conscientiousness	.09	.00	.16		
Artistic					
Neuroticism	.02	.08	01		
Extraversion	.11	.01	.12		
Openness	.48	.55	.67		
Agreeableness	.01	04	.05		
Conscientiousness	05	22	11		

Note: Meta-analytic estimates of relationships represent mean effect size estimates from Larson, Rottinghaus, & Borgen, 2002. Relationships in bold are statistically significant (p < .05).

	Trait Vocational Interest – Trait Personality Relationship (Meta-Analytic Estimate)	Trait Vocational Interest – Trait Personality Relationship (Current Study)	State Vocational Interest – Trait Personality Relationship (Current Study)		
Social					
Neuroticism	12	.00	14		
Extraversion	.31	.22	.44		
Openness	.19	.14	.17		
Agreeableness	.19	.34	.35		
Conscientiousness	.13	.15	.29		
Enterprising					
Neuroticism	19	17	19		
Extraversion	.41	.13	.37		
Openness	.09	.05	.07		
Agreeableness	07	.01	09		
Conscientiousness	.22	08	.05		
Conventional					
Neuroticism	10	10	06		
Extraversion	.08	12	.08		
Openness	11	05	06		
Agreeableness	.03	09	.05		
Conscientiousness	.25	.01	.32		

Note: Meta-analytic estimates of relationships represent mean effect size estimates from Larson, Rottinghaus, & Borgen, 2002. Relationships in bold are statistically significant (p < .05).

### Table 4:

Descriptives and Intercorrelations for Between-Person Variables in Study 2.

	Ν	М	SD	1.	2.	3.	4.	5.	6.	7.	8.
1. Trait Realistic (DSIM) (Pre)	176	4.36	1.04	(.75)							
2. Trait Investigative (DSIM) (Pre)	176	4.91	.92	.21***	(.70)						
3. Trait Artistic (DSIM) (Pre)	176	5.00	1.15	.07	.02	(.85)					
4. Trait Social (DSIM) (Pre)	176	5.60	.90	.02	.16*	.19*	(.83)				
5. Trait Enterprising (DSIM) (Pre)	176	4.33	1.08	.32***	.10	.13	.37***	(.77)			
6. Trait Conventional (DSIM) (Pre)	176	5.08	.75	.26***	.28***	01	.15	.23***	(.54)		
7. Trait Realistic (BPDRM) (Pre)	176	2.00	.65	.54***	.14	07	11	.18*	.07	(.87)	
8. Trait Investigative (BPDRM) (Pre)	176	3.31	.91	.16*	.59***	.08	.02	14	.02	.18*	(.89)
9. Trait Artistic (BPDRM) (Pre)	176	2.80	.88	.13	.07	.49***	.03	.13	13	.27***	.16*
10. Trait Social (BPDRM) (Pre)	176	3.75	.64	07	.10	.11	.46***	.09	.08	04	.20***
11. Trait Enterprising (BPDRM) (Pre)	176	2.95	.71	.22***	15*	.09	.12	.49***	.05	.32***	16*
12. Trait Conventional (BPDRM) (Pre)	176	2.51	.79	.38***	.25***	18*	18*	.20***	.30***	.60***	.12

Note: Pre and post refer to the temporality of when variables were collected. Pre variables were collected before the daily surveys, where post variables were collected after the daily surveys. Reliability (alphas) are reported on the diagonal for variables. \* p < .05 \*\*\*p < .01.

	Ν	М	SD	1.	2.	3.	4.	5.	6.	7.	8.
13. Extraversion (Pre)	176	3.42	.74	.09	01	.08	.49***	.40***	.00	.03	11
14. Agreeableness (Pre)	176	3.81	.55	11	05	.15*	.36***	18*	06	08	01
15. Conscientiousness (Pre)	176	3.80	.64	01	.06	.02	.21***	02	.33***	07	05
16. Negative Emotionality (Pre)	176	2.96	.82	- .21***	01	.11	11	12	.04	14	.12
17. Open-mindedness (Pre)	176	3.72	.64	.03	.20***	.68***	.07	08	.01	04	.16*
18. Curiosity (Pre)	176	3.24	.82	.27***	.31***	.26*	.39***	.36***	.09	.07	.16*
19. Grit (Pre)	176	3.45	.56	.03	.01	.01	.22***	.00	.20***	03	13
20. Consistency of Interests (Pre)	176	3.03	.77	01	12	05	.07	06	.11	.03	19*
21. Implicit Interests Theory (Pre)	176	3.49	1.02	08	03	07	03	01	12	09	02
22. Self-Assessed Interest Variance (Pre)	176	4.02	1.13	.17*	.13	.02	.17*	.13	15	.03	.11
23. Vocational Identity (Pre)	176	3.62	.88	11	.25***	13	.25***	08	.09	17*	.17*
24. Trait Positive Emotions (Pre)	176	3.57	.72	.05	.06	.13	.43***	.23***	.12	02	.03

	N	М	SD	1.	2.	3.	4.	5.	6.	7.	8.
25. Trait Negative Emotions (Pre)	176	2.15	.69	.01	01	06	17*	05	.02	.02	.09
26. Interest Importance (Pre)	176	4.60	1.24	04	.11	02	02	.04	.05	.10	05
27. Trait Realistic (DSIM) (Post)	136	3.33	1.17	.49***	.19*	.01	02	.10	.06	.44***	.28***
28. Trait Investigative (DSIM) (Post)	136	4.56	1.18	.08	.57***	.04	.02	11	.08	.03	.54***
29. Trait Artistic (DSIM) (Post)	136	4.00	1.42	.18	.02	.58***	.00	04	09	.14	.18*
30. Trait Social (DSIM) (Post)	136	5.07	1.19	07	.10	.22*	.53***	.14	.01	09	.09
31. Trait Enterprising (DSIM) (Post)	136	3.22	1.14	.19*	.04	.14	.16	.46***	.00	.17	02
32. Trait Conventional (DSIM) (Post)	136	4.51	1.15	.03	.22***	04	03	11	.34***	04	.18*
33. Trait Realistic (BPDRM) (Post)	136	1.86	.66	.42***	.04	04	12	.12	08	.74***	.20*
34. Trait Investigative (BPDRM) (Post)	136	3.13	.88	.27***	.56***	.06	02	15	03	.20*	.87***
35. Trait Artistic (BPDRM) (Post)	136	2.61	.86	.15	.06	.43***	.08	.17	09	.29***	.16
36. Trait Social (BPDRM) (Post)	136	3.55	.72	.01	.08	.30***	.47***	.05	.09	.02	.10

Table 4 (cont'd)

	Ν	М	SD	1.	2.	3.	4.	5.	6.	7.	8.
37. Trait Enterprising (BPDRM) (Post)	136	2.59	.77	.08	- .20***	.16	.09	.42***	10	.28***	21*
38. Trait Conventional (BPDRM) (Post)	136	2.59	.74	.18*	.12	- .26***	22***	.08	.14	.49***	.02
39. Extraversion (Post)	136	3.27	.75	.09	06	.12	.44***	.40***	.06	.05	12
40. Agreeableness (Post)	136	3.73	.59	03	03	01	.36***	14	.03	11	12
41. Conscientiousness (Post)	136	3.76	.66	07	.06	.04	.18*	10	.33***	16	13
42. Negative Emotionality (Post)	136	3.01	.75	17	07	.06	14	13	.00	10	.11
43. Open-mindedness (Post)	136	3.58	.64	.13	.13	.62***	.06	07	.07	02	.19*
44. Positive Emotions (Past Week) (Post)	136	2.96	.84	.04	.01	.12	.22*	.21*	.18*	05	08
45. Positive Emotions (Past Week) (Post)	136	1.83	.69	- .23***	10	02	07	05	.02	11	.07
46. Academic Satisfaction (Post)	136	5.60	.85	08	.07	01	.21*	.00	11	18*	.04
47. Dropout Intentions (Post)	136	2.17	.99	07	11	06	18	.06	.08	.15	10

	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
9. Trait Artistic	(.84)										
(BPDRM) (Pre)											
10. Trait Social	.15	(.78)									
(BPDRM) (Pre)											
11. Trait Enterprising	.26***	.13	(.79)								
(BPDRM) (Pre)											
12. Trait Conventional	.11	10	.36***	(84)							
(BPDRM) (Pre)											
13. Extraversion (Pre)	.02	.19***	.26***	12	(.87)						
14. Agreeableness	.03	.17*	.02	17*	.24***	(.75)					
(Pre)											
15. Conscientiousness	12	.15*	05	.06	.12	.32***	(.85)				
(Pre)											
16. Negative	.05	.10	16*	04	44***	16*	13	(.90)			
Emotionality (Pre)											
17. Open-mindedness	.54***	.03	06	15	.13	.23***	.07	.05	(.82)		
(Pre)											
18. Curiosity (Pre)	.21***	.16*	.16*	01	.45***	.13	.00	27***	.35***	(.88)	
19. Grit (Pre)	08	.11	07	.00	.33***	.26***	.64***	38***	.04	.13	(.79)
20. Consistency of	04	.08	05	.02	.20***	.17*	.45***	29***	08	06	.85***
Interests (Pre)											

	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
21. Implicit Interests Theory (Pre)	.04	06	06	08	15	.15	07	.16*	.05	04	25***
22. Self-Assessed Interest Variance (Pre)	.09	.07	.16*	14	.14	.10	14	.02	.11	.24***	17*
23. Vocational Identity (Pre)	19*	.14	- .23***	13	.16*	.10	.15*	19*	03	.22***	.34***
24. Trait Positive Emotions (Pre)	.03	.20***	.16*	06	.61***	.32***	.30***	42***	.16*	.55***	.40***
25. Trait Negative Emotions (Pre)	01	.06	03	.01	35**	- .23***	- .22***	.53***	06	10	44***
26. Interest Importance (Pre)	.02	.00	09	.06	.00	01	01	.04	03	06	.00
27. Trait Realistic (DSIM) (Post)	.14	10	.08	.34* **	.11	11	09	20*	.03	.19*	01
28. Trait Investigative (DSIM) (Post)	.08	.08	12	.10	03	02	03	.06	10	.23***	11
29. Trait Artistic (DSIM) (Post)	.51***	.01	.09	.02	.05	.06	06	.04	.53***	.12	09
30. Trait Social (DSIM) (Post)	.09	.39***	.12	17*	.30***	.38***	.15	15	.05	.15	.12
31. Trait Enterprising (DSIM) (Post)	.26***	.02	.35***	.16	.35***	.03	09	17	02	.22*	.01
32. Trait Conventional (DSIM) (Post)	04	.07	15	.16	05	.04	.10	.11	02	07	04

	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
33. Trait Investigative (BPDRM) (Post)	.14	.08	20*	.11	14	07	12	.14	.15	.23***	21*
34. Trait Artistic (BPDRM) (Post)	.80***	.13	.35***	.14	.13	03	19*	05	.45***	.26***	16
35. Trait Social (BPDRM) (Post)	.22***	.72***	.17*	08	.17*	.29***	.21*	.03	.17*	.19*	.18*
36. Trait Enterprising (BPDRM) (Post)	.34***	.00	.74***	.17*	.32***	.03	14	18*	03	.14	01
37. Trait Conventional (BPDRM) (Post)	01	21*	.19	.73* **	09	16	03	01	22*	13	06
38. Extraversion (Post)	.07	.19*	.26***	14	.91***	.24***	.15	49***	.11	.34***	.36***
39. Agreeableness (Post)	06	.18*	.03	10	.25***	.76***	.38***	22*	.02	.08	.28***
40. Conscientiousness (Post)	15	.15	17	.00	.10	.36***	.85***	10	.04	06	.62***
41. Negative Emotionality (Post)	.05	.10	07	04	41***	08	12	.83***	.11	- .32***	- .36***
42. Open-mindedness (Post)	.51***	.03	05	11	.11	.20*	.14	.02	.83***	.30***	.04
43. Positive Emotions (Past Week) (Post)	04	.08	.11	04	.29***	.11	.23***	21*	.07	.16	.24***
44. Positive Emotions (Past Week) (Post)	.04	.09	01	11	16	12	14	.38*	.05	10	- .31***
45. Academic Satisfaction (Post)	10	.07	.02	14	.17	.08	.12	13	01	.17	.13
46. Dropout Intentions (Post)	.02	06	.05	.13	18*	21*	16	.25***	08	.18*	16

	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
20. Consistency of Interests (Pre)	(.80)										
21. Implicit Interests Theory (Pre)	33***	(.81)									
22. Self-Assessed Interest Variance (Pre)	26***	.42***	(.69)								
23. Vocational Identity (Pre)	.23***	17*	14	(.97)							
24. Trait Positive Emotions (Pre)	.20***	- .21***	.01	.26***	(.90)						
25. Trait Negative Emotions (Pre)	39***	.07	.06	18*	14	(.85)					
26. Interest Importance (Pre)	01	03	07	.00	03	03	(.66)				
27. Trait Realistic (DSIM) (Post)	06	08	.06	01	.05	01	.05	(.83)			
28. Trait Investigative (DSIM) (Post)	20*	06	.05	.31***	.05	.14	.10	.36***	(.82)		
29. Trait Artistic (DSIM) (Post)	12	04	.02	17*	.01	.02	.00	.46***	.31***	(.89)	
30. Trait Social (DSIM) (Post)	.00	.04	.03	.26***	.33***	04	.04	.20*	.36***	.29***	(.89)
31. Trait Enterprising (DSIM) (Post)	02	01	.02	07	.17	04	04	.48***	.26***	.40***	.41***
32. Trait Conventional (DSIM) (Post)	05	12	22*	.14	01	.13	.17	.36***	.52***	.38***	.33***

Table 4 (cont'd)

	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
33. Trait Realistic (BPDRM)	08	14	.02	18*	05	.10	.03	.61***	.14	.25***	05
(Post)											
34. Trait Investigative	26***	.03	.15	.13	07	.15	08	.35***	.55**	.24***	.10
(BPDRM) (Post)									*		
35. Trait Artistic (BPDRM)	12	04	.05	11	.08	.07	.06	.32***	.18*	.60***	.19*
(Post)											
36. Trait Social (BPDRM)	.15	03	.07	.15	.29***	.10	.01	.11	.15	.27***	.56***
(Post)											
37. Trait Enterprising	.07	12	.11	34***	.13	12	02	.25***	10	.24***	.15
(BPDRM) (Post)											
38. Trait Conventional	02	07	08	24***	13	.07	.06	.42***	.10	.02	12
(BPDRM) (Post)											
39. Extraversion (Post)	.28***	11	.10	.14	.56***	40***	.05	.13	02	.10	.35***
40. Agreeableness (Post)	.21*	.17*	.06	.14	.24***	31***	.07	08	02	.03	.37***
41. Conscientiousness (Post)	.51***	.01	13	.11	.25***	21*	.06	08	.00	02	.18*
42. Negative Emotionality	30***	.18*	.01	18*	36***	.59***	05	17	.04	.09	08
(Post)											
43. Open-mindedness (Post)	05	.04	.10	.00	.17*	.00	.01	.16	.15	.66***	.15
44. Positive Emotions (Past	.21*	22*	06	.11	.37***	12	.06	.27***	.19*	.25***	.33***
Week) (Post)											
45. Positive Emotions (Past	27***	.10	01	08	17	.48***	01	11	.02	04	.02
Week) (Post)											
46. Academic Satisfaction	.04	01	.00	.25***	.27***	07	.04	03	.14	02	.20*
(Post)											
47. Dropout Intentions (Post)	05	.03	13	13	27***	.18*	13	.03	11	12	15

	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
20. Consistency of Interests (Pre)	(.80)										
21. Implicit Interests Theory (Pre)	33***	(.81)									
22. Self-Assessed Interest Variance (Pre)	26***	.42***	(.69)								
23. Vocational Identity (Pre)	.23***	17*	14	(.97)							
24. Trait Positive Emotions (Pre)	.20***	- .21***	.01	.26***	(.90)						
25. Trait Negative Emotions (Pre)	39***	.07	.06	18*	14	(.85)					
26. Interest Importance (Pre)	01	03	07	.00	03	03	(.66)				
27. Trait Realistic (DSIM) (Post)	06	08	.06	01	.05	01	.05	(.83)			
28. Trait Investigative (DSIM) (Post)	20*	06	.05	.31***	.05	.14	.10	.36***	(.82)		
29. Trait Artistic (DSIM) (Post)	12	04	.02	17*	.01	.02	.00	.46***	.31***	(.89)	
30. Trait Social (DSIM) (Post)	.00	.04	.03	.26***	.33***	04	.04	.20*	.36***	.29***	(.89)
31. Trait Enterprising (DSIM) (Post)	02	01	.02	07	.17	04	04	.48***	.26***	.40***	.41***
32. Trait Conventional (DSIM) (Post)	05	12	22*	.14	01	.13	.17	.36***	.52***	.38***	.33***

Table 4 (cont'd)

	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
33. Trait Realistic (BPDRM) (Post)	08	14	.02	18*	05	.10	.03	.61***	.14	.25***	05
34. Trait Investigative (BPDRM) (Post)	26***	.03	.15	.13	07	.15	08	.35***	.55***	.24***	.10
35. Trait Artistic (BPDRM) (Post)	12	04	.05	11	.08	.07	.06	.32***	.18*	.60***	.19*
36. Trait Social (BPDRM) (Post)	.15	03	.07	.15	.29***	.10	.01	.11	.15	.27***	.56***
37. Trait Enterprising (BPDRM) (Post)	.07	12	.11	- .34***	.13	12	02	.25***	10	.24***	.15
38. Trait Conventional (BPDRM) (Post)	02	07	08	- .24***	13	.07	.06	.42***	.10	.02	12
39. Extraversion (Post)	.28***	11	.10	.14	.56***	40***	.05	.13	02	.10	.35***
40. Agreeableness (Post)	.21*	.17*	.06	.14	.24***	31***	.07	08	02	.03	.37***
41. Conscientiousness (Post)	.51***	.01	13	.11	.25***	21*	.06	08	.00	02	.18*
42. Negative Emotionality (Post)	30***	.18*	.01	18*	- .36***	.59***	05	17	.04	.09	08
43. Open-mindedness (Post)	05	.04	.10	.00	.17*	.00	.01	.16	.15	.66***	.15
44. Positive Emotions (Past Week) (Post)	.21*	22*	06	.11	.37***	12	.06	.27***	.19*	.25***	.33***
45. Positive Emotions (Past Week) (Post)	27***	.10	01	08	17	.48***	01	11	.02	04	.02

	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
46. Academic	.04	01	.00	.25***	.27***	07	.04	03	.14	02	.20*
Satisfaction (Post)											
47. Dropout Intentions	05	.03	13	13	-	.18*	13	.03	11	12	15
(Post)					.27***						

Table 4 (cont'd)

	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.	41.
31. Trait Enterprising (DSIM) (Post)	(.81)										
32. Trait Conventional (DSIM) (Post)	.34***	(.83)									
33. Trait Realistic (BPDRM) (Post)	.31***	.10	(.88)								
34. Trait Investigative (BPDRM) (Post)	.01	.20*	.30***	(.87)							
35. Trait Artistic (BPDRM) (Post)	.36***	.10	.41***	.22***	(.84)						
36. Trait Social (BPDRM) (Post)	.18*	.20*	.02	.14	.30***	(.81)					
37. Trait Enterprising (BPDRM) (Post)	.53***	04	.38***	17*	.46***	.11	(.84)				
38. Trait Conventional (BPDRM) (Post)	.25***	.25***	.64***	.08	.12	09	.38***	(.87)			
39. Extraversion (Post)	.37***	01	.03	14	.14	.23***	.32***	10	(.87)		
40. Agreeableness (Post)	.01	.07	27***	18*	07	.27***	.00	13	.24***	(.80)	
41. Conscientiousness (Post)	04	.10	29***	19*	19*	.26***	10	04	.18*	.46***	(.87)
42. Negative Emotionality (Post)	13	.17*	11	.14	.01	.09	20*	06	48***	19*	15

	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.	41.
43. Open-mindedness	.16	.10	02	.17*	.51***	.22***	.02	17*	.17	.11	.14
(Post)											
44. Positive Emotions	.33***	.30***	.02	05	.03	.24***	.20*	.08	.40***	.14	.33*
(Past Week) (Post)											**
45. Positive Emotions	03	.14	07	.04	.06	.06	13	09	25***	16	16
(Past Week) (Post)											
46. Academic	.05	.00	08	.01	02	.17*	.04	07	.23***	.18*	.16
Satisfaction (Post)											
47. Dropout Intentions	02	.02	.19*	.00	.03	17*	.04	.14	26***	30***	-
(Post)											.22*
											**

	42.	43.	44.	45.	.46	47.
42. Negative Emotionality (Post)	(.88)					
43. Open-mindedness (Post)	.07	(.83)				
44. Positive Emotions (Past Week)	21*	19*	(.87)			
(Post)						
45. Positive Emotions (Past Week)	.51***	05	23***	(.79)		
(Post)						
46. Academic Satisfaction (Post)	19*	.10	.25***	20*	(.84)	
47. Dropout Intentions (Post)	.27***	19*	24***	.24***	55***	(.79)

### Table 5:

Descriptives and Intercorrelations for Within-Person Variables in Study 2.

		Ν	М	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.
1.	Sleep Quality (M)	951	2.77	.74									
2.	Sleep Quantity (M)	952	14.12	2.95	.58***								
3.	State Realistic (M)	951	3.21	1.21	.06	.01	(.82)						
4.	State Investigative (M)	950	4.16	1.40	.06	.00	.50***	(.86)					
5.	State Artistic (M)	950	3.71	1.47	.06	03	.50***	.29***	(.89)				
6.	State Social (M)	949	4.58	1.34	.16***	.04	.47***	.46***	.41***	(.88)			
7.		950	3.00	1.20	.07*	.02	.61***	.42***	.52***	.56***	(.83)		
8.	State Conventional (M)	950	4.27	1.35	.06	.05	.53***	.63***	.33***	.53***	.50***	(.86)	
9.		952	2.18	1.00	- .40***	- .21***	- .19***	- .23***	17***	- .31***	16***	17***	(.92)
	. State Positive Emotion (M)	953	2.42	.94	.29***	.05	.27***	.26***	.29***	.35***	.28***	.23***	40***

	Ν	М	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.
11. State	953	1.51	.64	-	-	04	03	03	08*	.04	.04	.45***
Negative				.19***	.09***							
Emotion (M)												
12. Positive	869	2.65	.96	.15***	02	.23***	.20***	.22***	.28***	.19***	.13***	25***
Emotion												
(Daily) (E)												
13. Negative	869	1.64	.73	-	02	08*	03	06	-	07	.05	.32***
Emotion				.14***					.10***			
(Daily) (E)	0.07	0.00	1 1 1	0.2	07	( 1 xh xh xh	26444	0.1.4.4.4	0.4 34 34 34	4.0 xk xk xk	2 ( ** ** **	0.0
14. Realistic	867	2.30	1.11	03	07	.61***	.36***	.31***	.34***	.43***	.36***	06
Daily												
Activities (E)	0.07	2.00	1.71	0.5	01	21444	()***	07***	22444	0(***	4 7 * * *	0.5
15. Investigative	867	3.88	1.51	.05	01	.31***	.62***	.27***	.33***	.26***	.45***	05
Daily												
Activities (E)	867	2.45	1.35	.04	05	.41***	.31***	.57***	.34***	.42***	.27***	09*
16. Artistic Daily	80/	2.45	1.35	.04	05	.41***	.31***	.3/****	.34***	.42***	.27****	09*
Activities (E) 17. Social Daily	867	3.78	1.49	.02	04	.32***	.32***	.27***	.63***	.39***	.38***	11***
Activities (E)	807	5.78	1.49	.02	04	.52	.52	.27	.05	.59	.30	11
18. Enterprising	867	2.15	1.14	.01	04	.38***	.33***	.30***	.37***	.56***	.37***	.00
Daily	007	2.13	1.17	.01	04	.50	.55	.50	.57	.50	.57	.00
Activities (E)												
19. Conventional	867	3.63	1.54	.03	.01	.38***	.50***	.27***	.38***	.40***	.68***	01
Daily												
Activities (E)												

	Ν	М	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.
20. Perseverance (Daily) E	869	3.30	.93	.11***	.04	.21***	.27***	.15***	.30***	.21***	.17***	26***
21. Realistic Situational Interests (E)	344	4.98	1.26	.12*	01	.25***	.06	.06	.13*	.08	.06	18***
22. Investigative Situational Interests (E)	626	5.01	1.29	.16***	.01	.28***	.53***	.19***	.37***	.26***	.33***	25***
23. Artistic Situational Interests (E)	217	5.07	1.29	.13	.10	.10	.13	.51***	.10	.12	.08	17***
24. Social Situational Interests (E)	583	5.38	1.21	.17***	.00	.19***	.24***	.24***	.46***	.18***	.22***	21***
25. Enterprising Situational Interests (E)	148	4.67	1.28	.16	.04	.21*	.13	.22*	.14	.14	.12	23***
26. Conventional Situational Interests (E)	541	4.81	1.42	.21***	.06	.23***	.29***	.07	.28***	.19***	.43***	21***
27. Engagement (Daily) (E)	869	4.32	1.37	.25***	.06	.32***	.25***	.26***	.37***	.29***	.25***	40***
28. Intrinsic Motivation (Daily) (E)	868	4.44	1.51	.24***	.07*	.27***	.23**	.17***	.32***	.21***	.23***	34***

Table 5 (cont'd)

	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
10. State Positive	(.90)										
Emotion (M)											
11. State Negative	.01	(.79)									
Emotion (M)											
12. Positive	.64***	06	(.88)								
Emotion (Daily)											
(E)											
13. Negative	06	.62***	09	(.82)							
Emotion (Daily)											
(E)											
14. Realistic Daily	.27***	.00	.33***	.02							
Activities (E)											
15. Investigative	.20***	.05	.27***	.07*	.44***						
Daily Activities											
(E)											
16. Artistic Daily	.31***	.01	.38***	.00	.61***	.44***					
Activities (E)											
17. Social Daily	.25***	01	.35***	04	.47***	.42***	.49***				
Activities (E)											
18. Enterprising	.25***	.06	.33***	.08*	.63***	.38***	.62***	.62***			
Daily Activities											
(E)											
19. Conventional	.15***	.06	.21***	.10***	.53***	.70***	.45***	.53***	.51***		
Daily Activities											
(E)	1		11					D 1: 1 :1:			

	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
10. Perseverance	.39***	-	.56***	21***	.30***	.40***	.30***	.39***	.29***	.32***	(.89)
(Daily) E		.21***									
11. Realistic	.29***	13*	.33***	20***	.25***	.12*	.13*	.24***	.10	.16***	.46**
Situational											*
Interests (E)											
12. Investigative	.32***	-	.33***	10*	.32***	.54***	.28***	.42***	.30***	.38***	.48**
Situational		.13***									*
Interests (E)											
13. Artistic	.23***	10	.22***	15*	.09	.22***	.46***	.12	.10	.08	.20**
Situational											*
Interests (E)											
14. Social	.29***	-	.33***	19***	22***	.24***	.28***	.48***	.25***	.23***	.36**
Situational		.13***									*
Interests (E)											
15. Enterprising	.20*	13	.30***	29***	.20*	.16*	.25***	.27***	.32***	.24***	.44**
Situational											*
Interests (E)											
16. Conventional	.35***	04	.37***	11***	.25***	.32***	.20***	.31***	.27***	.40***	.40**
Situational											*
Interests (E)											
17. Engagement	.50***	-	.65***	31***	.34***	.24***	.37***	.41***	.31***	.26***	.63**
(Daily) (E)		.23***									*
18. Intrinsic	.37***	-	.51***	31***	.28***	.13***	.30***	.33***	.22***	.15***	.42**
Motivation		.22***									*
(Daily) (E)											

	21.	22.	23.	24.	25.	26.	27.	28.
21. Realistic Situational Interests (E)	(.85)							
22. Investigative Situational Interests	.35***	(.88)						
(E)								
23. Artistic Situational Interests (E)	.22*	.35***	(.88)					
24. Social Situational Interests (E)	.34***	.46***	.38***	(.90)				
25. Enterprising Situational Interests	.43***	.39***	.41***	.44***	(.86)			
(E)								
26. Conventional Situational Interests	.50***	.49***	.10	.45***	.46***	(.91)		
(E)								
27. Engagement (Daily) (E)	.43***	.51***	.32***	.45***	.44***	.52***	(.93)	
28. Intrinsic Motivation (Daily) (E)	.34***	.44***	.23***	.42***	.28***	.44***	.76***	(.95)

Table 6:

Interest	Mean	Median	SD	Min	Max
Realistic	.66	.60	.31	.10	1.57
Investigative	.84	.76	.45	.11	2.50
Artistic	.76	.64	.43	.00	2.21
Social	.77	.65	.47	.17	2.28
Enterprising	.73	.71	.35	.08	1.94
Conventional	.83	.75	.40	.12	2.10
Average	.77	.69	.40	.10	2.10

Descriptive for State Interest Standard Deviations.

Note: State interests were on a seven-point scale. Based on individuals who had four or more daily interest scores. Average represents the average across six interests. N = 148

Table 7:

*Multilevel Regression Results of State Realistic Interest at T+1 on State Realistic Interest at T.* 

Variable	Unstandardized Coefficient	Standard Error	T-Value	Standardized Coefficient
Intercept	.56***	.08	6.76	
State Realistic	.79***	.02	32.67	.78***

Note: Conditional  $R^2 = .60$ . Marginal  $R^2 = .60$ . Level 1 N = 705, Level 2 N = 165. \*p < .05 \*\*\*p < .01.

Table 8:

 $\label{eq:main-state-s$ 

Variable	Unstandardized Coefficient	Standard Error	T-Value	Standardized Coefficient
Intercept	1.07***	.12	8.55	
State	.71***	.03	25.46	.69***
Investigative				

*Note:* Conditional  $R^2 = .48$ . Marginal  $R^2 = .48$ . Level 1 N = 704, Level 2 N = 165. \* p < .05 \*\*\*p < .01.

Table 9:

*Multilevel Regression Results of State Artistic Interest at* T+1 *on State Artistic Interest at* T.

Variable	Unstandardized Coefficient	Standard Error	T-Value	Standardized Coefficient
Intercept	.62***	.09	6.70	
State Artistic	.79***	.02	34.32	.79***

*Note:* Conditional  $R^2 = .63$ . Marginal  $R^2 = .64$ . Level 1 N = 705, Level 2 N = 165. \* p < .05 \*\*\*p < .01.

Table 10:

*Multilevel Regression Results of State Social Interest at* T+1 *on State Social Interest at* T.

Variable	Unstandardized Coefficient	Standard Error	T-Value	Standardized Coefficient
Intercept	1.23***	.14	8.89	
State Social	.70***	.03	24.35	.68***

Note: Conditional  $R^2 = .46$ . Marginal  $R^2 = .46$ . Level 1 N = 704, Level 2 N = 165. \*p < .05 \*\*\*p < .01.

### Table 11:

*Multilevel Regression Results of State Enterprising Interest at T+1 on State Enterprising Interest at T.* 

Variable	Unstandardized Coefficient	Standard Error	T-Value	Standardized Coefficient
Intercept	.84***	.09	9.49	
State	.67***	.03	24.65	.68***
Enterprising				

*Note:* Conditional  $R^2 = .49$ . Marginal  $R^2 = .51$ . Level 1 N = 705, Level 2 N = 165. \*p < .05 \*\*\*p < .01.

### Table 12:

*Multilevel Regression Results of State Conventional Interest at T+1 on State Conventional Interest at T.* 

Variable	Unstandardized Coefficient	Standard Error	<b>T-Value</b>	Standardized Coefficient
Intercept	.93***	.13	7.32	
State	.74***	.03	26.71	.71***
Conventional				

*Note:* Conditional  $R^2 = .50$ . Marginal  $R^2 = .50$ . Level 1 N = 705, Level 2 N = 165. \* p < .05 \*\*\*p < .01.

### Table 13:

## Spearman Correlations Between Within-Individual Ranked Interests from T and T+1.

Interest	Spearman p	
Realistic	.46***	
Investigative	.53***	
Artistic	.62***	
Social	.44***	
Enterprising	.46***	
Conventional	.48***	

*Note:* N = 703, \*p < .05 \*\*\*p < .01.

# Table 14:

Spearman Correlation	is Between Da	vs and Averaged	Spearman	Correlations.

Interest	Day 1 to Day 2	Day 2 to Day 3	Day 3 to Day 4	Day 4 to Day 5	Day 5 to Day 6	Day 6 to Day 7
Realistic	.41***	.44***	.45***	.42***	.48***	54***
Investigative	.58***	.55***	.60***	.43***	.49***	.54***
Artistic	.62***	.66***	.67***	.57***	.58***	.63***
Social	.47***	.45***	.54***	.40***	.38***	.40***
Enterprising	.52***	.48***	.52***	.35***	.38***	.52***
Conventional	.53***	.52***	.47***	.50***	.39***	.49***

*Note:* N = 92-134, \*p < .05 \*\*\*p < .01.

## Table 15:

Interclass Correlation Coefficient (ICC) Values for State Interests Nested Within Individuals.

Interest	ICC(1)	ICC(2)	
Realistic	.62	.90	
Investigative	.51	.85	
Artistic	.65	.91	
Social	.53	.86	
Enterprising	.53	.86	
Conventional	.52	.86	

Level 1 N = 949-951, Level 2 N = 178

### Table 16:

Interest	Latent	X2	CFI	TLI	RMSEA	SRMR
	Correlation					
Realistic	.86***	77.86***	.98	.98	.06	.03
Investigative	.71***	76.49***	.98	.97	.06	.05
Artistic	.85***	23.70	1.00	1.00	.00	.01
Social	.74***	118.18***	.97	.96	.08	.03
Enterprising	.81***	83.41***	.98	.96	.06	.03
Conventional	.79***	44.39*	.99	.99	.03	.02

Multilevel Structural Equation Model Results for Latent Correlations Between State Interests.

Level 1 N = 703-704, Level 2 N = 165. \*p < .05 \*\*\*p < .01.

## Table 17:

### *Correlation Between State Interests at T1 and State Interests at T7.*

Interest	r
Realistic	.44***
Investigative	.37***
Artistic	.44***
Social	.35***
Enterprising	.25*
Conventional	.48***

N = 89-91. \* p < .05 \*\*\*p < .01.

## Table 18:

## Spearman Correlations Between Within-Individual Ranked Interests from T1 and T7.

Interest	Spearman ρ	
Realistic	.26*	
Investigative	.31***	
Artistic	.58***	
Social	.26*	
Enterprising	.25*	
Conventional	.42***	

*Note:* N = 89, \*p < .05 \*\*\*p < .01.

#### Table 19:

Variable	Realistic	Investigative	Artistic	Social	Enterprising	Conventional	Mean
	SD	SD	SD	SD	SD	SD	SD
Open-mindedness	.12	.06	.29***	03	.06	.09	.16*
Conscientiousness	.15	.05	.11	.13	.15	.15	.15*
Extraversion	.08	05	.09	.05	.17*	04	.12
Agreeableness	.09	04	.10	.09	01	.19*	.11
Negative	17*	.03	05	.02	03	.09	09
Emotionality							
Grit	.23***	.06	.15	.13	.18*	.09	.19*
Self-Assessed	04	05	.01	.07	01	.01	.05
Interest Variance							
Consistency of	.11	07	.10	.09	.09	.01	.07
Interests							
Curiosity	.27***	.23***	.15	.16*	.15	.15*	.33***
Implicit Interest	04	.07	.10	.05	.09	.13	.06
Theory							
Vocational	.18*	.33***	.04	.21***	.07	.17*	.16*
Identity							

Beta Weights for Relationships Between Individual Differences and Variability of State Vocational Interests.

Note: Numbers represent beta weights from linear regressions controlling for mean and squared mean levels of the state vocational interests. Mean SD is the averaged standard deviation across six state interests. SDs included for individuals with 4+ state interests reported. N = 146. \* p < .05 \*\*\*p < .01

## Table 20:

Variable	Unstandardized Coefficient	Standard Error	T-Value	Standardized Coefficient
Intercept	.36	.41	.88	
Mean Averaged State Interests	07	.18	37	19
Mean Averaged State Interests <sup>2</sup>	02	.02	73	36
Open-mindedness	.03	.03	.90	.07
Self-Assessed Interest Variance	01	.02	27	02
Curiosity	.10***	.03	3.60	.29***
Implicit Interests Theory	.03	.02	1.46	.12
Vocational Identity	.02	.02	.74	.06
Grit	.05	.05	.91	.09
Conscientiousness	.04	.05	.92	.09

Regression Results of Hypothesized Individual Differences Predicting Average Standard Deviation of State Interests.

 $N = 146. \ *p < .05, \ ***p < .01.$ 

# Table 21:

	Person				Person & Environment				Polynomial Regression			
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	2.66***	.06	45.60		2.65***	.06	47.71		2.66	.07	40.35	
State Realistic	.16***	.04	4.33	.17***	.06	.04	1.49	.06	.07	.04	1.63	.07
Realistic Daily					.24***	.04	5.99	.25***	.23***	.05	4.61	.24***
Activities												
State Realistic <sup>2</sup>									02	.04	68	03
Realistic Daily									01	.03	36	.02
Activities <sup>2</sup>												
Realistic State									.05	.05	.97	.06
X Realistic												
Daily												
Activities												
Marginal R <sup>2</sup>	.03				.09				.09			
Conditional R <sup>2</sup>	.51				.52				.52			

Results for Polynomial Regression and Related Models for State Realistic Interest Predicting Daily Positive Affect.

Level 1 N = 741, Level 2 N = 165. \*p < .05, \*\*\*p < .01.

## Table 22:

Polynomial Regression Fit Line Coefficients for State Realistic Interest Congruence Predicting Daily Positive Affect.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Realistic Fit Line (X=Y)	.29*	.19	.39
Realistic Fit Line Curvilinearity	.01	06	.07
Realistic Misfit Line (X=-Y)	16	33	.01
Realistic Misfit Line Curvilinearity	.03	28	.12

## Table 23:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	2.66***	.06	45.40		2.66***	.06	46.39		2.65***	.07	38.15	
State	.16***	.04	4.59	.17***	.08	.04	1.88	.08	.09*	.05	1.97	.09*
Investigative												
Investigative					.13***	.04	3.50	.14***	.14***	.04	3.57	.15***
Daily Activities												
State									02	.04	39	02
Investigative <sup>2</sup>												
Investigative									08*	.04	-2.13	09*
Daily												
Activities <sup>2</sup>												
State									.16***	.05	3.45	.18***
Investigative X												
Investigative												
Daily Activities												
Marginal R <sup>2</sup>	.03				.04				.06			
Conditional R <sup>2</sup>	.52				.51				.52			

Results for Polynomial Regression and Related Models for State Investigative Interest Predicting Daily Positive Affect.

## Table 24:

Polynomial Regression Fit Line Coefficients for State Investigative Interest Congruence Predicting Daily Positive Affect.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Investigative Fit Line (X=Y)	.23*	.15	.30
Investigative Fit Line Curvilinearity	.07	01	.14
Investigative Misfit Line	05	20	.11
(X=-Y)			
Investigative Misfit Line Curvilinearity	25*	50	02

### Table 25:

	Person				Person &	Environ	ment		Polynomia	al Regres	ssion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	2.66***	.06	45.31		2.65***	.05	48.70		2.67***	.07	39.65	
State Artistic	.15***	.04	3.92	.16***	.01	.04	.25	.01	.01	.04	.19	.01
Artistic Daily Activities					.30***	.04	7.60	.32***	.29***	.05	6.09	.30***
State Artistic <sup>2</sup>									05	.04	-1.30	05
Artistic Daily Activities <sup>2</sup>									.02	.03	.52	.02
State Artistic X Artistic Daily Activities									.01	.04	.24	.01
Marginal R <sup>2</sup>	.03				.11				.11			
Conditional R <sup>2</sup>	.51				.52				.52			

Results for Polynomial Regression and Related Models for State Artistic Interest Predicting Daily Positive Affect.

# Table 26:

Polynomial Regression Fit Line Coefficients for State Artistic Interest Congruence Predicting Daily Positive Affect.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Artistic Fit Line (X=Y)	.29*	.20	.38
Artistic Fit Line Curvilinearity	02	10	.05
Artistic Misfit Line (X=-Y)	28*	46	08
Artistic Misfit Line Curvilinearity	04	26	.26

### Table 27:

	Person				Person &	Environ	ment		Polynomi	al Regres	sion	
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Intercept	2.67***	.06	46.46		2.67	.06	47.29		2.68***	.07	39.56	
State Social	.20***	.04	5.63	.21***	.07	.04	1.66	.07	.06	.05	1.23	.06
Social Daily Activities					.25***	.04	6.68	.26***	.25***	.04	6.65	.27***
State Social <sup>2</sup>									.00	.03	12	01
Social Daily Activities <sup>2</sup>									.00	.04	03	.00
State Social X Daily Social Activities									01	.05	24	01
$10^{\circ}$	0.4				10				10			
Marginal R <sup>2</sup>	.04				.10				.10			
Conditional R <sup>2</sup>	.51	* 05	*** . (		.55				.55			

Results for Polynomial Regression and Related Models for State Social Interest Predicting Daily Positive Affect.

#### Table 28:

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Social Fit Line (X=Y)	.31*	.22	.39
Social Fit Line Curvilinearity	02	09	.06
Social Misfit Line (X=-Y)	20*	35	04
Social Misfit Line Curvilinearity	.01	23	.24

Polynomial Regression Fit Line Coefficients for State Social Interest Congruence Predicting Daily Positive Affect.

# Table 29:

	Person				Person &	Environ	ment		Polynomia	al Regres	ssion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	2.66***	.06	45.21		2.65	.06	47.02		2.69	.07	40.83	
State	.14***	.04	3.92	.15***	.03	.04	.69	.03	.04	.04	1.05	.04
Enterprising												
Enterprising					.26***	.04	6.62	.27	.25***	.05	5.27	.27***
Daily												
Activities												
State									06	.03	-1.89	08
Enterprising <sup>2</sup>												
Enterprising									01	.03	38	02
Daily												
Activities <sup>2</sup>												
State									.05	.04	1.25	.07
Enterprising X												
Enterprising												
Daily												
Activities												
Marginal R <sup>2</sup>	.02				.08				.09			
Conditional R <sup>2</sup>	.51				.53				.53			

Results for Polynomial Regression and Related Models for State Enterprising Interest Predicting Daily Positive Affect.

## Table 30:

Polynomial Regression Fit Line Coefficients for State Enterprising Interest Congruence Predicting Daily Positive Affect.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Enterprising Fit Line (X=Y)	.30*	.20	.39
Enterprising Fit Line Curvilinearity	02	09	.03
Enterprising Misfit Line	21*	37	06
(X=-Y)			
Enterprising Misfit Line Curvilinearity	13	29	.07

# Table 31:

	Person				Person &	Environ	ment		Polynomia	l Regression		
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	2.67***	.06	44.58		2.66***	.06	45.07		2.67	.07	37.87	
State	.12***	.04	3.30	.12***	.01	.04	.30	.01	.00	.05	06	.00
Conventional												
Conventional					.16***	.04	4.02	.17***	.17**	.04	4.02	.17***
Daily												
Activities												
State									01	.04	17	01
Conventional <sup>2</sup>												
Conventional									.03	.04	.64	.03
Daily												
Activities <sup>2</sup>												
State									04	.06	75	05
Conventional												
Х												
Conventional												
Daily												
Activities												
Marginal R <sup>2</sup>	.01				.03				.03			
Conditional	.52				.53				.53			
R <sup>2</sup>		* 0.5										

Results for Polynomial Regression and Related Models for State Conventional Interest Predicting Daily Positive Affect.

## Table 32:

Polynomial Regression Fit Line Coefficients for State Conventional Interest Congruence Predicting Daily Positive Affect.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Conventional Fit Line (X=Y)	.16*	.07	.25
Conventional Fit Line Curvilinearity	02	09	.05
Conventional Misfit Line	17	32	.01
(X=-Y)			
Conventional Misfit Line Curvilinearity	.06	33	.39

# Table 33:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	1.64***	.04	38.24		1.64***	.04	37.98		1.65***	.05	31.67	
State Realistic	01	.03	44	02	05	.03	-1.40	07	05	.03	-1.44	07
Realistic					.07*	.03	2.32	.10*	.09*	.04	2.38	.13*
Daily												
Activities												
State									.01	.03	.42	.02
Realistic <sup>2</sup>												
Realistic									03	.03	97	06
Daily												
Activities <sup>2</sup>												
Realistic State									.01	.04	.29	.02
X Realistic												
Daily												
Activities												
Marginal R <sup>2</sup>	.00				.01				.01			
Conditional	.43				.44				.44			
R <sup>2</sup>			di di di di									

Results for Polynomial Regression and Related Models for State Realistic Interest Predicting Daily Negative Affect.

# Table 34:

Polynomial Regression Fit Line Coefficients for State Realistic Interest Congruence Predicting Daily Negative Affect.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Realistic Fit Line (X=Y)	.05	02	.14
Realistic Fit Line Curvilinearity	.00	05	.05
Realistic Misfit Line (X=-Y)	14*	27	02
Realistic Misfit Line Curvilinearity	02	16	.11

# Table 35:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	ion		
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.		
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.		
Intercept	1.64***	.04	38.12		1.64***	.04	38.40		1.64***	.05	30.52			
State	.00	.03	.00	.00	05	.03	-1.51	07	05	.04	-1.47	08		
Investigative														
Investigative					.08***	.03	2.67	.11***	.08***	.03	2.61	.12***		
Daily														
Activities														
State									01	.03	19	01		
Investigative <sup>2</sup>														
Investigative									.00	.03	.08	.00		
Daily														
Activities <sup>2</sup>														
State									.01	.04	.15	.01		
Investigative X														
Investigative														
Daily														
Activities														
Marginal R <sup>2</sup>	.00				.01				.01					
Conditional R <sup>2</sup>	.43				.43				.43					

Results for Polynomial Regression and Related Models for State Investigative Interest Predicting Daily Negative Affect.

## Table 36:

Polynomial Regression Fit Line Coefficients for State Investigative Interest Congruence Predicting Daily Negative Affect.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Investigative Fit Line (X=Y)	.03	02	.09
Investigative Fit Line Curvilinearity	.00	06	.06
Investigative Misfit Line	14	25	01
(X=-Y)			
Investigative Misfit Line Curvilinearity	01	23	.20

## Table 37:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	1.64***	.04	38.17		1.64***	.04	38.11		1.63	.05	30.10	
State Artistic	01	.03	30	01	02	.03	47	02	01	.04	33	02
Artistic Daily					.01	.03	.44	.02	.03	.04	.80	.04
Activities												
State Artistic <sup>2</sup>									.03	.03	1.06	.05
Artistic Daily									03	.03	1.18	06
Activities <sup>2</sup>												
State Artistic									.03	.04	.74	.04
X Artistic												
Daily												
Activities												
Marginal R <sup>2</sup>	.00				.00				.01			
Conditional	.43				.43				.43			
$\frac{R^2}{L = 1 + N = 74L}$												

Results for Polynomial Regression and Related Models for State Artistic Interest Predicting Daily Negative Affect.

# Table 38:

Polynomial Regression Fit Line Coefficients for State Artistic Interest Congruence Predicting Daily Negative Affect.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Artistic Fit Line (X=Y)	.02	05	.10
Artistic Fit Line Curvilinearity	.03	03	.09
Artistic Misfit Line (X=-Y)	04	15	.09
Artistic Misfit Line Curvilinearity	03	23	.12

## Table 39:

	Person				Person &	Environ	ment		Polynomia	al Regres	ssion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	1.64***	.04	38.44		1.64***	.04	38.42		1.65	.05	31.15	
State Social	03	.03	-1.08	04	04	.03	-1.09	05	02	.04	42	02
Social Daily					.01	.03	.33	.01	.01	.03	.18	.01
Activities												
State Social <sup>2</sup>									.04	.03	1.45	.08
Social Daily									02	.03	67	03
Activities <sup>2</sup>												
State Social									04	.04	91	06
X Daily												
Social												
Activities												
Marginal R <sup>2</sup>	00				.00				.01			
Conditional	.43				.43				.43			
$R^2$												

Results for Polynomial Regression and Related Models for State Social Interest Predicting Daily Negative Affect.

#### Table 40:

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Social Fit Line (X=Y)	01	06	.07
Social Fit Line Curvilinearity	02	08	.04
Social Misfit Line (X=-Y)	02	14	.11
Social Misfit Line Curvilinearity	.06	11	.24

Polynomial Regression Fit Line Coefficients for State Social Interest Congruence Predicting Daily Negative Affect.

# Table 41:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	l		
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.		
Intercept	1.64***	.04	38.03		1.64***	.04	38.25		1.65***	.05	32.34			
Enterprising Social	.01	.03	.21	.01	03	.03	-1.07	05	04	.03	-1.35	06		
Enterprising Daily Activities					.09***	.03	2.75	.12	.12***	.04	2.97	.16***		
State Enterprising <sup>2</sup>									.02	.03	.57	.03		
Enterprising Daily Activities <sup>2</sup>									04	.03	-1.37	08		
State Enterprising X Enterprising Daily Activities									.02	.03	.45	.03		
Marginal R <sup>2</sup>	.00				.01				.01					
Conditional R <sup>2</sup>	.43				.44				.43					

Results for Polynomial Regression and Related Models for State Enterprising Interest Predicting Daily Negative Affect.

## Table 42:

Polynomial Regression Fit Line Coefficients for State Enterprising Interest Congruence Predicting Daily Negative Affect. \_\_\_\_

<b>Polynomial Regression Terms</b>	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Enterprising Fit Line (X=Y)	.07*	.01	.16
Enterprising Fit Line Curvilinearity	.00	06	.06
Enterprising Misfit Line	16*	26	03
(X=-Y)			
Enterprising Misfit Line Curvilinearity	04	18	.10

## Table 43:

j	Person				Person &	Environ			<b>Polynomial Regression</b>			
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	1.64***	.04	38.13		1.64***	.04	38.10		1.68***	.05	31.80	
State	.02	.03	.54	.02	04	.04	-1.25	06	03	.04	81	04
Conventional												
Conventional					.09***	.03	2.81	.13***	.08*	.03	2.45	.11
Daily												
Activities												
State									.02	.03	.59	.03
Conventional <sup>2</sup>												
Conventional									06	.04	-1.81	09
Daily												
Activities <sup>2</sup>												
State									.01	.05	.27	.02
Conventional												
X												
Conventional												
Daily												
Activities												
Marginal R <sup>2</sup>	.00				.01				.01			
Conditional	.43				.44				.44			
$R^2$												

Results for Polynomial Regression and Related Models for State Conventional Interest Predicting Daily Negative Affect.

# Table 44:

Polynomial Regression Fit Line Coefficients for State Conventional Interest Congruence Predicting Daily Negative Affect.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Conventional Fit Line (X=Y)	.05	01	.11
Conventional Fit Line Curvilinearity	03	09	.03
Conventional Misfit Line	11	24	.01
(X=-Y)			
Conventional Misfit Line Curvilinearity	06	27	.18

## Table 45:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.42***	.08	53.24		4.41***	.08	54.43		4.51***	.10	45.41	
State	.35***	.06	5.77	.24***	.24***	.07	3.55	.16***	.25***	.07	3.56	.17***
Realistic												
Realistic					.23***	.07	3.54	.16***	.26***	.08	3.17	.17***
Daily												
Activities												
State									08	.06	-1.36	07
Realistic <sup>2</sup>												
Realistic									03	.05	55	03
Daily												
Activities <sup>2</sup>												
Realistic									.03	.08	.40	.03
State X												
Realistic												
Daily												
Activities												
Marginal R <sup>2</sup>	.06				.08				.09			
Conditional	.41				.41				.41			
R <sup>2</sup>			ماد ماد ماد	0.1								

Results for Polynomial Regression and Related Models for State Realistic Interest Predicting Daily Intrinsic Motivation.

Table 46:

Polynomial Regression Fit Line Coefficients for State Realistic Interest Congruence Predicting Daily Intrinsic Motivation.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Realistic Fit Line (X=Y)	.51*	.31	.65
Realistic Fit Line Curvilinearity	08	18	.03
Realistic Misfit Line (X=-Y)	01	29	.24
Realistic Misfit Line Curvilinearity	15	45	.26

#### Table 47:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.43***	.09	52.12		4.43***	.09	52.08		4.41***	.11	40.96	
State	.23***	.06	3.89	.15***	.25***	.07	3.55	.17***	.22***	.08	2.88	.15***
Investigative												
Investigative					04	.06	62	03	.01	.07	.16	.01
Daily Activities												
State									11	.07	-1.64	09
Investigative <sup>2</sup>												
Investigative									01	.06	23	01
Daily												
Activities <sup>2</sup>												
State									.23***	.08	2.84	.16***
Investigative X												
Investigative												
Daily Activities												
Marginal R <sup>2</sup>	.02				.02				.04			
Conditional R <sup>2</sup>	.40				.40				.40			

Results for Polynomial Regression and Related Models for State Investigative Interest Predicting Daily Intrinsic Motivation.

## Table 48:

Polynomial Regression Fit Line Coefficients for State Investigative Interest Congruence Predicting Daily Intrinsic Motivation.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Investigative Fit Line (X=Y)	.23*	.06	.34
Investigative Fit Line Curvilinearity	.10	03	.24
Investigative Misfit Line	.21	09	.45
(X=-Y)			
Investigative Misfit Line Curvilinearity	35	75	.06

### Table 49:

	Person				Person &	Environ	ment		Polynomia	al Regres	ssion	
Variable	Unstand.	Stand.	T-	Stand.	Unstand.	Stand.	T-	Stand.	Unstand.	Stand.	T-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.43***	.09	50.59		4.42***	.08	53.09		4.53***	.11	42.56	
State Artistic	.22***	.06	3.36	.14***	.03	.07	.43	.02	.02	.07	.27	.01
Artistic Daily					.37***	.07	5.61	.25***	.37***	.08	4.70	.25
Activities												
State Artistic <sup>2</sup>									14*	.06	-2.26	10
Artistic Daily									02	.06	34	02
Activities <sup>2</sup>												
State Artistic X									.09	.07	1.14	.06
Artistic Daily												
Activities												
Marginal R <sup>2</sup>	.02				.07				.08			
Conditional R <sup>2</sup>	.42				.42				.42			

Results for Polynomial Regression and Related Models for State Artistic Interest Predicting Daily Intrinsic Motivation.

# Table 50:

Polynomial Regression Fit Line Coefficients for State Artistic Interest Congruence Predicting Daily Intrinsic Motivation.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Artistic Fit Line (X=Y)	.39*	.24	.54
Artistic Fit Line Curvilinearity	08	-22	.06
Artistic Misfit Line (X=-Y)	35*	62	08
Artistic Misfit Line Curvilinearity	25	62	.04

### Table 51:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.44***	.08	54.92		4.44***	.08	56.05		4.49***	.10	44.48	
State Social	.40***	.06	6.91	.27***	.26***	.07	3.85	.17***	.20*	.08	2.55	.13*
Social Daily					.26***	.06	3.99	.17***	.27***	.06	4.19	.18***
Activities												
State Social <sup>2</sup>									03	.06	49	03
Social Daily									.04	.07	.61	.03
Activities <sup>2</sup>												
State Social X									09	.09	-1.07	07
Daily Social												
Activities												
Marginal R <sup>2</sup>	.07				.10				.10			
Conditional R <sup>2</sup>	.40				.41				.41			

Results for Polynomial Regression and Related Models for State Social Interest Predicting Daily Intrinsic Motivation.

#### Table 52:

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Social Fit Line (X=Y)	.47*	.30	.60
Social Fit Line Curvilinearity	08	21	.06
Social Misfit Line (X=-Y)	07	34	.18
Social Misfit Line Curvilinearity	.10	27	.49

Polynomial Regression Fit Line Coefficients for State Social Interest Congruence Predicting Daily Intrinsic Motivation.

## Table 53:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.43***	.09	51.45		4.42***	.09	51.96		4.52***	.10	44.26	
Enterprising	.20***	.06	3.39	.13***	.10	.07	1.54	.07	.13	.07	1.93	.09
Social												
Enterprising					.21***	.07	3.24	.14***	.23***	.08	2.80	.16***
Daily Activities												
State									10	.06	-1.76	08
Enterprising <sup>2</sup>												
Enterprising									01	.05	21	01
Daily												
Activities <sup>2</sup>												
State									.02	.07	.26	.02
Enterprising X												
Enterprising												
Daily Activities												
Marginal R <sup>2</sup>	.02				.04				.04			
Conditional R <sup>2</sup>	.40				.41				.40			

Results for Polynomial Regression and Related Models for State Enterprising Interest Predicting Daily Intrinsic Motivation.

#### Table 54:

Polynomial Regression Fit Line Coefficients for State Enterprising Interest Congruence Predicting Daily Intrinsic Motivation.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Enterprising Fit Line (X=Y)	.36*	.14	.51
Enterprising Fit Line Curvilinearity	09	22	.04
Enterprising Misfit Line	10	38	.14
(X=-Y)			
Enterprising Misfit Line Curvilinearity	13	39	.18

### Table 55:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.43***	.08	52.50		4.43***	.08	52.46		4.43***	.11	41.37	
State	.26***	.06	4.39	.17***	.26***	.07	3.58	.18***	.29***	.08	3.48	.19***
Conventional												
Conventional					01	.07	16	01	03	.07	37	02
Daily Activities												
State									.06	.06	.93	.06
Conventional <sup>2</sup>												
Conventional									.00	.07	07	.00
Daily												
Activities <sup>2</sup>												
State									07	.10	73	05
Conventional X												
Conventional												
Daily Activities												
Marginal R <sup>2</sup>	.03				.03				.03			
Conditional R <sup>2</sup>	.40				.40				.40			

Results for Polynomial Regression and Related Models for State Conventional Interest Predicting Daily Intrinsic Motivation.

#### Table 56:

Polynomial Regression Fit Line Coefficients for State Conventional Interest Congruence Predicting Daily Intrinsic Motivation.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Conventional Fit Line (X=Y)	.26*	.07	.39
Conventional Fit Line Curvilinearity	02	16	.12
Conventional Misfit Line	.32*	.01	.57
(X=-Y)			
Conventional Misfit Line Curvilinearity	.13	31	.62

## Table 57:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Intercept	4.32***	.07	61.22		4.31***	.07	62.98		4.37***	.09	51.13	
State Realistic	.39***	.05	7.11	.29***	.20***	.06	3.38	.15***	.19***	.06	3.16	.14***
Realistic Daily					.37***	.06	6.33	.27***	.43***	.07	5.92	.32***
Activities												
State Realistic <sup>2</sup>									.00	.05	02	.00
Realistic Daily Activities <sup>2</sup>									04	.05	86	05
Realistic State X Realistic									02	.07	35	02
Daily Activities												
Marginal R <sup>2</sup>	.08				.15				.15			
Conditional R <sup>2</sup>	.38	- 05 *1	* . 01		.42				.42			

Results for Polynomial Regression and Related Models for State Realistic Interest Predicting Daily Engagement.

# Table 58:

Polynomial Regression Fit Line Coefficients for State Realistic Interest Congruence Predicting Daily Engagement.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Realistic Fit Line (X=Y)	.62*	.47	.78
Realistic Fit Line Curvilinearity	07	16	.03
Realistic Misfit Line (X=-Y)	24*	50	.00
Realistic Misfit Line Curvilinearity	02	29	.30

Level 1 N = 741, Level 2 N = 165. \* p < .05.

# Table 59:

	Person				Person &	Environ	ment		Polynomia	al Regres	ssion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.33***	.07	59.36		4.33***	.07	59.70		4.37***	.09	46.88	
State	.29***	.05	5.58	.22***	.16***	.06	2.59	.12***	.13	.07	1.89	.10
Investigative												
Investigative					.20***	.06	3.49	.15***	.24***	.06	4.06	.18***
Daily Activities												
State									13*	.06	-2.29	12*
Investigative <sup>2</sup>												
Investigative									11	.06	-1.93	09
Daily												
Activities <sup>2</sup>												
State									.33***	.07	4.61	.26***
Investigative X												
Investigative												
Daily Activities												
Marginal R <sup>2</sup>	.05				.06				.09			
Conditional R <sup>2</sup>	.37				.38				.40			

Results for Polynomial Regression and Related Models for State Investigative Interest Predicting Daily Engagement.

## Table 60:

Polynomial Regression Fit Line Coefficients for State Investigative Interest Congruence Predicting Daily Engagement.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Investigative Fit Line (X=Y)	.37*	.23	.48
Investigative Fit Line Curvilinearity	.09	01	.22
Investigative Misfit Line	11	37	.10
(X=-Y)			
Investigative Misfit Line Curvilinearity	57*	93	19

Level 1 N = 741, Level 2 N = 165. \* p < .05.

### Table 61:

	Person				Person &	Environ	ment		Polynomia	al Regres	ssion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	T-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.33***	.07	59.13		4.32***	.07	63.33		4.38***	.09	48.59	
State Artistic	.28***	.06	4.91	.21***	.06	.06	.98	.05	.06	.06	.93	.04
Artistic Daily Activities					.44***	.06	7.38	.32***	.42***	.07	5.95	.31***
State Artistic <sup>2</sup>									11	.06	-1.91	09
Artistic Daily Activities <sup>2</sup>									01	.05	11	01
State Artistic X Artistic Daily Activities									.08	.07	1.26	.06
Marginal R <sup>2</sup>	.04				.13				.13			
Conditional R <sup>2</sup>	.37				.40				.40			

Results for Polynomial Regression and Related Models for State Artistic Interest Predicting Daily Engagement.

## Table 62:

Polynomial Regression Fit Line Coefficients for State Artistic Interest Congruence Predicting Daily Engagement.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Artistic Fit Line (X=Y)	.48*	.34	.60
Artistic Fit Line Curvilinearity	03	16	.09
Artistic Misfit Line (X=-Y)	36*	64	11
Artistic Misfit Line Curvilinearity	20	47	.14

Level 1 N =741, Level 2 N =165. \* p < .05.

### Table 63:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.34***	.07	64.19		4.34***	.07	65.09		4.32***	.09	49.95	
State Social	.43***	.05	8.40	.32***	.20***	.06	3.47	.15***	.16*	.07	2.30	.12*
Social Daily					.40***	.06	7.00	.30***	.41***	.06	7.16	.31***
Activities												
State Social <sup>2</sup>									03	.05	67	04
Social Daily									.09	.06	1.49	.07
Activities <sup>2</sup>												
State Social X									06	.08	81	05
Daily Social												
Activities												
Marginal R <sup>2</sup>	.10				.17				.17			
Conditional R <sup>2</sup>	.37				.43				.43			

Results for Polynomial Regression and Related Models for State Social Interest Predicting Daily Engagement.

#### Table 64:

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Social Fit Line (X=Y)	.57*	.43	.68
Social Fit Line Curvilinearity	01	12	.11
Social Misfit Line (X=-Y)	25*	50	05
Social Misfit Line Curvilinearity	.11	23	.44

Polynomial Regression Fit Line Coefficients for State Social Interest Congruence Predicting Daily Engagement.

Level 1 N = 741, Level 2 N = 165. \* p < .05.

## Table 65:

	Person				Person &	Environ	ment		Polynomia	al Regres	ssion	
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Intercept	4.32***	.07	60.45		4.31***	.07	61.19		4.38***	.09	50.85	
Enterprising Social	.31***	.05	5.94	.23***	.13*	.06	2.31	.10*	.17***	.06	2.84	.13***
Enterprising Daily Activities					.37***	.06	6.37	.27***	.34***	.07	4.72	.26***
State Enterprising <sup>2</sup>									11*	.05	-2.14	10*
Enterprising Daily Activities <sup>2</sup>									.03	.05	.60	.04
State Enterprising X Enterprising Daily Activities									.01	.06	.21	.01
Marginal R <sup>2</sup> Conditional R <sup>2</sup>	.05				.12 .41				.13 .41			

Results for Polynomial Regression and Related Models for State Enterprising Interest Predicting Daily Engagement.

## Table 66:

Polynomial Regression Fit Line Coefficients for State Enterprising Interest Congruence Predicting Daily Engagement.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Enterprising Fit Line (X=Y)	.51*	.34	.65
Enterprising Fit Line Curvilinearity	07	16	.04
Enterprising Misfit Line	18	43	.01
(X=-Y)			
Enterprising Misfit Line Curvilinearity	09	31	.19

Level 1 N = 741, Level 2 N = 165. \* p < .05.

## Table 67:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Intercept	4.33***	.07	59.39		4.33***	.07	59.14		4.29***	.09	46.05	
State	.30***	.05	5.76	.23***	.10	.07	1.57	.08	.13	.07	1.75	.10
Conventional												
Conventional					.31***	.06	4.98	.23***	.30***	.06	4.77	.22***
Daily Activities												
State									.02	.06	.42	.02
Conventional <sup>2</sup>												
Conventional									.00	.07	07	.00
Daily Activities <sup>2</sup>												
State									.03	.09	.30	.02
Conventional X												
Conventional												
Daily Activities												
Marginal R <sup>2</sup>	.05				.08				.08			
Conditional R <sup>2</sup>	.38				.41				.41			

Results for Polynomial Regression and Related Models for State Conventional Interest Predicting Daily Engagement.

# Table 68:

Polynomial Regression Fit Line Coefficients for State Conventional Interest Congruence Predicting Daily Engagement.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Conventional Fit Line (X=Y)	.43*	.28	.55
Conventional Fit Line Curvilinearity	.05	06	.16
Conventional Misfit Line	17	45	.07
(X=-Y)			
Conventional Misfit Line Curvilinearity	01	52	.52

*Level 1 N* =741, *Level 2 N* =165. \**p* < .05.

# Table 69:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Intercept	3.30***	.05	64.18		3.29***	.05	65.03		3.34	.06	53.22	
State Realistic	.21***	.04	5.37	.22***	.09*	.04	2.06	.10*	.08	.04	1.94	.09
Realistic Daily Activities					.25***	.04	6.00	.27***	.29***	.05	5.76	.32***
State Realistic <sup>2</sup>									.00	.04	06	.00
Realistic Daily Activities <sup>2</sup>									05	.03	-1.57	10
Realistic State X Realistic Daily Activities									.02	.05	.42	.03
Marginal R <sup>2</sup>	.05				.11				.11			
Conditional R <sup>2</sup>	.39	- 05 *1	* . 01		.43				.44			

Results for Polynomial Regression and Related Models for State Realistic Interest Predicting Daily Perseverance.

## Table 70:

Polynomial Regression Fit Line Coefficients for State Realistic Interest Congruence Predicting Daily Perseverance.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Realistic Fit Line (X=Y)	.38*	.29	.50
Realistic Fit Line Curvilinearity	03	12	.02
Realistic Misfit Line (X=-Y)	21*	40	05
Realistic Misfit Line Curvilinearity	08	27	.11

Level 1 N =741, Level 2 N =165. \* p < .05.

## Table 71:

	Person				Person &	Environ	ment		Polynomi	al Regres	ssion	
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Intercept	3.30***	.05	65.44		3.30***	.05	68.62		3.27***	.06	52.57	
State Investigative	.27***	.04	7.72	.30***	.08	.04	1.85	.08	.10*	.04	2.25	.11*
Investigative Daily Activities					.31***	.04	8.33	.34	.31***	.04	7.77	.33***
State Investigative <sup>2</sup>									.04	.04	1.03	.05
Investigative Daily Activities <sup>2</sup>									03	.04	91	04
State Investigative X Investigative Daily Activities									.05	.05	.98	.05
Marginal R <sup>2</sup>	.09				.15				.16			
Conditional R <sup>2</sup>	.41	05 ***			.46				.46			

Results for Polynomial Regression and Related Models for State Investigative Interest Predicting Daily Perseverance.

### Table 72:

Polynomial Regression Fit Line Coefficients for State Investigative Interest Congruence Predicting Daily Perseverance.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Investigative Fit Line (X=Y)	.41*	.32	.48
Investigative Fit Line Curvilinearity	.05	03	.13
Investigative Misfit Line	20*	36	05
(X=-Y)			
Investigative Misfit Line Curvilinearity	04	28	.18

Level 1 N = 741, Level 2 N = 165. \* p < .05.

### Table 73:

	Person				Person &	Environ	ment		Polynomia	Deff.       Error       Value       Coeff         33***       .07       50.68       2         2       .05      45      02         5***       .05       5.10       .28**		
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	3.31***	.05	63.25		3.30***	.05	65.77		3.33***	.07	50.68	
State Artistic	.12***	.04	2.95	.13***	01	.04	27	01	02	.05	45	02
Artistic Daily Activities					.26***	.04	6.17	.28	.25***	.05	5.10	.28***
State Artistic <sup>2</sup>									04	.04	94	04
Artistic Daily Activities <sup>2</sup>									.01	.04	.39	.02
State Artistic X Artistic Daily Activities									02	.05	40	02
Marginal R <sup>2</sup>	.02				.07				.07			
Conditional R <sup>2</sup>	.37				.39				.40			

Results for Polynomial Regression and Related Models for State Artistic Interest Predicting Daily Perseverance.

#### Table 74:

Polynomial Regression Fit Line Coefficients for State Artistic Interest Congruence Predicting Daily Perseverance.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Artistic Fit Line (X=Y)	.23*	.14	.33
Artistic Fit Line Curvilinearity	04	14	.03
Artistic Misfit Line (X=-Y)	27*	44	11
Artistic Misfit Line Curvilinearity	.00	22	.18

Level 1 N = 741, Level 2 N = 165. \*p < .05.

### Table 75:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	3.31***	.05	68.09		3.31***	.05	68.29		3.28***	.06	52.94	
State Social	.24***	.04	6.81	.26***	.08*	.04	2.02	.09*	.10*	.05	2.18	.11*
Social Daily					.29***	.04	7.27	.31***	.28***	.04	7.14	.31***
Activities												
State Social <sup>2</sup>									.07	.04	1.88	.10
Social Daily									.03	.04	.71	.03
Activities <sup>2</sup>												
State Social X									11*	.05	-2.08	13*
Daily Social												
Activities												
Marginal R <sup>2</sup>	.07				.14				.14			
Conditional R <sup>2</sup>	.37				.44				.44			

Results for Polynomial Regression and Related Models for State Social Interest Predicting Daily Perseverance.

#### Table 76:

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Social Fit Line (X=Y)	.39*	.29	.46
Social Fit Line Curvilinearity	01	10	.07
Social Misfit Line (X=-Y)	18	37	03
Social Misfit Line Curvilinearity	.21	08	.45

Polynomial Regression Fit Line Coefficients for State Social Interest Congruence Predicting Daily Perseverance.

Level 1 N = 741, Level 2 N = 165. \* p < .05.

## Table 77:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	T-	Stand.	Unstand.	Stand.	T-	Stand.	Unstand.	Stand.	T-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	3.30***	.05	64.31		3.29***	.05	65.50		3.33***	.06	53.83	
State	.17***	.04	4.55	.18***	.06	.04	1.37	.06	.07	.04	1.69	.08
Enterprising												
Enterprising					.24***	.04	5.81	.26***	.23***	.05	4.52	.25***
Daily												
Activities												
State									05	.04	-1.54	07
Enterprising <sup>2</sup>												
Enterprising									.00	.03	.11	.01
Daily												
Activities <sup>2</sup>												
State									.02	.05	.40	.02
Enterprising X												
Enterprising												
Daily												
Activities												
Marginal R <sup>2</sup>	.03				.08				.09			
Conditional R <sup>2</sup>	.37				.41				.41			

Results for Polynomial Regression and Related Models for State Enterprising Interest Predicting Daily Perseverance.

## Table 78:

Polynomial Regression Fit Line Coefficients for State Enterprising Interest Congruence Predicting Daily Perseverance.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Enterprising Fit Line (X=Y)	.30*	.20	.40
Enterprising Fit Line Curvilinearity	03	11	.03
Enterprising Misfit Line	16*	.33	01
(X=-Y)			
Enterprising Misfit Line Curvilinearity	07	28	.13

Level 1 N = 741, Level 2 N = 165. \* p < .05.

#### Table 79:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	3.31***	.05	63.33		3.30***	.05	64.46		3.27***	.06	50.89	
State	.18***	.04	5.00	.20***	05	.04	-1.12	05	02	.05	40	02
Conventional												
Conventional					.36***	.04	8.76	.39***	.35***	.04	8.37	.38***
Daily Activities												
State									.03	.04	.91	.05
Conventional <sup>2</sup>												
Conventional									.00	.04	.00	.00
Daily												
Activities <sup>2</sup>												
State									.00	.06	.02	.00
Conventional X												
Conventional												
Daily Activities												
Marginal R <sup>2</sup>	.04				.12				.12			
Conditional R <sup>2</sup>	.39				.47				.47			

Results for Polynomial Regression and Related Models for State Conventional Interest Predicting Daily Perseverance.

# Table 80:

Polynomial Regression Fit Line Coefficients for State Conventional Interest Congruence Predicting Daily Perseverance.

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Conventional Fit Line (X=Y)	.33*	.24	.42
Conventional Fit Line Curvilinearity	.04	04	.11
Conventional Misfit Line	37*	55	20
(X=-Y)			
Conventional Misfit Line Curvilinearity	.03	29	.32

*Level 1 N* =741, *Level 2 N* =165. \**p* < .05.

### Table 81:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand . Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Valu e	Stand Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	2.67***	.06	43.97		2.65***	.06	47.69		2.54	.07	35.66	
Realistic Daily Activities					.26***	.04	7.29	.28** *	.28***	.05	6.23	.30***
Realistic Daily Activities <sup>2</sup>									.00	.03	.10	.00
Trait Realistic X Realistic Daily Activities									04	.04	-1.11	05
Level 2												
Trait Realistic	.05	.06	.86	.06	03	.06	46	03	.01	.06	.10	.01
Trait Realistic <sup>2</sup>									.12***	.04	2.84	.18***
Marginal R <sup>2</sup>	.00				.07				.10			
Conditional $\mathbb{R}^2$	.52				.51				.51			

Results for Polynomial Regression and Related Models for Trait Realistic Interest Predicting Daily Positive Affect.

### Table 82:

	State & T	State & Trait Congruence							
Variable				Stand.					
	Coeff.	Error	Value	Coeff.					
Intercept	48***	.09	-5.23						
State Realistic Congruence	.85*	.36	2.33	.56*					
Trait Realistic Congruence	.34	.36	.92	.22					

Regression Results for Polynomial Trait and State Congruence for Realistic Interest Predicting Daily Positive Affect.

Marginal  $R^2$ =.62, Conditional  $R^2$ =.62. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

### Table 83:

	Person				Person &	Person & Environment			Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	2.67***	.06	43.97		2.66***	.06	46.16		2.67***	.08	35.29	
Investigative					.17***	.03	5.41	.18***	.16***	.03	4.80	.17***
Daily												
Activities												
Investigative									.00	.03	.00	03
Daily												
Activities <sup>2</sup>												
Trait									.05	.03	1.56	.06
Investigative X												
Investigative												
Daily												
Activities												
Level 2												
Trait	.05	.06	.89	.06	.00	.06	.04	.00	01	.06	12	01
Investigative												
Trait									02	.04	55	03
Investigative <sup>2</sup>												
Marginal R <sup>2</sup>	.00				.03				.03			
Conditional R <sup>2</sup>	.52				.51				.52			

Results for Polynomial Regression and Related Models for Trait Investigative Interests Predicting Daily Positive Affect.

#### Table 84:

	State & Trait Congruence							
Variable	Unstand.	Stand.	Т-	Stand.				
	Coeff.	Error	Value	Coeff.				
Intercept	50***	.09	-5.45					
State Investigative Congruence	.85***	.22	3.91	.56***				
Trait Investigative Congruence	.35	.22	1.58	.23				

Regression Results for Polynomial Trait and State Congruence for Investigative Interests Predicting Daily Positive Affect.

Marginal  $R^2=62$ . Conditional  $R^2=.62$ . Level 1 N = 741, Level 2 N = 165. \* p < .05, \*\*\* p < .01.

### Table 85:

	Person				Person &	Person & Environment				Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Sta nd. Coe ff.	
Level 1													
Intercept	2.67***	.06	44.06		2.65***	.05	48.64		2.60***	.07	35.31		
Artistic Daily Activities					.31***	.04	8.60	.32***	.30***	.04	7.11	.32* **	
Artistic Daily Activities <sup>2</sup>									.01	.03	.20	.01	
Trait Artistic X Artistic Daily Activities									.01	.04	.29	.01	
Level 2													
Trait Artistic	.06	.06	.96	.06	02	.05	39	02	.01	.06	.17	.01	
Trait Artistic <sup>2</sup>									.04	.04	1.00	.07	
Marginal R <sup>2</sup>	.00				.10				.11			1	
Conditional R <sup>2</sup>	.52				.52				.52				

Results for Polynomial Regression and Related Models for Trait Artistic Interest Predicting Daily Positive Affect.

### Table 86:

Regression Results for Polynomial Trait	and State Congruence for Artistic	Interest Predicting Daily Positive Affect.

	State & Trai	State & Trait Congruence									
Variable	Unstand.	Stand.	<b>T-Value</b>	Stand.							
	Coeff.	Error		Coeff.							
Intercept	46	.09	-5.05								
State Artistic Congruence	.87	.59	1.46	.59							
Trait Artistic Congruence	.30	.59	.51	.21							

Marginal  $R^2$ =.63, Conditional  $R^2$ =.63. Level 1 N =741., Level 2 N =165. \* p < .05, \*\*\* p < .01.

## Table 87:

	Person				Person &	Person & Environment			Polynomial Regression			
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	T-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Level 1												
Intercept	2.68***	.06	44.53		2.67	.06	46.94		2.65	.07	36.37	
Social Daily					.28***	.03	8.40	.29***	.27***	.03	8.08	.28***
Activities												
Social Daily									02	.03	74	02
Activities <sup>2</sup>												
Trait Social X									.03	.03	.83	.03
Daily Activities												
Level 2												
Trait Social	.12*	.06	2.03	.13*	.04	.06	.63	.04	.07	.07	1.02	.07
Trait Social <sup>2</sup>									.03	.04	.93	.06
Marginal R <sup>2</sup>	.02				.09				.10			
Conditional R <sup>2</sup>	.52				.55				.55			

Results for Polynomial Regression and Related Models for Trait Social Interest Predicting Daily Positive Affect.

# Table 88:

Regression Results for Polynomial Tra	iit and State Congruence for Social 1	Interest Predicting Daily Positive Affect.

	State & Trait Congruence								
Variable	Unstand.	Stand.	Т-	Stand.					
	Coeff.	Error	Value	Coeff.					
Intercept	45	.09	-5.08						
State Social Congruence	.56	.51	1.09	.38					
Trait Social Congruence	.61	.51	1.19	.42					

Marginal  $R^2$ =.64, Conditional  $R^2$ =.64. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

### Table 89:

	Person				Person & Environment				Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	2.66***	.06	44.35		2.64***	.06	47.01		2.62***	.07	36.17	
Enterprising Daily Activities					.26***	.03	7.53	.28***	.27***	.04	6.08	.28***
Enterprising Daily Activities <sup>2</sup>									01	.03	22	01
Trait Enterprising X Enterprising Daily Activities Level 2									.00	.04	06	.00
Trait Enterprising	.12*	.06	2.10	.13*	.07	.06	1.32	.08	.08	.06	1.37	.08
Trait Enterprising <sup>2</sup>									.03	.04	.83	.05
Marginal R <sup>2</sup>	.02				.09				.09			
Conditional R <sup>2</sup>	.52				.53				.54			

Results for Polynomial Regression and Related Models for Trait Enterprising Interest Predicting Daily Positive Affect.

### Table 90:

Regression Results for Polynomial Trait and State Congruence for Enterprising Interest Predicting Daily Positive Affect.
--

	State & Trait Congruence							
Variable	Unstand.	Stand.	Т-	Stand.				
	Coeff.	Error	Value	Coeff.				
Intercept	47	.09	-5.20					
Enterprising State Congruence	.78	.44	1.78	.52				
Enterprising Trait Congruence	.40	.44	.92	.27				

*Marginal*  $R^2$ =.63, *Conditional*  $R^2$ =.63. *Level* 1 N =741, *Level* 2 N =165. \* p < .05, \*\*\* p < .01.

## Table 91:

	Person			Person &	Environ	ment		Polynomial Regression				
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	2.67***	.06	43.95		2.66***	.06	44.91		2.67***	.08	33.66	
Conventional					.17***	.03	5.20	.18***	.17***	.03	4.95	.18***
Daily Activities												
Conventional									01	.03	24	01
Daily												
Activities <sup>2</sup>												
Trait									.01	.03	.20	.01
Conventional X												
Conventional												
Daily Activities												
Level 2												
Trait	.02	.06	.39	.02	01	.06	19	01	01	.06	21	01
Conventional												
Trait									01	.05	15	01
Conventional <sup>2</sup>												
Marginal R <sup>2</sup>	.00				.03				.03			
Conditional R <sup>2</sup>	.52				.53				.53			

Results for Polynomial Regression and Related Models for Trait Conventional Interest Predicting Daily Positive Affect.

#### Table 92:

	State & Trait Congruence							
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff,				
Intercept	51	.09	-5.48	Coeff,				
State Conventional Congruence	.83	.69	1.20	.55				
Trait Conventional Congruence	.37	.69	.53	.24				

Regression Results for Polynomial Trait and State Congruence for Conventional Interest Predicting Daily Positive Affect.

Marginal  $R^2$ =.62, Conditional  $R^2$ =.62. Level 1 N =741. Level 2 N =165. \* p < .05, \*\*\* p < .01.

### Table 93:

	Person				Person & Environment				Polynomial Regression			
Variable	Unstand . Coeff.	Stand Error	T- Valu e	Stand Coeff.	Unstand . Coeff.	Stand Error	T- Valu e	Stand. Coeff.	Unstand . Coeff.	Stand Error	T- Valu e	Stand Coeff.
Level 1												
Intercept	1.64***	.04	38.84		1.64	.04	38.38		1.61***	.06	28.77	
Realistic Daily Activities					.07*	.03	2.43	.10*	.09*	.04	2.51	.13*
Realistic Daily Activities <sup>2</sup>									02	.02	95	05
Trait Realistic X Realistic Daily Activities Level 2									.01	.03	.22	.01
Trait Realistic	11*	.04	-2.52	15*	13***	.04	-2.93	18***	11*	.05	-2.40	15*
Trait Realistic <sup>2</sup>									.05	.03	1.60	.10
Marginal R <sup>2</sup>	.02				.03				.04			
Conditional R <sup>2</sup>	.43		** . 01		.45				.45			

Results for Polynomial Regression and Related Models for Trait Realistic Interest Predicting Daily Negative Affect.

#### Table 94:

	State & Trait Congruence								
Variable	Unstand.	Stand.		Stand.					
	Coeff.	Error	Value	Coeff.					
Intercept	45***	.07	-6.29						
State Realistic Congruence	.64	.42	1.52	.37					
Trait Realistic Congruence	.64	.42	1.52	.37					

Regression Results for Polynomial Trait and State Congruence for Realistic Interest Predicting Daily Negative Affect.

Marginal  $R^2$ =.55, Conditional  $R^2$ =.55. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

#### Table 95:

	Person				Person & Environment				Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	1.64***	.04	38.19		1.64	.04	38.25		1.61***	.06	28.52	
Investigative Daily Activities					.06*	.03	2.42	.09*	.07*	.03	2.52	.10*
Investigative Daily Activities <sup>2</sup>									.02	.02	.61	.02
Trait Investigative X									03	.03	-1.08	04
Investigative Daily Activities												
Level 2												
Trait Investigative	05	.04	-1.05	06	06	.04	-1.46	09	06	.04	-1.33	08
Trait Investigative <sup>2</sup>									.02	.03	.77	.05
Marginal R <sup>2</sup>	.00				.01				.01			
Conditional R <sup>2</sup>	.43				.44				.44			

Results for Polynomial Regression and Related Models for Trait Investigative Interests Predicting Daily Negative Affect.

Table 96:

	State & Trait Congruence								
Variable	Unstand.	Stand.	Т-	Stand.					
	Coeff.	Error	Value	Coeff.					
Intercept	45***	.07	-6.35						
State Investigative Congruence	.71	.53	1.35	.41					
Trait Investigative Congruence	.57	.52	1.09	.33					

Regression Results for Polynomial Trait and State Congruence for Investigative Interests Predicting Daily Negative Affect.

*Marginal*  $R^2$ =.55, *Conditional*  $R^2$ =.55. *Level 1* N =741, *Level 2* N =165. \* p < .05, \*\*\* p < .01.

#### Table 97:

	Person				Person &	Environ	ment		Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stan d. Coef f.
Level 1												
Intercept	1.64***	.04	38.03		1.64	.04	37.95		1.67***	.06	28.41	
Artistic Daily Activities					.01	.03	.18	.01	.01	.03	.40	.02
Artistic Daily Activities <sup>2</sup>									01	.03	47	02
Trait Artistic X Artistic Daily Activities									.00	.03	.04	.00
Level 2												
Trait Artistic	.02	.04	.43	.03	.02	.04	.39	.02	.00	.05	.06	.00
Trait Artistic <sup>2</sup>									02	.03	58	04
Marginal R <sup>2</sup>	.00				.00				.00			
Conditional R <sup>2</sup>	.43				.44				.44			

Results for Polynomial Regression and Related Models for Trait Artistic Interest Predicting Daily Negative Affect.

Table 98:

Regression Results for Polynomial Trait and State Congruence for Artistic Interest Predicting Daily Negative Affect.

	State & Trai	State & Trait Congruence								
Variable	Unstand. Coeff.	Stand. Error	T-Value	Stand. Coeff.						
Intercept	46***	.07	-6.41							
State Artistic Congruence	.72	.50	1.44	.41						
Trait Artistic Congruence	.56	.50	1.13	.33						

Marginal  $R^2$ =.55, Conditional  $R^2$ =.33. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

# Table 99:

	Person				Person &	Environ	ment		Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	1.64***	.04	38.04		1.64***	.04	38.04		1.66***	.06	29.37	
Social Daily Activities					.00	.03	14	01	01	.03	31	01
Social Daily Activities <sup>2</sup>									03	.02	-1.33	05
Trait Social X Daily									.01	.03	.29	.01
Activities Level 2												
Trait Social	03	.04	61	04	03	.04	57	04	01	.05	20	01
Trait Social <sup>2</sup>									.02	.03	.57	.04
Marginal R <sup>2</sup>	.00				.00				.00			
Conditional R <sup>2</sup>	.43				.43				.44			

Results for Polynomial Regression and Related Models for Trait Social Interest Predicting Daily Negative Affect.

#### Table 100:

Regression Results for Polynomial Trait and State Congruence for Social Interest Predicting Daily Negative Affect.

	State & Trait Congruence									
Variable	Unstand.	Stand.	Т-	Stand.						
	Coeff.	Error	Value	Coeff.						
Intercept	46***	.07	-6.39							
State Social Congruence	.44	.47	.93	.25						
Trait Social Congruence	.84	.47	1.78	.49						

Marginal  $R^2$ =.55, Conditional  $R^2$ =.55. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

#### Table 101:

	Person				Person &	Environ	ment		Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	1.64***	.04	38.11		1.64***	.04	37.94		1.66***	.06	29.63	
Enterprising Daily Activities					.07***	.03	2.64	.10***	.10***	.04	2.69	.14***
Enterprising Daily Activities <sup>2</sup>									02	.02	-1.06	05
Trait Enterprising X Enterprising Daily Activities									.02	.03	.53	.02
Level 2												
Trait Enterprising	03	.04	64	04	04	.04	97	06	04	.04	96	06
Trait Enterprising <sup>2</sup>									.00	.03	10	01
Marginal R <sup>2</sup>	.00				.01				.01			
Conditional R <sup>2</sup>	.43				.44				.45			

Results for Polynomial Regression and Related Models for Trait Enterprising Interest Predicting Daily Negative Affect.

#### Table 102:

Regression Results for Polynomial Trait and State Congruence for Enterprising Interest Predicting Daily Nego	tive Affect.

	State & Trait Congruence								
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.					
Intercept	44***	.07	-6.19						
Enterprising State Congruence	04	.57	07	02					
Enterprising Trait Congruence	1.31*	.57	2.32	.76*					

Marginal  $R^2$ =.55, Conditional  $R^2$ =.55. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

### Table 103:

	Person				Person &	Environ	ment		Polynomial Regression				
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	
Level 1													
Intercept	1.64***	.04	38.12		1.64***	.04	38.16		1.66***	.06	28.69		
Conventional					.07***	.03	2.76	.10***	.07*	.03	2.46	.09*	
Daily													
Activities													
Conventional									04	.02	-1.69	06	
Daily													
Activities <sup>2</sup>													
Trait									01	.03	34	01	
Conventional													
Х													
Conventional													
Daily													
Activities													
Level 2													
Trait	05	.04	-1.26	08	07	.04	-1.61	10	06	.04	-1.36	08	
Conventional													
Trait									.02	.03	.61	.04	
Conventional <sup>2</sup>													
Marginal R <sup>2</sup>	.01				.01				.02				
Conditional	.43				.44				.44				
$\mathbb{R}^2$													

Results for Polynomial Regression and Related Models for Trait Conventional Interest Predicting Daily Negative Affect.

Table 104:

Regression Results for Polynomial Trait and State Congruence for Conventional Interest Predicting Daily Negative Affect.

	State & Trait Congruence								
Variable	Unstand.	Stand.	Т-	Stand.					
	Coeff.	Error	Value	Coeff,					
Intercept	44	.07	-6.29						
State Conventional Congruence	1.04*	.47	2.22	.61*					
Trait Conventional Congruence	.24	.47	.50	.14					

Marginal  $R^2$ =.55, Conditional  $R^2$ =.55. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

#### Table 105:

	Person				Person &	Environ	ment		Polynomial Regression				
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	
Level 1													
Intercept	4.43***	.09	50.08		4.42***	.08	53.53		4.45***	.11	40.88		
Realistic Daily Activities					.32***	.06	5.36	.22***	.38***	.08	5.02	.26***	
Realistic Daily Activities <sup>2</sup>									03	.05	.63	03	
Trait Realistic X Realistic Daily Activities									07	.07	-1.06	05	
Level 2													
Trait Realistic	.22*	.09	2.43	.14*	.12	.08	1.40	.08	.11	.09	1.24	.07	
Trait Realistic <sup>2</sup>									.02	.06	.30	.02	
Marginal R <sup>2</sup>	.02				.06				.07				
Conditional R <sup>2</sup>	.42				.41				.41				

Results for Polynomial Regression and Related Models for Trait Realistic Interest Predicting Daily Intrinsic Motivation.

Table 106:

Regression Results for Polynomial Trait and State Congruence for Realistic Interest Predicting Daily Intrinsic Motivation.

	State & Trait Congruence								
Variable	Unstand.	Stand.	Т-	Stand.					
	Coeff.	Error	Value	Coeff.					
Intercept	-1.27***	.20	-6.23						
State Realistic Congruence	.66*	.26	2.55	.38*					
Trait Realistic Congruence	.62*	.26	2.38	.35*					

Marginal  $R^2$ =.52, Conditional  $R^2$ =.52. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

#### Table 107:

Person					Person & Environment				Polynomial Regression				
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	
Level 1													
Intercept	4.43***	.09	50.04		4.43***	.09	50.46		4.43***	.12	38.05		
Investigative Daily Activities					.07	.05	1.25	.05	.08	.06	1.42	.06	
Investigative Daily Activities <sup>2</sup>									.06	.05	1.18	.04	
Trait Investigative X Investigative Daily Activities									.09	.06	1.59	.06	
Level 2 Trait Investigative	.19*	.09	2.12	.13*	.17	.09	1.88	.11	.12	.09	1.36	.08	
Trait Investigative <sup>2</sup>									08	.06	-1.35	08	
Marginal R <sup>2</sup> Conditional	.02				.02 .42				.03 .42				
$R^2$			ale ale ale		. 12				2				

Results for Polynomial Regression and Related Models for Trait Investigative Interests Predicting Daily Intrinsic Motivation.

#### Table 108:

	State & Trait Congruence							
Variable	Unstand.	Stand.	Т-	Stand.				
	Coeff.	Error	Value	Coeff.				
Intercept	-1.39	.21	-6.76					
State Investigative Congruence	.51*	.22	2.28	.28*				
Trait Investigative Congruence	.80***	.22	3.61	.45***				

Regression Results for Polynomial Trait and State Congruence for Investigative Interests Predicting Daily Intrinsic Motivation.

*Marginal*  $R^2$ =.53, *Conditional*  $R^2$ =.53. *Level* 1 N =741, *Level* 2 N =165. \* p < .05, \*\*\* p < .01.

#### Table 109:

Results for Polynomial Regression and Related Models for Trait Artistic Interest Predicting Daily I	Intrinsic Motivation.
---	-----------------------

	Person				Person &	Environ	nent		Polynomi	al Regres	ssion	
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	4.44***	.09	49.30		4.42***	.08	53.49		4.40***	.11	38.66	
Artistic Daily Activities					.41***	.06	6.81	.27***	.43***	.07	5.97	.29***
Artistic Daily Activities <sup>2</sup>									03	.05	53	02
Trait Artistic X Artistic Daily Activities									.01	.07	.09	.00
Level 2												
Trait Artistic	03	.09	34	02	14	.08	-1.62	09	10	.09	-1.11	07
Trait Artistic <sup>2</sup>									.04	.06	.68	.04
Marginal R <sup>2</sup>	.00				.07				.07			
Condition al R <sup>2</sup>	.42				.42				.42			

#### Table 110:

Regression Results for Polynomial Trait and State Congruence for Artistic Interest Predicting Daily Intrinsic Motivation.

	State & Trait	tate & Trait Congruence							
Variable	Unstand.	Stand.	<b>T-Value</b>	Stand.					
	Coeff.	Error		Coeff.					
Intercept	-1.21***	.20	-6.12						
State Artistic Congruence	.77*	.37	2.07	.44*					
Trait Artistic Congruence	.50	.37	1.35	.29					

Marginal  $R^2$ =.53, Conditional  $R^2$ =.53. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

## Table 111:

	Person				Person &	Person & Environment				Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	
Level 1													
Intercept	4.44***	.09	50.08		4.44***	.08	54.25		4.43***	.11	41.01		
Social Daily Activities					.37***	.06	6.53	.25***	.36***	.06	6.28	.24***	
Social Daily Activities <sup>2</sup>									04	.05	87	03	
Trait Social X Daily Activities									02	.06	40	01	
Level 2													
Trait Social	.23*	.09	2.55	.15*	.11	.08	1.32	.07	.17	.09	1.74	.11	
Trait Social <sup>2</sup>									.06	.05	1.17	.07	
Marginal R <sup>2</sup>	.02				.08				.08				
Conditional R <sup>2</sup>	.43				.42				.42				

Results for Polynomial Regression and Related Models for Trait Social Interest Predicting Daily Intrinsic Motivation.

#### Table 112:

	State & Tr	ait Cong	ruence	
Variable	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.
Intercept	-1.21***	.20	-6.10	
State Social Congruence	.57*	.23	2.53	.33*
Trait Social Congruence	.70***	.23	3.05	.40***

Regression Results for Polynomial Trait and State Congruence for Social Interest Predicting Daily Intrinsic Motivation.

Marginal  $R^2$ =.53, Conditional  $R^2$ =.53. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

## Table 113:

Results for Polynomial Regression and Related Models for Trait Enterprising Interest Predicting Daily In
--

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	4.43***	.09	49.99		4.42***	.09	51.63		4.47***	.11	40.02	
Enterprising Daily Activities					.25***	.06	4.17	.16***	.28***	.08	3.76	.19***
Enterprising Daily Activities <sup>2</sup>									03	.04	59	03
Trait Enterprising X Enterprising Daily Activities									04	.06	70	03
Level 2												
Trait Enterprising	.20*	.09	2.33	.14*	.16	.08	1.85	.10	.16	.09	1.87	.11
Trait Enterprising <sup>2</sup>									01	.06	25	01
Marginal R <sup>2</sup>	.02				.04				.05			
Conditional R <sup>2</sup>	.42				.42				.42			

#### Table 114:

	State & T	rait Cong	gruence					
Variable	Unstand.			Stand.				
	Coeff.	Error	Value	Coeff.				
Intercept	-1.31***	.21	-6.39					
Enterprising State Congruence	.28	.36	.78	.16				
Enterprising Trait Congruence	1.02***	.36	2.86	.57***				

Regression Results for Polynomial Trait and State Congruence for Enterprising Interest Predicting Daily Intrinsic Motivation.

*Marginal*  $R^2$ =.53, *Conditional*  $R^2$ =.53. *Level* 1 N =741, *Level* 2 N =165. \* p < .05, \*\*\* p < .01.

### Table 115:

	Person				Person &	Person & Environment				Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	
Level 1													
Intercept	4.45***	.09	50.66		4.44***	.09	51.41		4.62***	.12	39.66		
Conventional Daily Activities					.12*	.06	2.07	.08*	.11	.06	1.88	.07	
Conventional Daily Activities <sup>2</sup>									05	.05	-1.03	04	
Trait Conventional X Conventional Daily Activities									.04	.05	.76	.03	
Level 2													
Trait Conventional	.26***	.09	2.97	.18***	.24***	.09	2.71	.16***	.20*	.09	2.24	.13*	
Trait Conventional <sup>2</sup>									14*	.07	-2.10	13*	
Marginal R <sup>2</sup>	.03				.04				.05				
Conditional $\mathbb{R}^2$	.42				.42				.42				

Results for Polynomial Regression and Related Models for Trait Conventional Interest Predicting Daily Intrinsic Motivation.

#### Table 116:

Regression Results for Polynomial Trait and State Congruence for Conventional International Internat	nterest Predicting Daily Intrinsic Motivation.
--	--

	State & Trait Congruence							
Variable	Unstand.	Stand.	Т-	Stand.				
	Coeff.	Error	Value	Coeff,				
Intercept	-1.39***	.21	-6.71					
State Conventional Congruence	.70***	.24	2.92	.39***				
Trait Conventional Congruence	.61*	.24	2.56	.34*				

Marginal  $R^2$ =.53, Conditional  $R^2$ =.53. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

# Table 117:

Results for Polynomial Regression and Related Models for Trait Realistic Interest Predicting Daily Engagement.
--

	Person				Person &	Environ	ment		Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	4.33***	.08	56.68		4.31***	.07	62.19		4.33***	.09	47.13	
Realistic Daily Activities					.45***	.05	8.55	.34***	.53***	.07	7.96	.40***
Realistic Daily Activities <sup>2</sup>									06	.04	-1.55	08
Trait Realistic X Realistic Daily Activities									03	.06	47	02
Level 2												
Trait Realistic	.20***	.08	2.66	.15***	.07	.07	.98	.05	.08	.07	1.11	.06
Trait Realistic <sup>2</sup>									.06	.05	1.06	.06
Marginal R <sup>2</sup>	.02				.13				.13			
Conditional R <sup>2</sup>	.38				.41				.41			

#### Table 118:

	State & T	rait Con	Congruence					
Variable		Stand.		Stand.				
	Coeff.	Error	Value	Coeff.				
Intercept	-1.11	.20	-5.66					
State Realistic Congruence	.84***	.31	2.69	.48***				
Trait Realistic Congruence	.42	.31	1.33	.24				

Regression Results for Polynomial Trait and State Congruence for Realistic Interest Predicting Daily Engagement.

Marginal  $R^2$ =.52, Conditional  $R^2$ =.52. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

#### Table 119:

	Person				Person &	Environ		Polynomial Regression				
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	4.33***	.08	56.16		4.33***	.07	58.50		4.35***	.10	43.96	
Investigative Daily Activities					.28***	.05	5.77	.21***	.29***	.05	5.68	.22***
Investigative Daily Activities <sup>2</sup>									.05	.05	1.00	.04
Trait Investigative X Investigative Daily Activities									.04	.05	.80	.03
Level 2 Trait Investigative	.14	.08	1.81	.10	.06	.08	.76	.04	.02	.08	.26	.02
Trait Investigative <sup>2</sup>									08	.05	-1.54	09
Marginal R <sup>2</sup>	.01				.05				.06			
Conditional $R^2$	.38				.39				.39			

Results for Polynomial Regression and Related Models for Trait Investigative Interests Predicting Daily Engagement.

Table 120:

State & Trait Congruence									
Variable	Unstand.	Stand.	Т-	Stand.					
	Coeff.	Error	Value	Coeff.					
Intercept	-1.31***	.20	-6.43						
State Investigative Congruence	.82***	.18	4.45	.46***					
Trait Investigative Congruence	.49*	.19	2.58	.27*					

Regression Results for Polynomial Trait and State Congruence for Investigative Interests Predicting Daily Engagement.

*Marginal*  $R^2$ =.52, *Conditional*  $R^2$ =.52. *Level* 1 N =741, *Level* 2 N =165. \* p < .05, \*\*\* p < .01.

#### Table 121:

Results for Polynomial Regression and Related Models for Trait Artistic Interest Predicting Daily Engagement.

	Person				Person &	rson & Environment				Polynomial Regression			
Variable	Unstand . Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	
Level 1													
Intercept	4.33***	.08	55.75		4.32***	.07	63.14		4.24***	.09	44.94		
Artistic					.47***	.05	8.96	.35***	.47***	.06	7.52	.35***	
Daily													
Activities													
Artistic									03	.05	56	02	
Daily													
Activities <sup>2</sup>													
Trait Artistic									.11	.06	1.88	.08	
X Artistic													
Daily													
Activities													
Level 2													
Trait Artistic	.07	.08	.85	.05	05	.07	79	04	.02	.08	.29	.02	
Trait									.07	.05	1.40	.08	
Artistic <sup>2</sup>													
Marginal R <sup>2</sup>	00				.12				.14				
Conditional R <sup>2</sup>	.38				.39				.40				

#### Table 122:

	State & Trait Congruence										
Variable	Unstand.	Stand.	<b>T-Value</b>	Stand.							
	Coeff.	Error		Coeff.							
Intercept	-1.13***	.20	-5.66								
State Artistic Congruence	.55	.33	1.68	.31							
Trait Artistic Congruence	.71*	.32	2.21	.41*							

Marginal  $R^2$ =.14, Conditional  $R^2$ =.40. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

## Table 123:

Person				Person & Environment				Polynomial Regression				
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	4.34***	.08	56.73		4.34***	.07	62.99		4.24***	.09	46.39	
Social Daily Activities					.49***	.05	9.96	.37	.48***	.05	9.69	.36***
Social Daily Activities <sup>2</sup>									.02	.04	.56	.02
Trait Social X Daily Activities									02	.05	46	02
Level 2												
Trait Social	.21***	.08	2.72	.16***	.06	.07	.82	.04	.12	.08	1.56	.09
Trait Social <sup>2</sup>									.08	.04	1.82	.11
Marginal R <sup>2</sup>	.02				.14				.16			
Conditional R <sup>2</sup>	.38				.43				.44			

Results for Polynomial Regression and Related Models for Trait Social Interest Predicting Daily Engagement.

# Table 124:

Regression Results for	Polynomial Trait and State Co	ongruence for Social Interest	Predicting Daily Engagement.
1108. 0001011 110011100.000			

	State & Trait Congruence							
Variable	Unstand.	Stand.	Т-	Stand.				
	Coeff.	Error	Value	Coeff.				
Intercept	-1.04***	.19	-5.53					
State Social Congruence	.57*	.24	2.38	.34*				
Trait Social Congruence	.67***	.24	2.78	.40***				

 $\frac{11}{Marginal R^2 = .54, Conditional R^2 = .54. Level 1 N = 741, Level 2 N = 165. * p < .05, *** p < .01.$ 

#### Table 125:

Person				Person &	Environ	ment		Polynomial Regression				
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	4.33***	.08	56.26		4.31***	.07	60.11		4.29***	.09	45.34	
Enterprising					.42***	.05	8.18	.32***	.42***	.07	6.37	.31***
Daily												
Activities												
Enterprising									.02	.04	.39	.02
Daily												
Activities <sup>2</sup>												
Trait									09	.05	-1.61	07
Enterprising X												
Enterprising												
Daily												
Activities												
Level 2												
Trait	.17*	.08	2.22	.13*	.09	.07	1.24	.07	.09	.07	1.31	.07
Enterprising												
Trait									02	.05	.32	.02
Enterprising <sup>2</sup>												
Marginal R <sup>2</sup>	.02				.11				.11			
Conditional R <sup>2</sup>	.38				.42				.43			

Results for Polynomial Regression and Related Models for Trait Enterprising Interest Predicting Daily Engagement.

#### Table 126:

	State & Trait Congruence								
Variable	Unstand.	Stand.	Т-	Stand.					
	Coeff.	Error	Value	Coeff.					
Intercept	-1.16***	.20	-5.93						
Enterprising State Congruence	.30	.27	1.13	.17					
Enterprising Trait Congruence	.97***	.27	3.63	.55***					

Regression Results for Polynomial Trait and State Congruence for Enterprising Interest Predicting Daily Engagement.

*Marginal*  $R^2$ =, *Conditional*  $R^2$ =. *Level* 1 N =741, *Level* 2 N =165. \* p < .05, \*\*\* p < .01.

### Table 127:

	Person				Person & Environment				Polynomial Regression			
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	T-	Stand.	Unstand.	Stand.	T-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Level 1												
Intercept	4.34***	.08	56.43		4.33***	.07	58.51		4.37***	.10	43.17	
Conventional					.35***	.05	7.21	.26***	.34***	.05	6.81	.26***
Daily												
Activities												
Conventional									.00	.05	05	.00
Daily												
Activities <sup>2</sup>												
Trait									.08	.05	1.71	.06
Conventional												
Х												
Conventional												
Daily												
Activities												
Level 2												
Trait	.17*	.08	2.25	.13*	.10	.08	1.30	.07	.08	.08	1.02	.06
Conventional												
Trait									06	.06	-1.01	06
Conventional <sup>2</sup>												
Marginal R <sup>2</sup>	.02				.08				.08			
Conditional	.38				.42				.42			
$\mathbb{R}^2$												

Results for Polynomial Regression and Related Models for Trait Conventional Interest Predicting Daily Engagement.

Table 128:

Regression Results for Polynomial Trait and State Congruence for Conventional Interest Predicting Daily Engagement.

State & Trait Congruence									
Variable	Unstand.	Stand.	Т-	Stand.					
	Coeff.	Error	Value	Coeff,					
Intercept	-1.22***	.20	-6.14						
State Conventional Congruence	.40	.39	1.02	.22					
Trait Conventional Congruence	.88*	.39	2.29	.50*					

Marginal  $R^2$ =.52, Conditional  $R^2$ =.52. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

#### Table 129

Results for Polynomial Regression and Related Models for Trait Realistic Interest Predicting Daily Perseverance.

	Person				Person &	Environr	nent		Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	3.31***	.05	61.98		3.30***	.05	65.35		3.29***	.07	49.05	
Realistic					.29***	.04	7.90	.32***	.35***	.05	7.53	38***
Daily												
Activities												
Realistic									06*	.03	-2.25	12*
Daily												
Activities <sup>2</sup>												
Trait									.03	.04	.74	.04
Realistic X												
Realistic												
Daily												
Activities												
Level 2												
Trait	.03	.05	.59	.03	06	.05	-1.06	06	03	.05	48	03
Realistic												
Trait									.07	.04	1.65	.10
Realistic <sup>2</sup>												
Marginal R <sup>2</sup>	.00				.09				.10			
Conditional R <sup>2</sup>	.37				.42				.43			

#### Table 130:

	State & Trait Congruence									
Variable	Unstand.	Stand.	Т-	Stand.						
	Coeff.	Error	Value	Coeff.						
Intercept	93***	.15	-6.18							
State Realistic Congruence	.86*	.39	2.19	.49*						
Trait Realistic Congruence	.42	.39	1.07	.24						

Regression Results for Polynomial Trait and State Congruence for Realistic Interest Predicting Daily Perseverance.

Marginal  $R^2$ =.53, Conditional  $R^2$ =.53. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

# Table 131:

Results for Polynomial Regression and Relation	ted Models for Trait Investigative	Interests Predicting Daily Perseverance.

	Person				Person & Environment				Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	3.31***	.05	62.74		3.31***	.05	68.46		3.28***	.06	50.52	
Investigative Daily Activities					.35***	.03	11.19	.38***	.34***	.03	10.16	.37***
Investigative Daily Activities <sup>2</sup>									.00	.03	16	01
Trait Investigative X Investigative Daily Activities									.03	.03	.91	.04
Level 2 Trait Investigative	.11*	.05	2.10	.12*	.01	.05	.11	.01	.01	.05	.23	.01
Trait Investigative <sup>2</sup>									.02	.03	.68	.04
Marginal R <sup>2</sup>	.01				.15				.15			
Conditional $R^2$	.37				.45				.45			

# Table 132:

Regression Results for Polynom	al Trait and State Congruence	or Investigative Interests	Predicting Daily Perseverance.
		8	

	State & Trait Congruence								
Variable	Unstand.	Stand.	Т-	Stand.					
	Coeff.	Error	Value	Coeff.					
Intercept	74***	.14	-5.44						
State Investigative Congruence	.83*	.35	2.41*	.51*					
Trait Investigative Congruence	.39	.35	1.12	.24					

Marginal  $R^2$ =.55, Conditional  $R^2$ =.55. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

#### Table 133:

Results for Polynomial Regression and Related Models for Trait Artistic Interest Predicting Daily Perseverance.

	Person				Person & Environment				Polynomial Regression			
Variable	Unstand . Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand . Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand . Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	3.31***	.05	62.09		3.30***	.05	65.67		3.23	.07	46.87	
Artistic					.26***	.04	6.85	.28***	.26***	.04	5.86	.28***
Daily												
Activities												
Artistic									01	.03	18	01
Daily												
Activities <sup>2</sup>												
Trait									.00	.04	.09	.00
Artistic X												
Artistic												
Daily												
Activities												
Level 2												
Trait	.04	.05	.74	.04	03	.05	53	03	.03	.06	.47	.03
Artistic												
Trait									.08	.04	1.96	.13
Artistic <sup>2</sup>												
Marginal R <sup>2</sup>	.00				.07				.08			
Conditional R <sup>2</sup>	.37				.39				.40			

#### Table 134:

Regression Results for Polynomial Trait and State Cong	ruence for Artistic Interest Predicting Daily Perseverance.
--	---

	State & Tra	State & Trait Congruence							
Variable	Unstand.	Stand.	<b>T-Value</b>	Stand.					
	Coeff.	Error		Coeff.					
Intercept	-1.00***	.16	-6.34						
State Artistic Congruence	1.23*	.48	2.56	.67*					
Trait Artistic Congruence	.07	.48	.15	.04					

Marginal  $R^2$ =.51, Conditional  $R^2$ =.51. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

# Table 135:

	Person				Person & Environment				Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	3.31***	.05	64.13		3.31***	.05	67.75		3.31***	.06	51.02	
Social Daily Activities					.32***	.03	9.28	.34***	.32***	.03	9.06	.34***
Social Daily Activities <sup>2</sup>									02	.03	68	.02
Trait Social X Daily Activities									04	.04	-1.03	04
Level 2												
Trait Social	.17***	.05	3.37	.19***	.08	.05	1.56	.08	.11	.06	1.92	.12
Trait Social <sup>2</sup>									.03	.03	1.10	.07
Marginal R <sup>2</sup>	.03				.14				.15			
Conditional R <sup>2</sup>	.37		ale ale ale		.44				.45			

Results for Polynomial Regression and Related Models for Trait Social Interest Predicting Daily Perseverance.

# Table 136:

Regression Results for Polynomial Trait and State Congruence for Social Interest Predicting Daily Perseverance.
---

	State & Trait Congruence								
Variable	Unstand.	Stand.	Т-	Stand.					
	Coeff.	Error	Value	Coeff.					
Intercept	83***	.14	-5.79						
State Social Congruence	.67*	.31	2.17	.39*					
Trait Social Congruence	.58	.31	1.89	.34					

*Marginal*  $R^2$ =.54, *Conditional*  $R^2$ =.54. *Level* 1 N =741, *Level* 2 N =165. \*p < .05, \*\*\*p < .01.

#### Table 137:

	Person				Person & Environment				Polynomial Regression			
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	3.31***	.05	61.97		3.29***	.05	65.21		3.25***	.07	48.94	
Enterprising Daily Activities					.26***	.04	7.29	.29***	.27***	.05	5.92	.30***
Enterprising Daily Activities <sup>2</sup>									01	.03	38	02
Trait Enterprising X Enterprising Daily Activities									.00	.04	.06	.00
Level 2												
Trait Enterprising	.03	.05	.51	.03	02	.05	44	02	02	.05	32	02
Trait Enterprising <sup>2</sup>									.05	.03	1.46	.08
Marginal R <sup>2</sup>	.00				.08				.09			
Conditional R <sup>2</sup>	.37				.41				.41			

Results for Polynomial Regression and Related Models for Trait Enterprising Interest Predicting Daily Perseverance.

#### Table 138:

Regression Results	for Polynomial Trait and	l State Congruence for H	Enterprising Interest Predictin	ng Dailv Perseverance.
	,			

	State & T	rait Cong	gruence	
Variable	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.
Intercept	98***	.16	-6.31	
Enterprising State Congruence	.79	.40	1.94	.44
Enterprising Trait Congruence	.51	.40	1.26	.28

*Marginal*  $R^2$ =.52, *Conditional*  $R^2$ =.52. *Level* 1 N =741, *Level* 2 N =165. \* p < .05, \*\*\* p < .01.

#### Table 139:

	Person				Person &	Environ	ment		Polynomia	al Regres	sion	
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Level 1												
Intercept	3.31***	.05	62.48		3.30***	.05	64.21		3.26***	.07	46.61	
Conventional Daily Activities					.33***	.03	10.01	.36***	.33***	.03	9.60	.35***
Conventional Daily Activities <sup>2</sup>									.01	.03	.28	.01
Trait Conventional X Conventional Daily Activities									.03	.03	.83	.03
Level 2 Trait	.09	.05	1.61	.09	.02	.05	.30	.02	.02	.05	.40	.02
Conventional	.07	.05	1.01	.07	.02	.05	.50	.02	.02	.05	.+0	.02
Trait Conventional <sup>2</sup>									.03	.04	.63	.04
Marginal R <sup>2</sup>	.01				.13				.13			
Conditional $R^2$	.37	*	*** ~ ^ ^	1	.47				.47			

Results for Polynomial Regression and Related Models for Trait Conventional Interest Predicting Daily Perseverance.

#### Table 140:

Regression Results for Polynomial Trait and State Congruence for Conventional Interest Predicting Daily Perseverance.

	State & Trait Cong							
Variable	Unstand.	Stand.	Т-	Stand.				
	Coeff.	Error	Value	Coeff,				
Intercept	80***	.14	-5.83					
State Conventional Congruence	1.01*	.51	1.98	.61*				
Trait Conventional Congruence	.23	.51	.44	.14				

Marginal  $R^2$ =.55, Conditional  $R^2$ =.55. Level 1 N =741, Level 2 N =165. \* p < .05, \*\*\* p < .01.

# Table 141:

	Full RIAS	EC State C	ongruenc	e	Full RIAS	EC State &	& Trait Co	ngruence
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	54***	.09	-6.05		54***	.09	-5.99	
State Realistic Congruence	03	.17	15	02	12	.38	31	08
State Investigative Congruence	.47***	.15	3.02	.31***	.82***	.22	3.71	.54****
State Artistic Congruence	.37***	.14	2.66	.25***	.38	.60	.64	.26
State Social Congruence	.65***	.15	4.43	.44***	03	.54	06	02
State Enterprising Congruence	.18	.17	1.04	.12	.32	.45	.71	.21
State Conventional Congruence	43*	.21	-2.05	28*	.97	.72	1.36	.64
Trait Realistic Congruence					.15	.36	.43	.10
Trait Investigative Congruence					49	.30	-1.66	32
Trait Artistic Congruence					01	.59	01	.00
Trait Social Congruence					.72	.54	1.33	.49
Trait Enterprising Congruence					19	.45	42	13
Trait Conventional Congruence					-1.32	.75	-1.76	87
Marginal R <sup>2</sup>	.65				.65			
Conditional R <sup>2</sup>	.65				.65			

Results for Polynomial Regression for Full RIASEC Model Congruence Predicting Daily Positive Affect.

# Table 142:

	Full RIAS	EC State C	Congruenc	e	Full RIAS	EC State	& Trait Co	ngruence
Variable	Unstand.	Stand.	<b>T-</b>	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	46***	.07	-6.49		45	.07	-6.18	
State Realistic Congruence	.37	.41	.91	.22	.34	.53	.64	.20
State Investigative Congruence	07	.39	17	04	08	.59	14	05
State Artistic Congruence	14	.42	33	08	.46	.53	.87	.27
State Social Congruence	.15	.36	.42	.09	.22	.53	.42	.13
State Enterprising Congruence	.27	.33	.82	.16	35	.68	51	20
State Conventional Congruence	.70*	.30	2.29	.41*	.79	.56	1.42	.46
Trait Realistic Congruence					.21	.49	.42	.12
Trait Investigative Congruence					.13	.62	.21	.08
Trait Artistic Congruence					-2.12*	.92	-2.30	-1.22**
Trait Social Congruence					.85	.81	1.06	.49
Trait Enterprising Congruence					1.08	.81	1.34	.63
Trait Conventional Congruence					26	.66	40	15
Marginal R <sup>2</sup>	.55				.56			
Conditional R <sup>2</sup>	.55		111		.56			

Results for Polynomial Regression for Full RIASEC Model Congruence Predicting Daily Negative Affect.

Note: † Beta weights can exceed 1.00 in cases where extensive multicollinearity exists. Level 1 N = 741, Level 2 N = 165. \* p < .05, \*\*\* p < .01.

# Table 143:

	Full RIAS	EC State C	Congruenc	e	Full RIAS	EC State &	k Trait Co	ngruence
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	-1.42***	.20	-7.01		-1.41***	.20	-6.93	
State Realistic Congruence	.09	.20	.44	.05	.08	.30	.26	.04
State Investigative Congruence	.46*	.19	2.44	.25*	.33	.24	1.39	.19
State Artistic Congruence	.62***	.17	3.57	.36***	.47	.39	1.21	.27
State Social Congruence	.62***	.16	3.87	.36***	.55*	.26	2.11	.32*
State Enterprising Congruence	46	.26	-1.76	26	77	.42	-1.85	43
State Conventional Congruence	01	.24	04	01	.07	.28	.26	.04
Trait Realistic Congruence					.05	.32	.14	.03
Trait Investigative Congruence					.24	.33	.72	.13
Trait Artistic Congruence					.12	.39	.31	.07
Trait Social Congruence					.14	.30	.46	.08
Trait Enterprising Congruence					.33	.44	.75	.18
Trait Conventional Congruence					28	.33	85	16
Marginal R <sup>2</sup>	.55				.55			
Conditional R <sup>2</sup>	.55				.55			

Results for Polynomial Regression for Full RIASEC Model Congruence Predicting Daily Intrinsic Motivation.

# Table 144:

	Full RIAS	EC State C	ongruenc	e	Full RIAS	EC State &	& Trait Co	ngruence
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	-1.49***	.20	-7.61		-1.41***	.20	-7.14	
State Realistic Congruence	.21	.15	1.40	.12	.19	.34	.55	.11
State Investigative Congruence	.40***	.14	2.85	.23***	.72***	.18	3.93	.41***
State Artistic Congruence	.19	.14	1.42	.11	16	.33	50	09
State Social Congruence	.55***	.12	4.54	.33***	.49	.27	1.82	.29
State Enterprising Congruence	.01	.16	.06	.01	42	.30	-1.41	24
State Conventional Congruence	02	.17	14	01	78	.41	-1.90	44
Trait Realistic Congruence					.03	.33	.09	.02
Trait Investigative Congruence					66***	.25	-2.71	36***
Trait Artistic Congruence					.35	.31	1.13	.20
Trait Social Congruence					.08	.28	.28	.05
Trait Enterprising Congruence					.54	.30	1.80	.31
Trait Conventional Congruence					.97*	.39	2.51	.55*
Marginal R <sup>2</sup>	.56				.57			
Conditional R <sup>2</sup>	.56				.57			

Results for Polynomial Regression for Full RIASEC Model Congruence Predicting Daily Engagement.

# Table 145:

	Full RIAS	EC State (	Congruenc	e	Full RIAS	EC State &	& Trait Co	ongruence
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Intercept	-1.04***	.15	-7.10		-1.04***	.15	-7.06	
State Realistic Congruence	.18	.16	1.12	.10	06	.41	15	04
State Investigative Congruence	.52***	.12	4.50	.32*	.67	.34	1.96	.41
State Artistic Congruence	05	.15	35	03	.80	.45	1.76	.44
State Social Congruence	.47***	.12	3.89	.28***	.30	.30	1.00	.18
State Enterprising Congruence	13	.17	72	07	.03	.42	.08	.02
State Conventional Congruence	.32*	.14	2.35	.19*	1.13*	.52	2.15	-68*
Trait Realistic Congruence					.28	.39	.73	.16
Trait Investigative Congruence					10	.35	27	06
Trait Artistic Congruence					92*	.45	-2.04	50*
Trait Social Congruence					.22	.31	.70	.13
Trait Enterprising Congruence					17	.40	41	10
Trait Conventional Congruence					87	.55	-1.59	52
Marginal R <sup>2</sup>	.58				.59			
Conditional R <sup>2</sup>	.58			1	.59			

Results for Polynomial Regression for Full RIASEC Model Congruence Predicting Daily Perseverance.

# Table 146:

	Prior Sta	te and Situ	lational	State, Si	tuational, a	nd Trait	Trait Mo	oderation	
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	<b>T-Value</b>
Level 1									
State Realistic (T)	.86***	.05	16.90	.83***	.06	14.81	.83***	.06	14.71
Realistic Situational	05	.05	-1.01	06	.05	-1.12	06	.05	-1.18
Interest (T)									
Realistic Situational							03	.06	58
Interest (T) X Trait									
Realistic									
Level 2									
Trait Realistic				.06	.05	1.14	.05	.06	.76
Marginal R <sup>2</sup>	.71			.71			.71		
Conditional R <sup>2</sup>	.71			.71			.71		

*Results for Prior Situational Realistic Interest (T) and Related Models Predicting Next Day Realistic Interest (T+1).* 

#### Table 147:

	Prior Sta	ate and Situ	uational	State, Si	tuational, a	and Trait	Trait Mo	deration	tion		
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	<b>T-Value</b>		
Level 1											
State Investigative (T)	.65***	.04	14.94	.57***	.05	11.66	.57***	.05	11.67		
Investigative Situational Interest (T)	.15***	.04	3.36	.13***	.04	3.09	.14***	.04	3.21		
Investigative Situational Interest (T) X Trait Investigative							.04	.04	1.10		
Level 2											
Trait Investigative				.14***	.05	3.05	.14	.05	3.12		
Marginal R <sup>2</sup>	.54			.55			.55				
Conditional R <sup>2</sup>	.54			.56			.56				

*Results for Prior Situational Investigative Interest (T) and Related Models Predicting Next Day Investigative Interest (T+1).* 

# Table 148:

	Prior Sta	te and Situ	uational	State, Si	tuational, a	nd Trait	Trait Mo	oderation	
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value
Level 1									
State Artistic (T)	.60***	.11	5.60	.51***	.15	3.45	.58***	.14	4.13
Artistic Situational	.10	.11	.92	.11	.11	.99	.14	.10	1.37
Interest (T)									
Artistic Situational							31***	.09	3.44
Interest (T) X Trait									
Artistic									
Level 2									
Trait Artistic				.11	.13	.83	.10	.13	.76
Marginal R <sup>2</sup>	.42			.43			.51		
Conditional R <sup>2</sup>	.42			.43			.52		

*Results for Prior Situational Artistic Interest (T) and Related Models Predicting Next Day Artistic Interest (T+1).* 

# Table 149:

	Prior Sta	ate and Sit	uational	State, Situational, and Trait			Trait Mo	oderation	
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value
Level 1									
State Social (T)	.53***	.05	10.38	.34***	.06	6.03	.36***	.06	6.50
Social Situational	.18***	.05	3.50	.16***	.05	3.20	.16	.05	3.20
Interest (T)									
Social (T) X							10*	.05	-2.25
Situational Interest									
Trait Social									
Level 2									
Trait Social				.30***	.06	5.24	.28***	.05	5.15
Marginal R <sup>2</sup>	.39			.40			.42		
Conditional R <sup>2</sup>	.39			.49			.48		

*Results for Prior Situational Social Interest (T) and Related Models Predicting Next Day Social Interest (T+1).* 

*Level 1 N* =284, *Level 2 N* =97. \**p* < .05, \*\*\**p* < .01.

# Table 150:

	Prior Sta	ate and Situ	uational	State, Si	tuational, a	and Trait	Trait Moderation		
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value
Level 1									
State Enterprising (T)	.69***	.12	5.59	.60***	.14	4.38	.59***	.14	4.28
Enterprising Situational Interest (T)	.10	.12	.85	.08	.12	.61	.11	.13	.85
Enterprising Situational Interest (T) X Trait Enterprising							.14	.12	1.17
Level 2									
Trait Enterprising				.18	.14	1.34	.17	.14	1.22
Marginal R <sup>2</sup>	.52			.54			.55		
Conditional R <sup>2</sup>	.52	0.5 shahah		.54			.55		

*Results for Prior Situational Enterprising Interest (T) and Related Models Predicting Next Day Enterprising Interest (T+1).* 

# Table 151:

	Prior Sta	ate and Sit	uational	State, Si	tuational, a	and Trait	Trait Mo	oderation	
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value
Level 1									
State Conventional (T)	.57***	.05	10.59	.53***	.05	9.67	.52***	.06	9.43
Conventional Situational Interest (T)	.14***	.05	2.66	.13*	.06	2.25	.14*	.06	2.27
Conventional Situational Interest (T) X Trait Conventional							.02	.06	.38
Level 2									
Trait Conventional				.08	.06	1.46	.09	.06	1.56
Marginal R <sup>2</sup>	.40			.39			.39		
Conditional R <sup>2</sup>	.40			.42			.43		

Results for Prior Situational Conventional Interest (T) and Related Models Predicting Next Day Conventional Interest (T+1).

# Table 152:

	Prior Sta	te and Situ	ational	State, Situational, and Trait Trait Moderation				oderation	
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value
Level 1									
State Realistic (T)	.10	.07	1.31	.09	.08	1.07	.09	.08	1.07
Realistic Situational Interest (T-1)	.58***	.07	7.99	.58***	.07	7.82	.58***	.07	7.76
Realistic Situational Interest (T-1) X Trait Realistic							.00	.07	.02
Level 2									
Trait Realistic				.02	.08	.29	.02	.09	1.07
Marginal R <sup>2</sup>	.37			.36			.36		
Conditional R <sup>2</sup>	.37			.36			.36		

Results for State Realistic Interest and Related Models Predicting Realistic Situational Interest.

# Table 153:

	Prior Sta	te and Situ	ational	State, Sit	tuational, ar	nd Trait	Trait Mo	Trait Moderation		
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	<b>T-Value</b>	
Level 1										
State Investigative (T)	.34***	.05	7.26	.32***	.05	6.24	.34***	.05	6.60	
Investigative	.44***	.05	9.39	.42***	.05	8.93	.43***	.05	9.05	
Situational Interest (T-										
1)										
Investigative							.12***	.04	2.76	
Situational Interest (T-										
1) X Trait Investigative										
Level 2										
Trait Investigative				.05	.05	.98	.08	.05	1.63	
Marginal R <sup>2</sup>	.46			.45			.47			
Conditional R <sup>2</sup>	.47			.47			.48			

# Table 154:

	<b>Prior Sta</b>	te and Situ	ational	State, Sit	tuational, an	nd Trait	Trait Moderation		
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	<b>T-Value</b>	Stand. Coeff.	Stand. Error	T-Value
Level 1									
State Artistic (T)	.15	.11	1.41	.11	.12	.91	.11	.12	.89
Artistic	.46***	.11	4.30	.44***	.11	3.99	.44***	.11	3.87
Situational									
Interest (T-1)									
Artistic							04	.11	34
Situational									
Interest (T-1) X									
Trait Artistic									
Level 2									
Trait Artistic				.10	.13	.80	.09	.13	.70
Marginal R <sup>2</sup>	.31			.30			.30		
Conditional R <sup>2</sup>	.41			.43			.43		

Results for State Artistic Interest and Related Models Predicting Artistic Situational Interest.

# Table 155:

	Prior Sta	te and Situ	ational	State, Sit	tuational, ar	nd Trait	Trait Mo	Trait Moderation		
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	<b>T-Value</b>	Stand. Coeff.	Stand. Error	T-Value	
Level 1										
State Social (T)	.35***	.06	5.90	.33***	.06	5.24	.36***	.06	5.61	
Social	01	.05	24	02	.05	36	01	.05	27	
Situational										
Interest (T-1)										
Social							.14*	.06	2.17	
Situational										
Interest (T-1) X										
Trait Social										
Level 2										
Trait Social				.05	.08	.61	.09	.08	1.02	
Marginal R <sup>2</sup>	.12			.12			.14			
Conditional R <sup>2</sup>	.56			.57			.57			

Results for State Social Interest and Related Models Predicting Social Situational Interest.

# Table 156:

	Prior Sta	te and Situ	ational	State, Sit	State, Situational, and Trait Trait Moderation				
Variable	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T-Value
Level 1									
State Enterprising (T)	.13	.15	.87	.13	.17	.75	.13	.17	.75
Enterprising	.51***	.15	3.47	.50***	.15	3.23	.44***	.17	2.62
Situational Interest (T-									
1)									
Enterprising							.15	.16	.93
Situational Interest (T-									
1) X Trait Enterprising									
Level 2									
Trait Enterprising				01	.17	04	.07	.19	.36
Marginal R <sup>2</sup>	.31			.30			.30		
Conditional R <sup>2</sup>	.33			.33			.34		

Results for State Enterprising Interest and Related Models Predicting Enterprising Situational Interest.

# Table 157:

	Prior Sta	te and Situ	ational	State, Situational, and Trait Trait Mod					
Variable	Stand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Stand. Error	T-Value	Stand. Coeff.	Stand. Error	T- Value
Level 1									
State Conventional (T)	.20***	.05	4.35	.20***	.05	4.16	.20***	.05	4.14
Conventional Situational Interest (T-1)	.62***	.05	13.20	.60***	.05	12.25	.60***	.05	12.23
Conventional Situational Interest (T-1) X Trait				.07	.05	1.46	.01	.04	.18
Conventional									
Level 2									
Trait Conventional							.07	.05	1.47
Marginal R <sup>2</sup>	.52			.52			.52		
Conditional R <sup>2</sup>	.52			.52			.52		

Results for State Conventional Interest and Related Models Predicting Conventional Situational Interest.

Level 1 N =251, Level 2 N =92. \*p < .05, \*\*\*p < .01.

#### Table 158:

	Person				Person &	Environ	ment		Polynomial Regression			
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	T-	Stand.	Unstand.	Stand.	T-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	3.06***	.03	95.55	.77***	3.06***	.03	91.96		3.07***	.05	66.66	
State Realistic					.70***	.04	17.87	.59***	.70***	.04	17.36	.58***
Realistic					.30***	.04	7.64	.25***	.30***	.05	6.14	.25***
Daily												
Activities												
State									01	.04	30	01
Realistic <sup>2</sup>												
Realistic									.01	.03	.22	.01
Daily												
Activities <sup>2</sup>												
State Realistic									01	.05	27	01
X Realistic												
Daily												
Activities												
Marginal R <sup>2</sup>	.61				.62				.62			
Conditional R <sup>2</sup>	.61				.65				.65			

*Results for Polynomial Regression and Related Models for State Realistic Interest (T) Predicting Next Day Realistic Interest (T+1).* 

Table 159:

Polynomial Regression Fit Line Coefficients for State Realistic Interest Congruence Predicting Next Day Realistic Interest (T+1).

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Realistic Fit Line (X=Y)	1.00*	.64	.91
Realistic Fit Line Curvilinearity	02	08	.06
Realistic Misfit Line (X=-Y)	.40	07	.36
Realistic Misfit Line Curvilinearity	.01	42	.14

Level 1 N = 582, Level 2 N = 156. \* p < .05.

#### Table 160:

	Person				Person & Environment			Polynomial Regression				
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.08***	.04	98.12		4.08***	.04	98.78		4.05***	.06	62.04	
State	.96***	.04	23.12	.69***	.86***	.05	16.30	.62***	.88***	.06	15.01	.64***
Investigative												
Investigative					.16***	.05	2.98	.11	.15***	.06	2.62	.11***
Daily												
Activities												
State									.04	.05	.78	.03
Investigative <sup>2</sup>												
Investigative									03	.05	63	03
Daily												
Activities <sup>2</sup>												
State									.03	.07	.41	.02
Investigative X												
Investigative												
Daily												
Activities												
Marginal R <sup>2</sup>	.48				.49				.49			
Conditional R <sup>2</sup>	.48				.49				.49			

Results for Polynomial Regression and Related Models for State Investigative Interest (T) Predicting Next Day Investigative Interest (T+1).

#### Table 161:

Polynomial Regression Fit Line Coefficients for State Investigative Interest Congruence Predicting Next Day Investigative Interest (T+1).

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Investigative Fit Line (X=Y)	1.03*	.57	.91
Investigative Fit Line Curvilinearity	.03	03	.19
Investigative Misfit Line (X=-Y)	.74*	.08	.64
Investigative Misfit Line Curvilinearity	02	17	.46

Level 1 N = 582, Level 2  $N = 156 \cdot p < .05$ .

# Table 162:

Person				Person & Environment				Polynomial Regression				
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Intercept	3.54***	.04	99.04		3.54***	.04	95.89		3.56***	.06	62.25	
State Artistic	1.20***	.04	33.48	.81***	1.05***	.04	24.19	.71***	1.06***	.05	23.38	.72***
Artistic Daily Activities					.21***	.04	4.76	.14***	.21***	.05	4.04	.14
State Artistic <sup>2</sup>									02	.04	39	01
Artistic Daily Activities <sup>2</sup>									.01	.04	.28	.01
State Artistic X Artistic Daily Activities									03	.05	50	02
Marginal R <sup>2</sup>	.66				.66				.66			
Conditional R <sup>2</sup>	.66				.67				.67			

Results for Polynomial Regression and Related Models for State Artistic Interest (T) Predicting Next Day Artistic Interest (T+1).

#### Table 163:

Polynomial Regression Fit Line Coefficients for State Artistic Interest Congruence Predicting Next Day Artistic Interest (T+1).

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Artistic Fit Line (X=Y)	1.26*	.71	1.09
Artistic Fit Line Curvilinearity	03	11	.10
Artistic Misfit Line (X=-Y)	.85	03	.58
Artistic Misfit Line Curvilinearity	.02	34	.19

Level 1 N = 582, Level 2 N = 156. \* p < .05.

#### Table 164:

Person					Person & Environment				Polynomial Regression			
Variable	Unstand.	Stand.		Stand.	Unstand.	Stand.		Stand.	Unstand.	Stand.	T-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.50***	.04	101.14		4.50***	.04	102.62		4.50***	.07	69.24	
State Social	.89***	.04	20.92	.65***	.73***	.05	14.08	.53***	.75***	.06	11.98	.55***
Social Daily					.27***	.05	5.17	.20***	.27***	.05	5.06	.19
Activities												
State Social <sup>2</sup>									.04	.05	.95	.05
Social Daily									.01	.05	.18	.01
Activities <sup>2</sup>												
State Social X									09	.07	-1.35	07
Social Daily												
Activities												
Marginal R <sup>2</sup>	.45				.47				.48			
Conditional	.47				.50				.50			
$\mathbb{R}^2$												

Results for Polynomial Regression and Related Models for State Social Interest (T) Predicting Next Day Social Interest (T+1).

#### Table 165:

Polynomial Regression Fit Line Coefficients for State Social Interest Congruence Predicting Next Day Social Interest (T+1).

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Social Fit Line (X=Y)	1.02*	.55	.92
Social Fit Line Curvilinearity	04	11	.11
Social Misfit Line (X=-Y)	.48*	.01	.47
Social Misfit Line Curvilinearity	.15	29	.38

Level 1 N = 582, Level 2 N = 156. \* p < .05.

#### Table 166:

	Person				Person & Environment			Polynomial Regression				
Variable	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.	Unstand. Coeff.	Stand. Error	T- Value	Stand. Coeff.
Intercept	2.79***	.03	80.02	Cocii.	2.78***	.03	86.15	Cocii.	2.79***	.05	59.66	Cocii.
State Enterprising	.79***	.03	23.48	.70***	.69***	.04	18.49	.61***	.70***	.04	18.70	.62***
Enterprising Daily Activities					.23***	.04	6.04	.20***	.22***	.05	4.64	.19***
State Enterprising <sup>2</sup>									01	.04	15	01
Enterprising Daily Activities <sup>2</sup>									.02	.03	.74	.03
State Enterprising X Enterprising Daily Activities									05	.04	-1.06	05
Marginal R <sup>2</sup>	.51				.55				.56			
Conditional R <sup>2</sup>	.53				.56				.56			

Results for Polynomial Regression and Related Models for State Enterprising Interest (T) Predicting Next Day Enterprising Interest (T+1).

Level 1 N = 582, Level 2 N = 156. \*p < .05, \*\*\*p < .01.

Table 167:

Polynomial Regression Fit Line Coefficients for State Enterprising Interest Congruence Predicting Next Day Enterprising Interest (T+1).

Polynomial Regression Terms	<b>Unstand.</b> Coefficient	Lower 95% CI	Upper 95% CI
Enterprising Fit Line (X=Y)	.92*	.58	.82
Enterprising Fit Line Curvilinearity	03	06	.09
Enterprising Misfit Line (X=-Y)	.48*	.05	.43
Enterprising Misfit Line Curvilinearity	.06	18	.32

*Level 1* N = 582, *Level 2* N = 156. \* p < .05.

## Table 168:

Results for Polynomial Regression and Related Models for State Conventional Interest (T) Predicting Next Day Conventional	
Interest (T+1).	

	Person			Person & Environment			Polynomial Regression					
Variable	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.	Unstand.	Stand.	Т-	Stand.
	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.	Coeff.	Error	Value	Coeff.
Intercept	4.19***	.04	103.87		4.19***	.04	106.99		4.15***	.06	68.85	
State	.99***	.04	24.56	.71***	.77***	.05	14.57	.56***	.85**	.06	13.81	.61***
Conventional												
Conventional					.32***	.05	6.03	.23***	.28***	.05	5.16	.20***
Daily												
Activities												
State									.10	.05	2.14	.11
Conventional <sup>2</sup>												
Conventional									05	.06	82	04
Daily												
Activities <sup>2</sup>												
State									03	.08	40	02
Conventional												
Х												
Conventional												
Daily												
Activities												
Marginal R <sup>2</sup>	.51				.54				.54			
Conditional	.51				.54				.54			
R <sup>2</sup>												

Level 1 N = 582, Level 2 N = 156. \*p < .05, \*\*\*p < .01.

#### Table 169:

Polynomial Regression Fit Line Coefficients for State Conventional Interest Congruence Predicting Next Day Conventional Interest (T+1).

Polynomial Regression Terms	Unstand. Coefficient	Lower 95% CI	Upper 95% CI
Conventional Fit Line (X=Y)	1.14*	.72	1.01
Conventional Fit Line Curvilinearity	.03	05	.14
Conventional Misfit Line (X=-Y)	.57	11	.39
Conventional Misfit Line Curvilinearity	.09	33	.57

Level 1 N = 582, Level 2 N = 156 . \*p < .05.

#### Table 170:

Variable	State	State	State	State	State	State
	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
Depletion	19***	23***	17***	31***	16***	17***
Positive	.27***	.26***	.29***	.35***	.28***	.23***
Affect						
Negative	04	03	03	08*	.04	.04
Affect						
Sleep	.06	.06	.06	.16***	.07*	.06
Quality						
Sleep	.01	.00	03	.04	.02	.05
Quantity						

Bivariate Within-Person Relationships Between State Interests and Resources.

*Note: Variables were collected concurrently in the morning.* N = 949-950. \* p < .05 \*\*\*p < .01

## Table 171:

Variable	Unstand.	Stand. Error	<b>T-Value</b>	Stand.
	Coefficient			Coefficient
Intercept	2.78***	.24	11.45	
Depletion	04	.04	-1.08	04
Positive Affect	.20***	.04	4.74	.16***
(State)				
Negative Affect	.05	.06	.81	.03
(State)				
Sleep Quality	.08	.05	1.46	.05
Sleep Quantity	02	.01	-1.23	04
Marginal R <sup>2</sup>	.04			
Conditional R <sup>2</sup>	.63			

*Multilevel Regression Results for Relationships Between State Realistic Interests and Resources.* 

Level 1 N = 950, Level 2 N = 173. \* p < .05 \*\*\* p < .01

### Table 172:

Variable	Unstand.	Stand. Error	<b>T-Value</b>	Stand.
	Coefficient			Coefficient
Intercept	4.24***	.30	14.05	
Depletion	17***	.05	-3.37	12***
Positive Affect	.23***	.05	4.34	.16***
(State)				
Negative Affect	.05	.07	.73	.02
(State)				
Sleep Quality	.00	.07	06	.00
Sleep Quantity	02	.02	-1.45	05
Marginal R <sup>2</sup>	.06			
Conditional R <sup>2</sup>	.51			

*Multilevel Regression Results for Relationships Between State Investigative Interests and Resources.* 

Level 1 N = 949, Level 2 N = 173. \*p < .05 \*\*\*p < .01

### Table 173:

Unstand.	Stand. Error	T-Value	Stand.
Coefficient			Coefficient
2.93***	.29	10.25	
.08	.05	1.66	.05
.34***	.05	6.66	.22***
06	.07	88	03
.09	.06	1.40	.04
02	.01	-1.53	05
.05			
.66			
	Coefficient         2.93***         .08         .34***        06         .09        02	Coefficient       .29         .08       .05         .34***       .05        06       .07         .09       .06        02       .01         .05       .05	Coefficient       10.25         2.93***       .29       10.25         .08       .05       1.66         .34***       .05       6.66        06       .07      88         .09       .06       1.40        02       .01       -1.53

Multilevel Regression Results for Relationships Between State Artistic Interests and Resources.

Level 1 N = 949, Level 2 N = 173. \* p < .05 \*\*\* p < .01

#### Table 174:

Unstand.	Stand. Error	<b>T-Value</b>	Stand.
Coefficient			Coefficient
4.24***	.28	15.00	
15***	.05	-3.13	11***
.30***	.05	5.91	.21***
.02	.07	.30	.01
.09	.06	1.46	.05
02	.02	-1.59	05
.09			
.53			
	Coefficient         4.24***        15***         .30***         .02         .09        02	Coefficient       .28         4.24***       .28        15***       .05         .30***       .05         .02       .07         .09       .06        02       .02         .09       .06         .09       .02	Coefficient       15.00         4.24***       .28       15.00        15***       .05       -3.13         .30***       .05       5.91         .02       .07       .30         .09       .06       1.46        02       .02       -1.59

Multilevel Regression Results for Relationships Between State Social Interests and Resources.

Level 1 N = 948, Level 2 N = 173. \* p < .05 \*\*\* p < .01

### Table 175:

Variable	Unstand.	Stand. Error	<b>T-Value</b>	Stand.
	Coefficient			Coefficient
Intercept	2.33***	.26	9.05	
Depletion	05	.04	-1.06	04
Positive Affect	.26***	.05	5.56	.20***
(State)				
Negative Affect	.16*	.06	2.57	.09*
(State)				
Sleep Quality	.08	.06	1.49	.05
Sleep Quantity	02	.01	-1.45	05
Marginal R <sup>2</sup>	.06			
Conditional R <sup>2</sup>	.55			

*Multilevel Regression Results for Relationships Between State Enterprising Interests and Resources.* 

Level 1 N = 949, Level 2 N = 173. \* p < .05 \*\*\* p < .01

#### Table 176:

Variable	Unstand.	Stand. Error	<b>T-Value</b>	Stand.
	Coefficient			Coefficient
Intercept	4.01***	.29	13.73	
Depletion	10*	.05	-2.09	08*
Positive Affect	.23***	.05	4.46	.16***
(State)				
Negative Affect	.07	.07	1.04	.04
(State)				
Sleep Quality	02	.06	32	01
Sleep Quantity	01	.02	65	02
Marginal R <sup>2</sup>	.04			
Conditional R <sup>2</sup>	.52			

*Multilevel Regression Results for Relationships Between State Conventional Interests and Resources.* 

Level 1 N = 949, Level 2 N = 173. \* p < .05 \*\*\* p < .01

#### Table 177:

Variable	Realistic	Investigative	Activities	Social	Enterprising	Conventional
	Activities	Activities	Artistic	Activities	Activities	Activities
Depletion	06	05	09	11***	.00	01
Positive	.27***	.20***	.31***	.25***	.25***	.15***
Affect						
Negative	.00	.05	.01	01	.06	.06
Affect						
Sleep	03	.05	.04	.02	.01	.03
Quality						
Sleep	07	01	05	04	04	.01
Quantity						

Bivariate Relationships Between Daily Activities and Resources.

*Note:* Resource variables were collected in the morning while activities variables were collected in the evening. N = 748. \* p < .05 \*\*\*p < .01

#### Table 178:

Variable	Unstand.	Stand. Error	<b>T-Value</b>	Stand.
	Coefficient			Coefficient
Intercept	1.76***	.26	6.71	
Depletion	.05	.04	1.17	.05
Positive Affect	.20***	.05	4.34	.17***
(State)				
Negative Affect	.09	.06	1.41	.05
(State)				
Sleep Quality	03	.06	54	02
Sleep Quantity	00	.01	21	01
Marginal R <sup>2</sup>	.03			
Conditional R <sup>2</sup>	.60			

Multilevel Regression Results for Relationships Between Realistic Daily Activities and Resources.

Level 1 N = 749, Level 2 N = 167. \*p < .05 \*\*\*p < .01

#### Table 179:

Variable	Unstand. Coefficient	Stand. Error	<b>T-Value</b>	Stand. Coefficient
Intercept	3.03***	.41	7.46	
Depletion	.03	.07	.48	.02
Positive Affect	.25***	.07	3.58	.16***
(State)				
Negative Affect	.16	.10	1.64	.07
(State)				
Sleep Quality	.06	.10	.64	.03
Sleep Quantity	01	.02	59	03
Marginal R <sup>2</sup>	.03			
Conditional R <sup>2</sup>	.32			

*Multilevel Regression Results for Relationships Between Investigative Daily Activities and Resources.* 

Level 1 N = 749, Level 2 N = 167. \* p < .05 \*\*\* p < .01

## Table 180:

Variable	Unstand. Coefficient	Stand. Error	<b>T-Value</b>	Stand. Coefficient
Interest	1.85***	22	5.92	
Intercept		.32	5.82	
Depletion	.02	.05	.31	.01
Positive Affect	.19***	.06	3.33	.13***
(State)				
Negative Affect	.07	.08	.97	.04
(State)				
Sleep Quality	.10	.07	1.47	.06
Sleep Quantity	01	.02	81	03
Marginal R <sup>2</sup>	.02			
Conditional R <sup>2</sup>	.59			

*Multilevel Regression Results for Relationships Between Artistic Daily Activities and Resources.* 

Level 1 N = 749, Level 2 N = 167. \* p < .05 \*\*\* p < .01

### Table 181:

Unstand.	Stand. Error	<b>T-Value</b>	Stand.
Coefficient			Coefficient
3.21***	.38	8.43	
.04	.07	.56	.03
.26***	.07	3.91	.17***
.03	.09	.36	.01
.00	.09	.00	.00
01	.02	58	02
.03			
.46			
	Coefficient         3.21***         .04         .26***         .03         .00        01         .03         .46	Coefficient         3.21***       .38         .04       .07         .26***       .07         .03       .09         .00       .09         .01       .02         .03       .03	Coefficient       8.43         3.21***       .38       8.43         .04       .07       .56         .26***       .07       3.91         .03       .09       .36         .00       .09       .00        01       .02      58         .03       .46

Multilevel Regression Results for Relationships Between Social Daily Activities and Resources.

Level 1 N = 749, Level 2 N = 167. \* p < .05 \*\*\* p < .01

#### Table 182:

Variable	Unstand. Coefficient	Stand. Error	T-Value	Stand. Coefficient
<b>T</b> (			5.21	Coefficient
Intercept	1.44***	.27	5.31	
Depletion	.06	.05	1.34	.06
Positive Affect	.20***	.05	4.08	.17***
(State)				
Negative Affect	.09	.07	1.40	.05
(State)				
Sleep Quality	.02	.06	.35	.01
Sleep Quantity	.00	.01	21	01
Marginal R <sup>2</sup>	.03			
Conditional R <sup>2</sup>	.57			

*Multilevel Regression Results for Relationships Between Enterprising Daily Activities and Resources.* 

Level 1 N = 749, Level 2 N = 167. \*p < .05 \*\*\*p < .01

#### Table 183:

Variable	Unstand.	Stand. Error	<b>T-Value</b>	Stand.
	Coefficient			Coefficient
Intercept	2.82***	.41	6.93	
Depletion	.08	.07	1.09	.05
Positive Affect	.25***	.07	3.52	.16***
(State)				
Negative Affect	.07	.10	.74	.03
(State)				
Sleep Quality	.02	.09	.18	.01
Sleep Quantity	.00	.02	18	01
Marginal R <sup>2</sup>	.02			
Conditional R <sup>2</sup>	.41			

*Multilevel Regression Results for Relationships Between Conventional Daily Activities and Resources.* 

Level 1 N = 749, Level 2 N = 167. \*p < .05 \*\*\*p < .01

## Table 184:

## Within-Person Correlation Between State Interests and Daily Activities.

Interest	ľ
Realistic	.61***
Investigative	.62***
Artistic	.57***
Social	.63***
Enterprising	.56***
Conventional	.68***

 $N = 748-749 \ *p < .05 \ ***p < .01$ 

#### Table 185:

*Multilevel Regression Results for Relationships Between Realistic Daily Activities and State Realistic Interest.* 

Variable	Unstand. Coefficient	Stand. Error	T-Value	Stand. Coefficient
Intercept	.96***	.11	8.43	
State Realistic	.43***	.03	13.80	.47***
Marginal R <sup>2</sup>	.25			
Conditional R <sup>2</sup>	.56			

Level 1 N = 748, Level 2 N = 167. \* p < .05 \*\*\* p < .01

#### Table 186:

Multilevel Regression Results for Relationships Between Investigative Daily Activities and State Investigative Interest.

Variable	Unstand. Coefficient	Stand. Error	T-Value	Stand. Coefficient
Intercept	1.10***	.15	7.11	
State	.68***	.03	19.90	.63***
Investigative				
Marginal R <sup>2</sup>	.39			
Conditional R <sup>2</sup>	.53			

Level 1 N = 748, Level 2 N = 167. \* p < .05 \*\*\* p < .01

#### Table 187:

# *Multilevel Regression Results for Relationships Between Artistic Daily Activities and State Artistic Interest.*

Variable	Unstand. Coefficient	Stand. Error	T-Value	Stand. Coefficient
Intercept	.88***	.14	6.38	
State Artistic	.44***	.03	13.83	.48***
Marginal R <sup>2</sup>	.24			
Conditional R <sup>2</sup>	.62			

Level 1 N = 748, Level 2 N = 167. \*p < .05 \*\*\*p < .01

#### Table 188:

# *Multilevel Regression Results for Relationships Between Social Daily Activities and State Social Interest.*

Variable	Unstand. Coefficient	Stand. Error	T-Value	Stand. Coefficient
Intercept	.96***	.17	5.61	
State Social	.62***	.03	17.69	.56***
Marginal R <sup>2</sup>	.34			
Conditional R <sup>2</sup>	.52			

Level 1 N = 748, Level 2 N = 167. \*p < .05 \*\*\*p < .01

#### Table 189:

Multilevel Regression Results for Relationships Between Enterprising Daily Activities and State Enterprising Interest.

Variable	Unstand. Coefficient	Stand. Error	<b>T-Value</b>	Stand. Coefficient
Intercept	.97***	.11	8.92	
State	.41***	.03	13.46	.43***
Enterprising				
Marginal R <sup>2</sup>	.20			
Conditional R <sup>2</sup>	.58			

Level 1 N = 748, Level 2 N = 167. \* p < .05 \*\*\* p < .01

## Table 190:

Multilevel Regression Results for Relationships Between Conventional Daily Activities and	
State Conventional Interest.	

Variable	Unstand. Coefficient	Stand. Error	T-Value	Stand. Coefficient
Intercept	.52***	.16	3.35	
State	.74***	.03	21.79	.66***
Conventional				
Marginal R <sup>2</sup>	.44			
Conditional R <sup>2</sup>	.58			

Level 1 N = 748, Level 2 N = 167. \* p < .05 \*\*\* p < .01

## Table 191:

Correlation Between	Pre and Post Train	Interests for DSIM	and BPDRM.

Interest	DSIM	BPDRM	
Realistic	.49***	.74***	
Investigative	.57***	.87***	
Artistic	.58***	.80***	
Social	.53***	.72***	
Enterprising	.46***	.74***	
Conventional	.34***	.73***	

N = 133. \* p < .05 \*\*\* p < .01

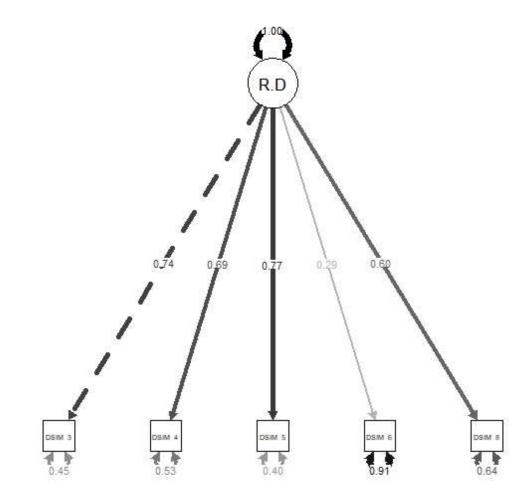
#### Table 192:

	Realistic		Investigative		Artistic		Social		Enterprising		Conventional	
Variable	DSIM	BPDRM	DSIM	BPDRM	DSIM	BPDRM	DSIM	BPDRM	DSIM	BPDRM	DSIM	BPDRM
Mean	.32***	.17	.28**	.06	.33**	.12	.28**	.24***	.25**	.24***	.46**	.11
State			*		*		*		*		*	
Interest												
Mean	.37***	.09	.33**	.04	.32**	.13	.27**	.24*	.25**	.16	.46**	.05
Daily			*		*		*		*		*	
Activities												
Dif. in	.72***	.24***	.57**	.12	.68**	.32***	.61**	.37***	.72**	.26***	.70**	.22***
Average			*		*		*		*		*	
from Pre												

Correlations of Trait Interest Change from Pre to Post Survey.

*Note: Only cases in which 4 or more state interests or daily activities in each respective interest domain were retained for analyses.* N = 32 - 133. \*p < .05, \*\*\*p < .01 Figure 1:

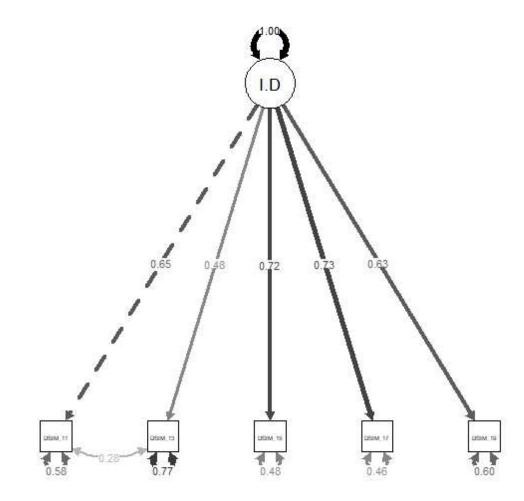
Plot of CFA for State Realistic Interest.



Note: Paths represent standardized coefficients. R.D. represents latent state Realistic interest.

Figure 2:

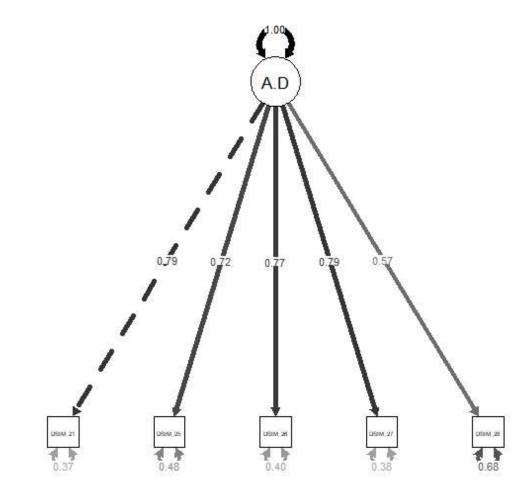
Plot of CFA for State Investigative Interest.



Note: Paths represent standardized coefficients. I.D. represents latent state Investigative interest.

Figure 3:

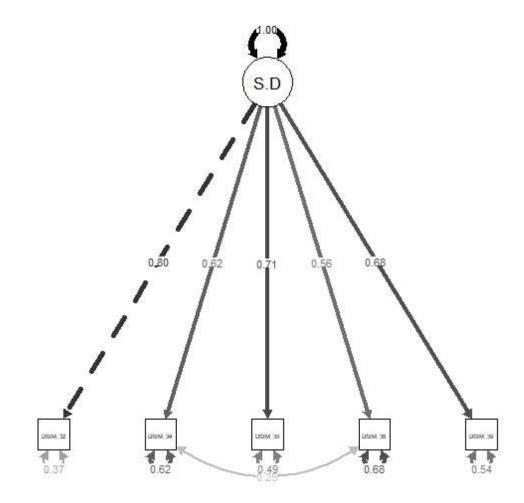
Plot of CFA for State Artistic Interest.



Note: Paths represent standardized coefficients. A.D. represents latent state Artistic interest.

Figure 4:

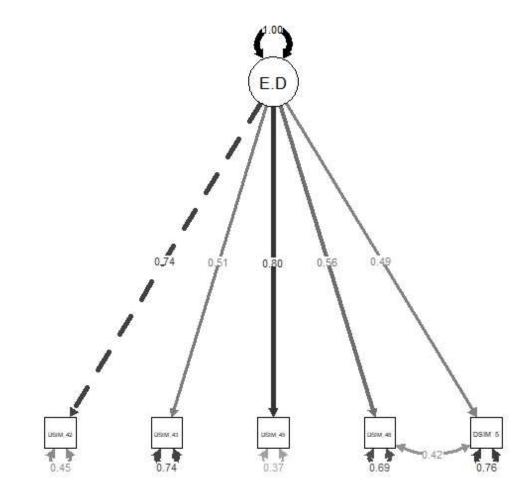
Plot of CFA for State Social Interest.



Note: Paths represent standardized coefficients. S.D. represents latent state Social interest.

Figure 5:

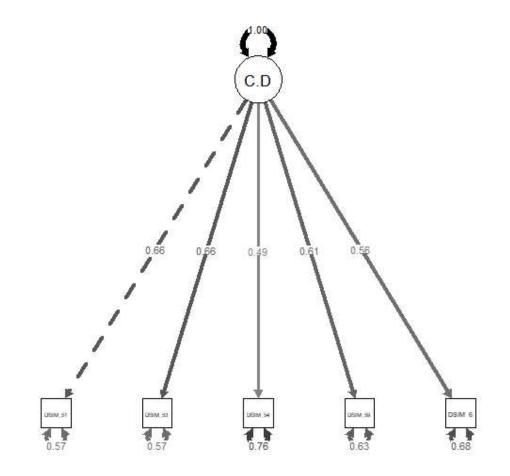
Plot of CFA for State Enterprising Interest.



Note: Paths represent standardized coefficients. E.D. represents latent state Enterprising interest.

Figure 6:

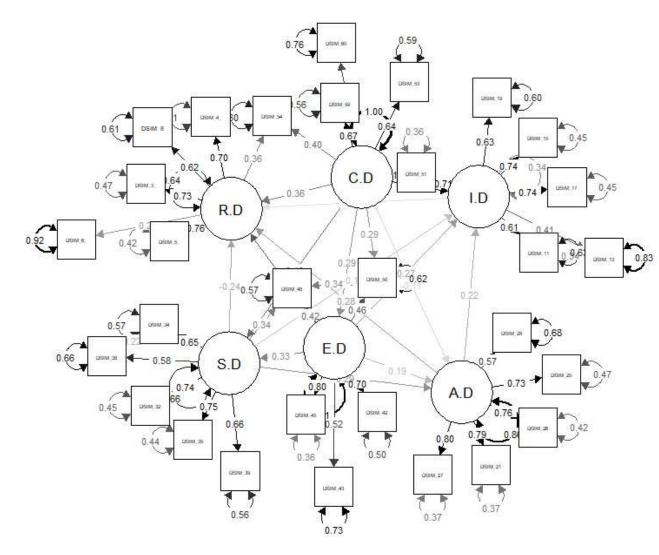
Plot of CFA for State Conventional Interest.



Note: Paths represent standardized coefficients. C.D. represents latent state Conventional interest.

#### Figure 7:

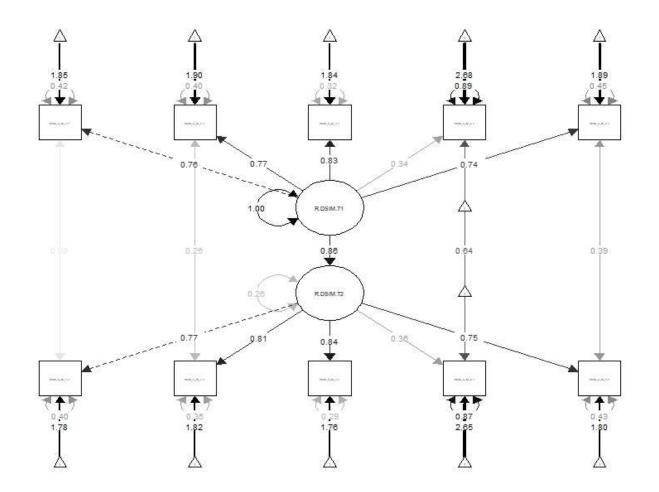
Plot of CFA for State Interests Replicating Holland Structure.



Note: Paths represent standardized coefficients

Figure 8:

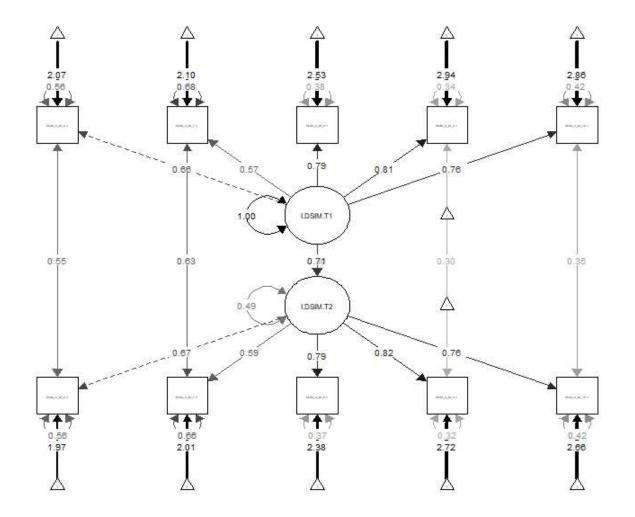
Plot of Structural Equation Model for Latent Correlation Between Realistic State Interests (T) and Next Day Realistic State Interest (T+1).



Note: Paths represent standardized coefficients

Figure 9:

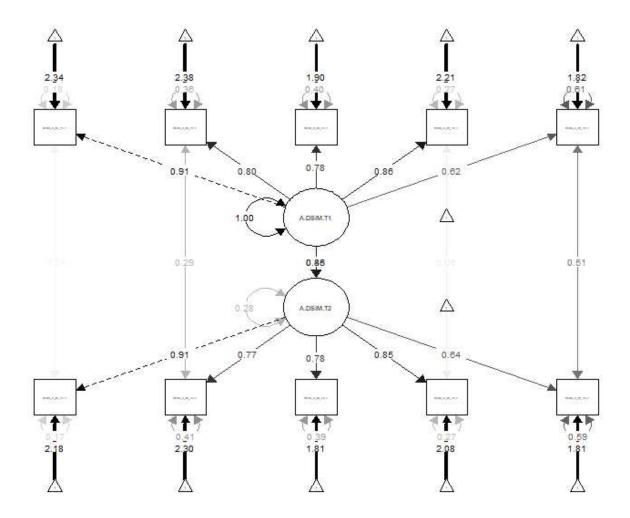
Plot of Structural Equation Model for Latent Correlation Between Investigative State Interests (T) and Next Day Investigative State Interest (T+1).



Note: Paths represent standardized coefficients

Figure 10:

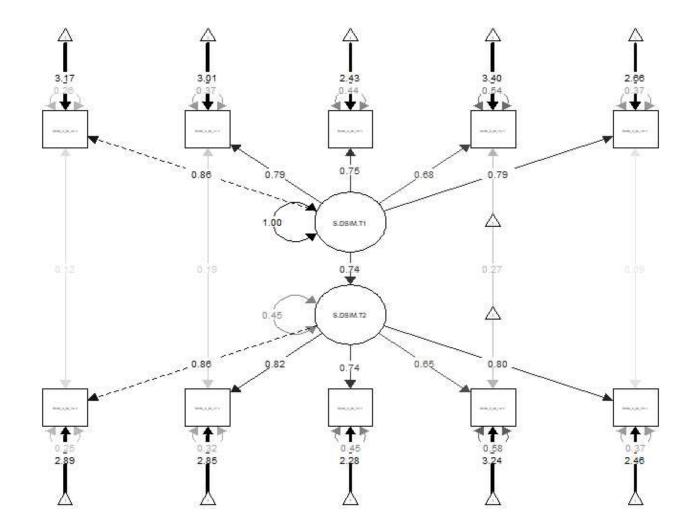
Plot of Structural Equation Model for Latent Correlation Between Artistic State Interests (T) and Next Day Artistic State Interest (T+1).



Note: Paths represent standardized coefficients

Figure 11:

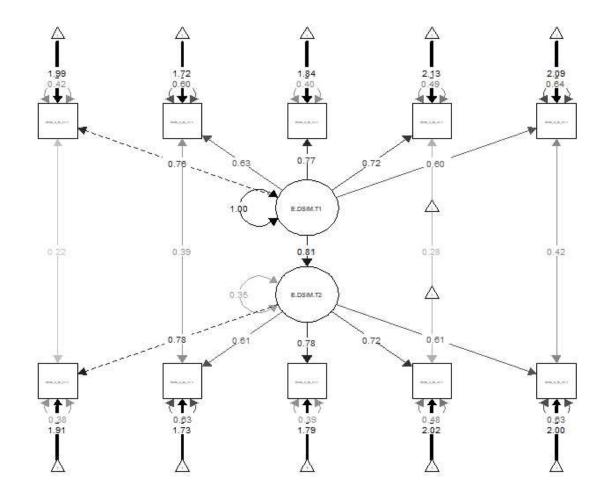
Plot of Structural Equation Model for Latent Correlation Between Social State Interests (T) and Next Day Social State Interest (T+1).



Note: Paths represent standardized coefficients

Figure 12:

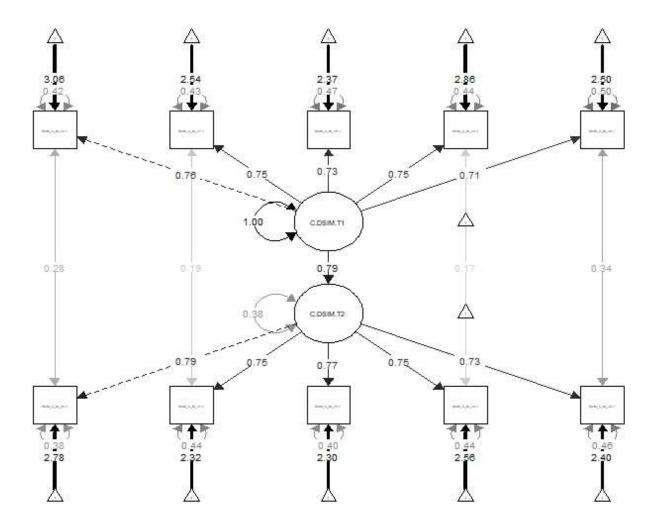
Plot of Structural Equation Model for Latent Correlation Between Enterprising State Interests (T) and Next Day Enterprising State Interest (T+1).



Note: Paths represent standardized coefficients

Figure 13:

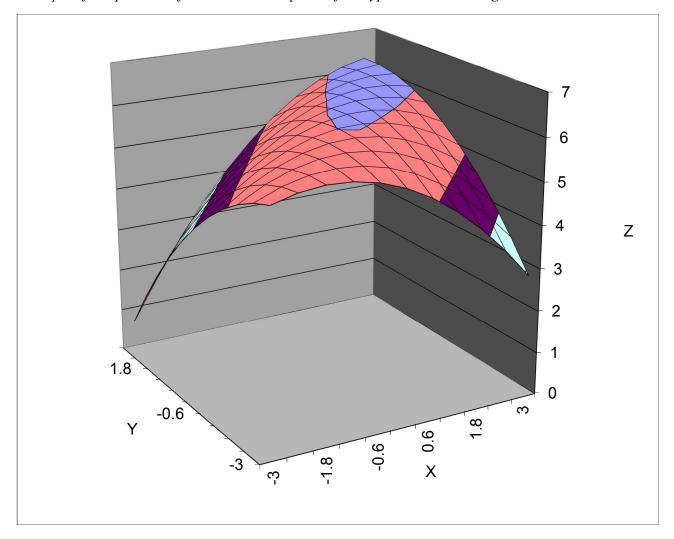
Plot of Structural Equation Model for Latent Correlation Between Conventional State Interests (T) and Next Day Conventional State Interest (T+1).



Note: Paths represent standardized coefficients

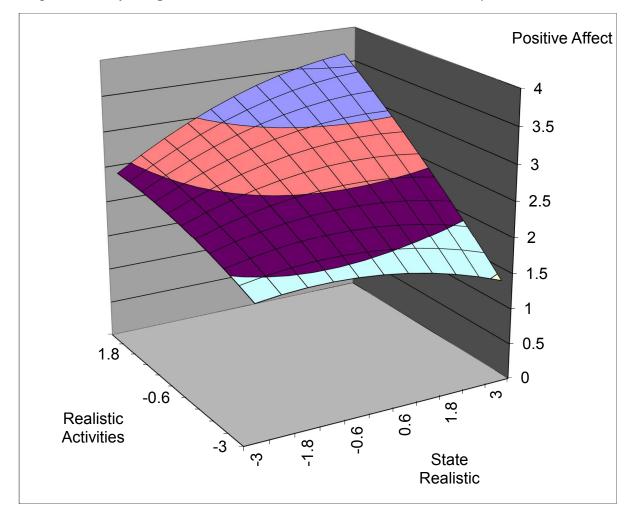
# Figure 14:

Example of Response Surface curvature expected for Hypotheses 3a through 3e.



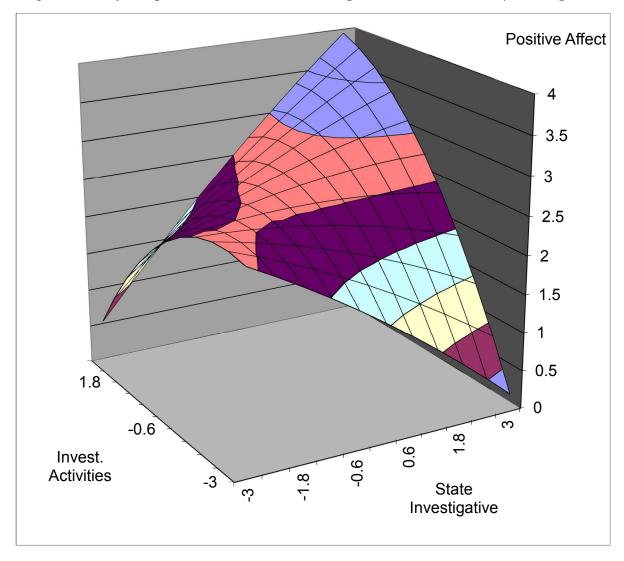
Note: The response plot curvature for negative affect is expected to be rotated 180 degrees, with the lowest point along the fit line.

# Figure 15:



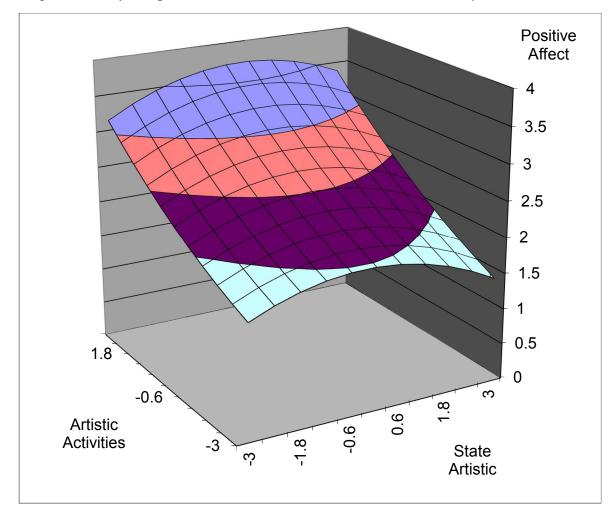
Response Plot of Congruence Between State Realistic Interests and Daily Realistic Activities Predicting Daily Positive Affect.

Figure 16:



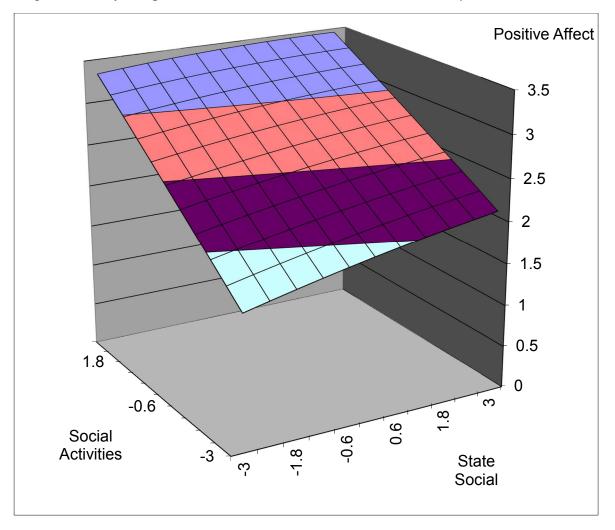
Response Plot of Congruence Between State Investigative Interests and Daily Investigative Activities Predicting Daily Positive Affect.

## Figure 17:



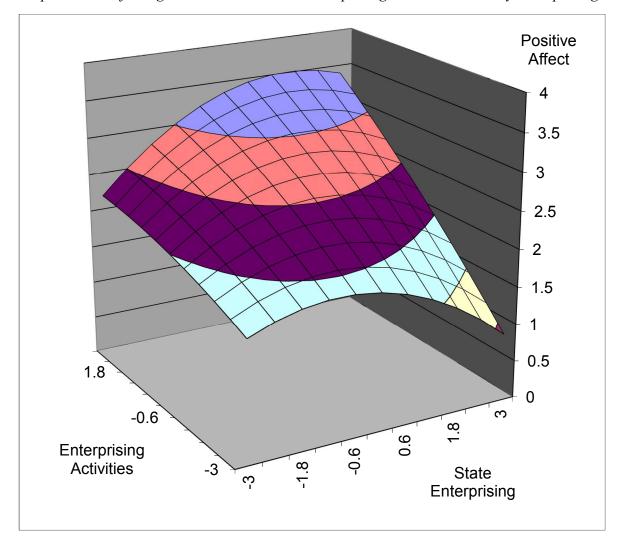
Response Plot of Congruence Between State Artistic Interests and Daily Artistic Activities Predicting Daily Positive Affect.

# Figure 18:



Response Plot of Congruence Between State Social Interests and Daily Social Activities Predicting Daily Positive Affect.

## Figure 19:



Response Plot of Congruence Between State Enterprising Interests and Daily Enterprising Activities Predicting Daily Positive Affect.

Figure 20:

Response Plot of Congruence Between State Conventional Interests and Daily Conventional Activities Predicting Daily Positive Affect.

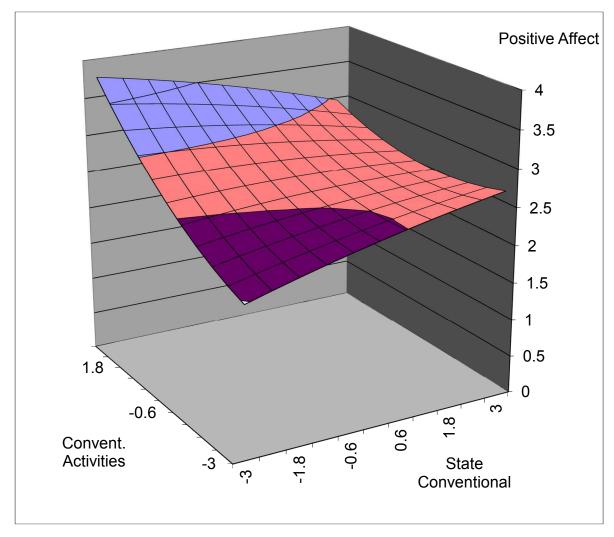
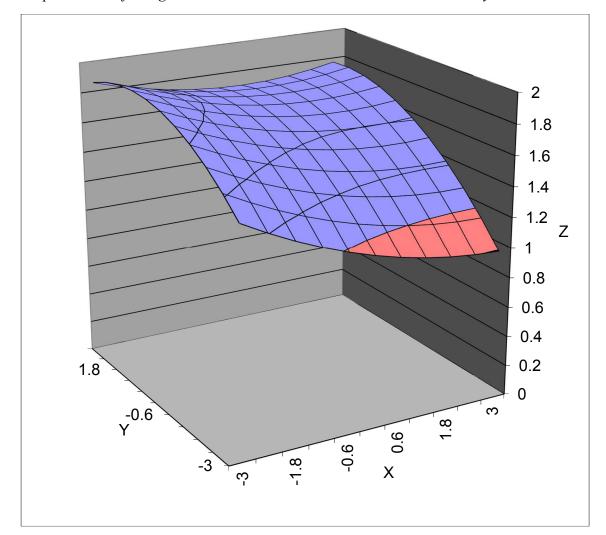
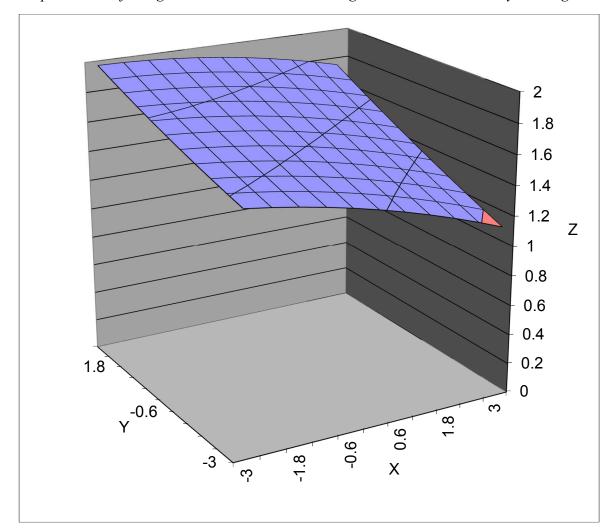


Figure 21:



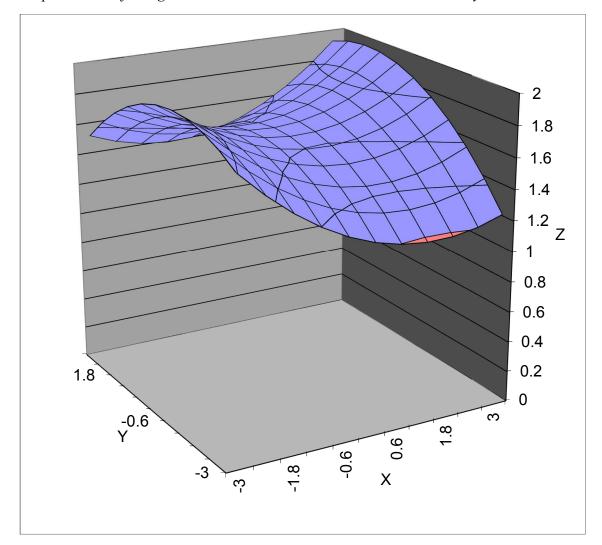
Response Plot of Congruence Between State Realistic Interests and Daily Realistic Activities Predicting Daily Negative Affect.

Figure 22:



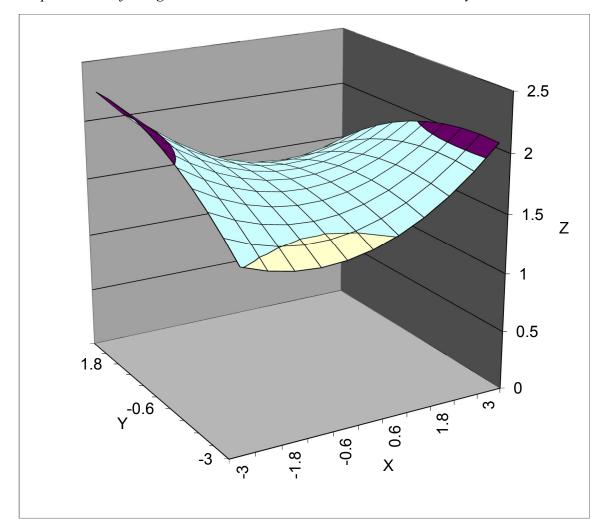
Response Plot of Congruence Between State Investigative Interests and Daily Investigative Activities Predicting Daily Negative Affect.

Figure 23:



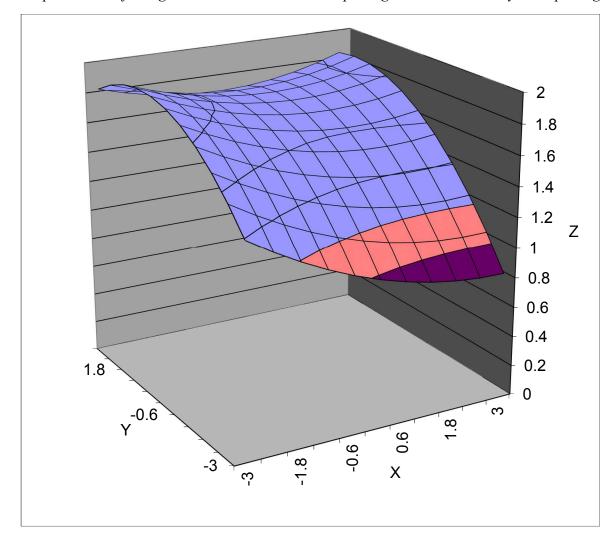
Response Plot of Congruence Between State Artistic Interests and Daily Artistic Activities Predicting Daily Negative Affect.

Figure 24:



Response Plot of Congruence Between State Social Interests and Daily Social Activities Predicting Daily Negative Affect.

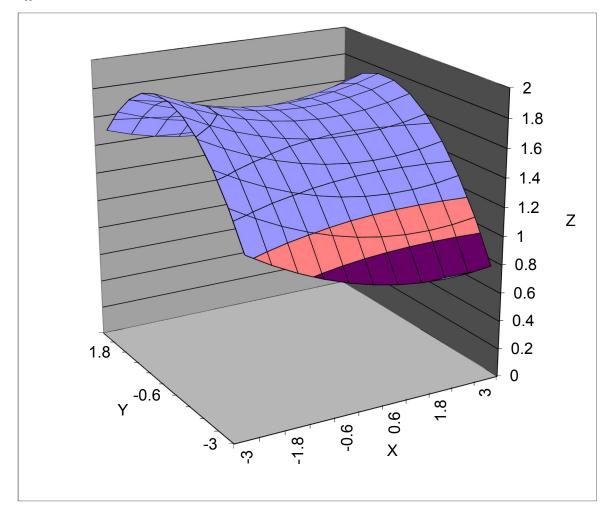
Figure 25:



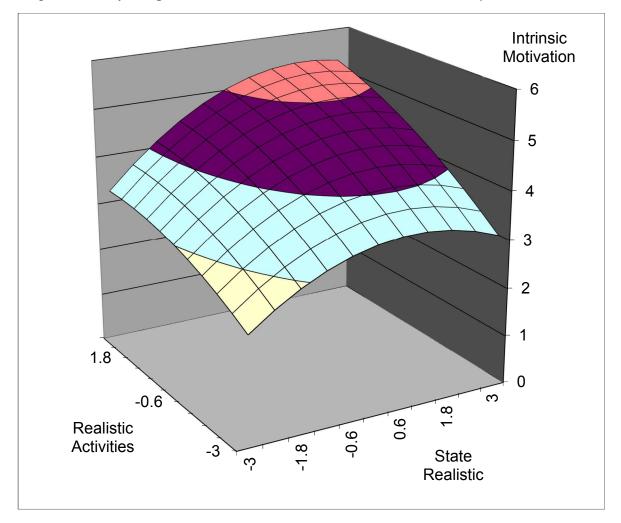
Response Plot of Congruence Between State Enterprising Interests and Daily Enterprising Activities Predicting Daily Negative Affect.

Figure 26:

Response Plot of Congruence Between State Conventional Interests and Daily Conventional Activities Predicting Daily Negative Affect.



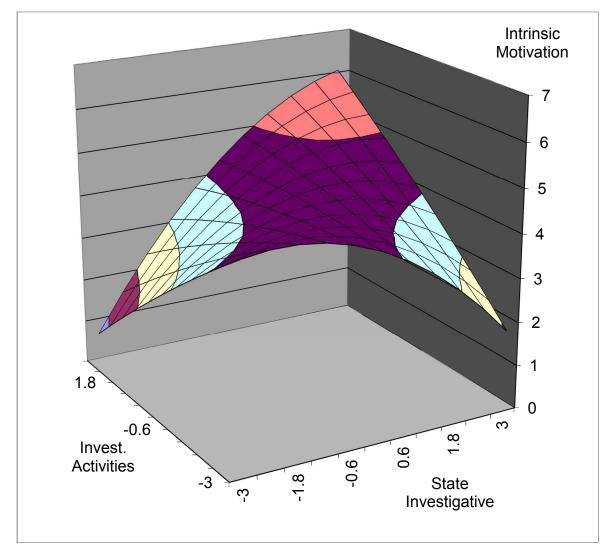
## Figure 27:



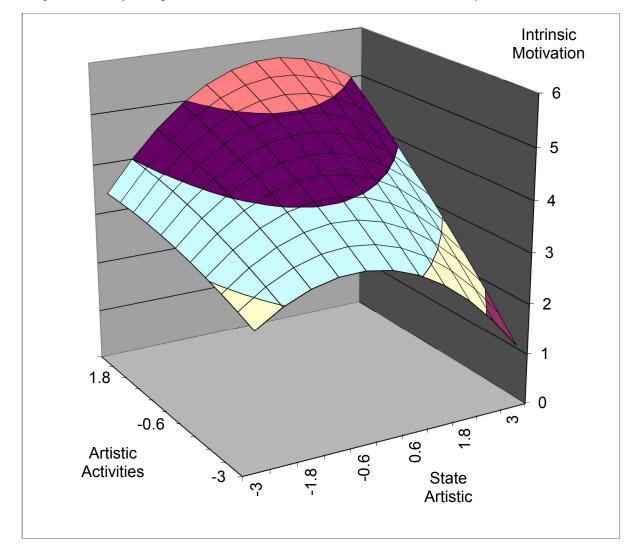
Response Plot of Congruence Between State Realistic Interests and Daily Realistic Activities Predicting Daily Intrinsic Motivation.

Figure 28:

Response Plot of Congruence Between State Investigative Interests and Daily Investigative Activities Predicting Daily Intrinsic Motivation.

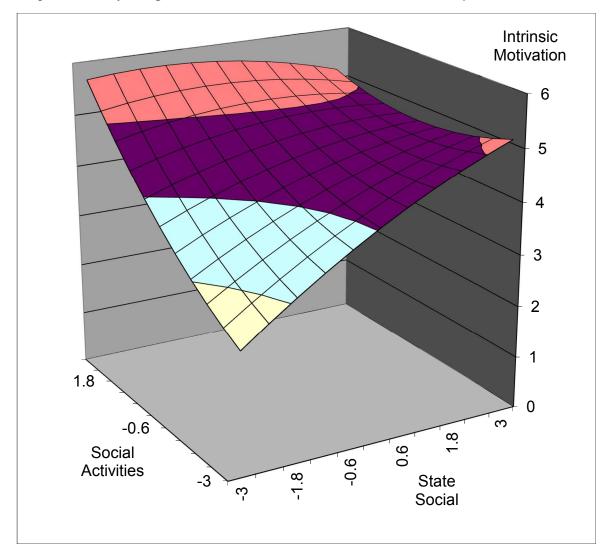


## Figure 29:



Response Plot of Congruence Between State Artistic Interests and Daily Artistic Activities Predicting Daily Intrinsic Motivation.

## Figure 30:



Response Plot of Congruence Between State Social Interests and Daily Social Activities Predicting Daily Intrinsic Motivation.

Figure 31:

Response Plot of Congruence Between State Enterprising Interests and Daily Enterprising Activities Predicting Daily Intrinsic Motivation.

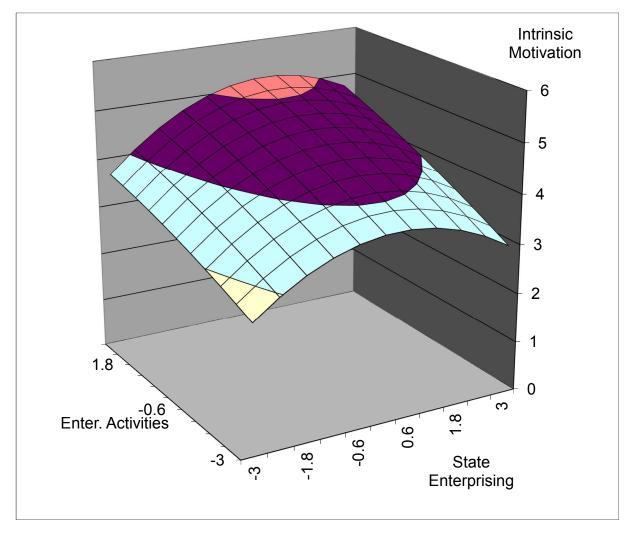
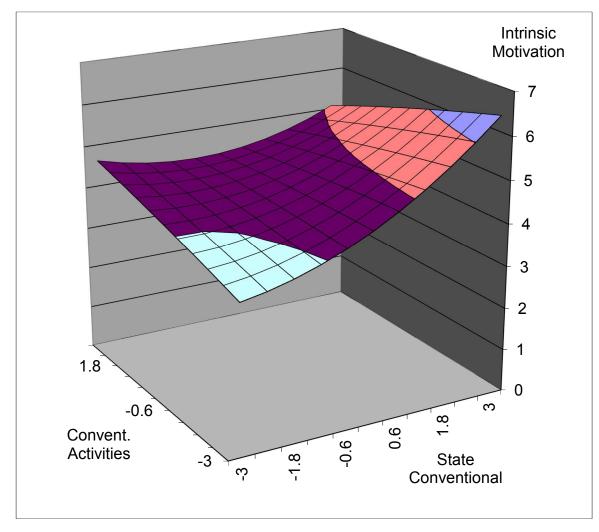
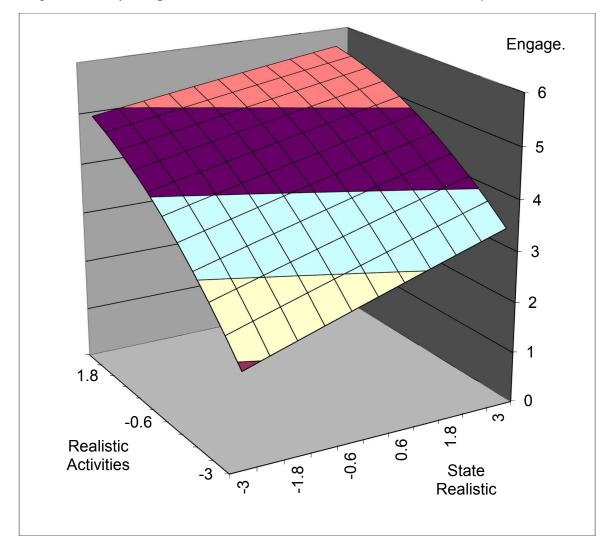


Figure 32:

Response Plot of Congruence Between State Conventional Interests and Daily Conventional Activities Predicting Daily Intrinsic Motivation.

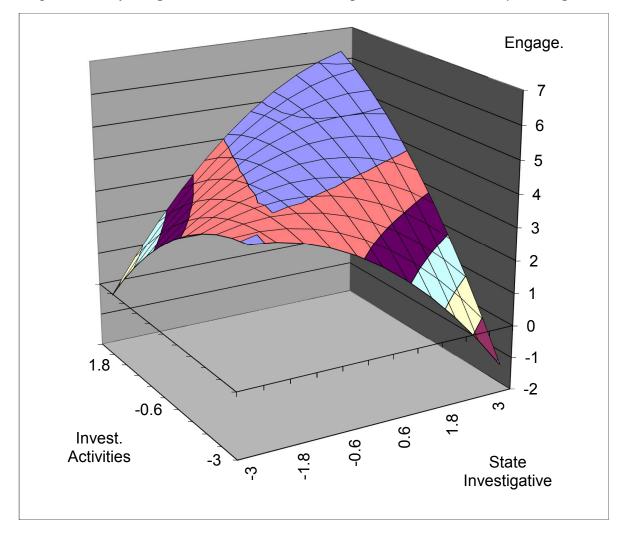


# Figure 33:



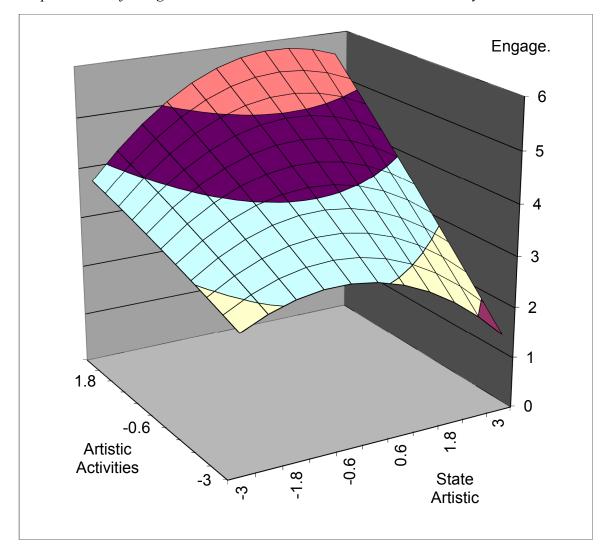
Response Plot of Congruence Between State Realistic Interests and Daily Realistic Activities Predicting Daily Engagement.

## Figure 34:



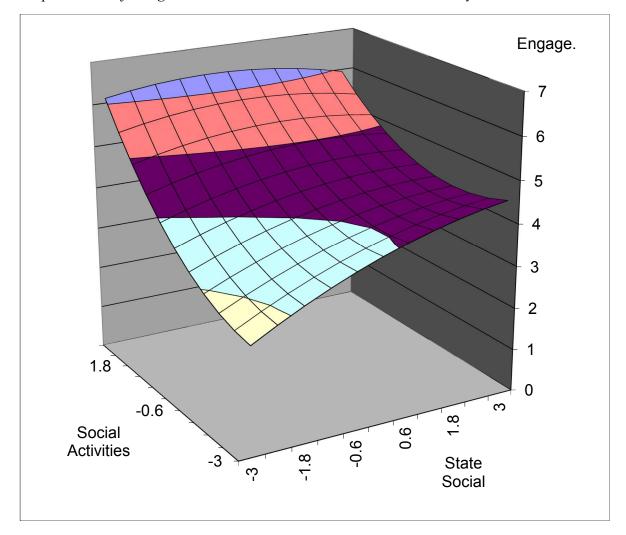
Response Plot of Congruence Between State Investigative Interests and Daily Investigative Activities Predicting Daily Engagement.

# Figure 35:



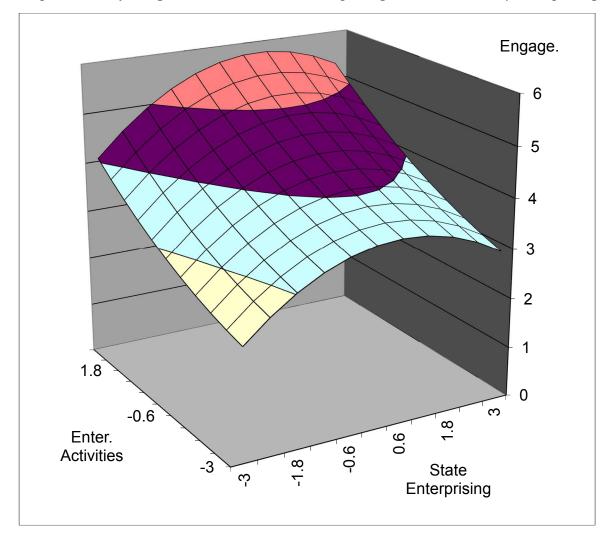
Response Plot of Congruence Between State Artistic Interests and Daily Artistic Activities Predicting Daily Engagement.

Figure 36:



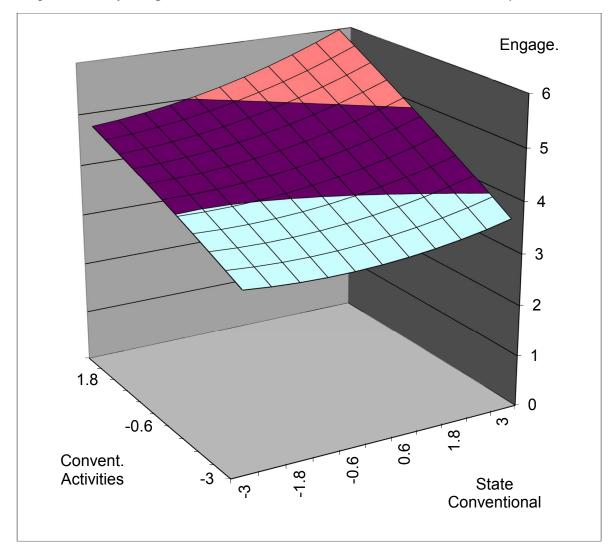
Response Plot of Congruence Between State Social Interests and Daily Social Activities Predicting Daily Engagement.

## Figure 37:



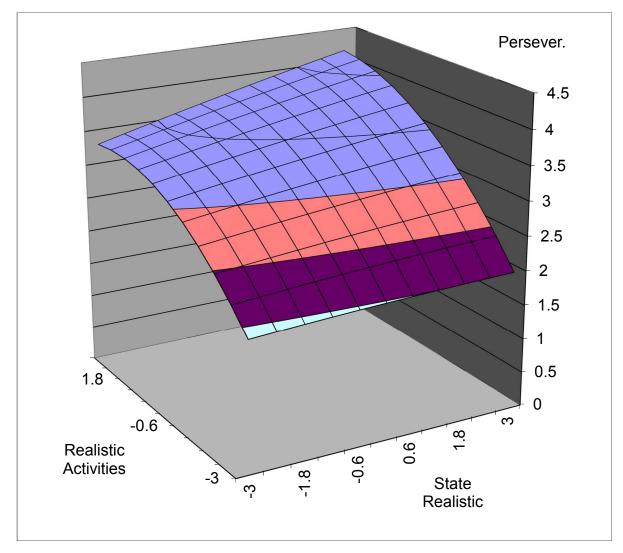
Response Plot of Congruence Between State Enterprising Interests and Daily Enterprising Activities Predicting Daily Engagement.

# Figure 38:



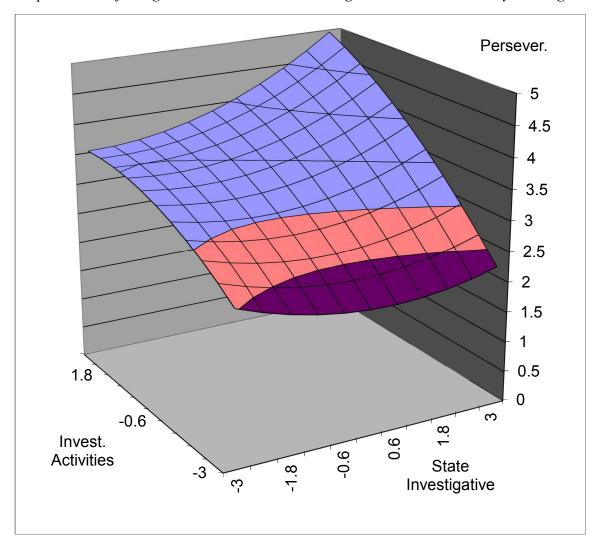
Response Plot of Congruence Between State Conventional Interests and Daily Conventional Activities Predicting Daily Engagement.

Figure 39:



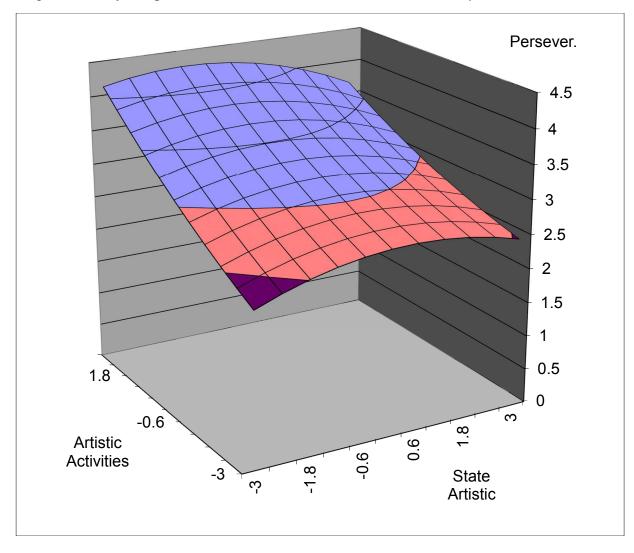
Response Plot of Congruence Between State Realistic Interests and Daily Realistic Activities Predicting Daily Perseverance.

Figure 40:



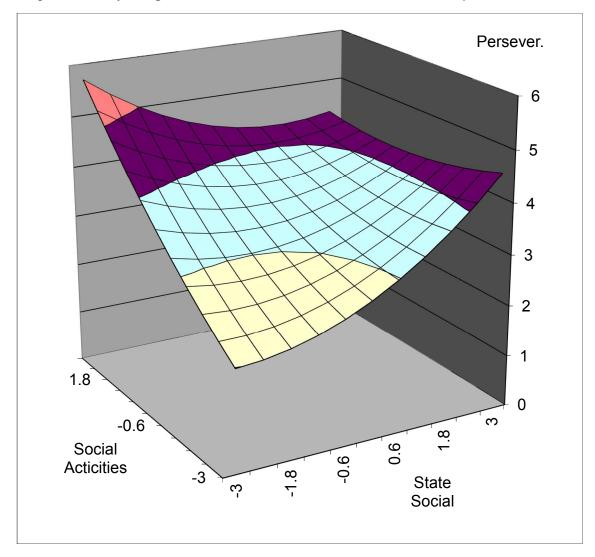
Response Plot of Congruence Between State Investigative Interests and Daily Investigative Activities Predicting Daily Perseverance.

# Figure 41:



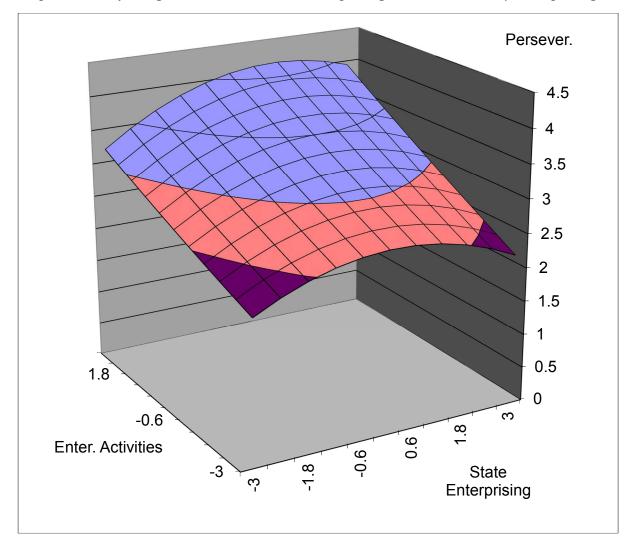
Response Plot of Congruence Between State Artistic Interests and Daily Artistic Activities Predicting Daily Perseverance.

Figure 42:



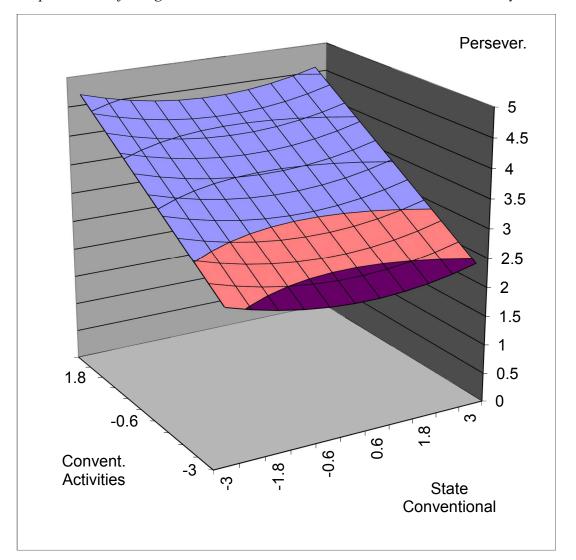
Response Plot of Congruence Between State Social Interests and Daily Social Activities Predicting Daily Perseverance.

# Figure 43:



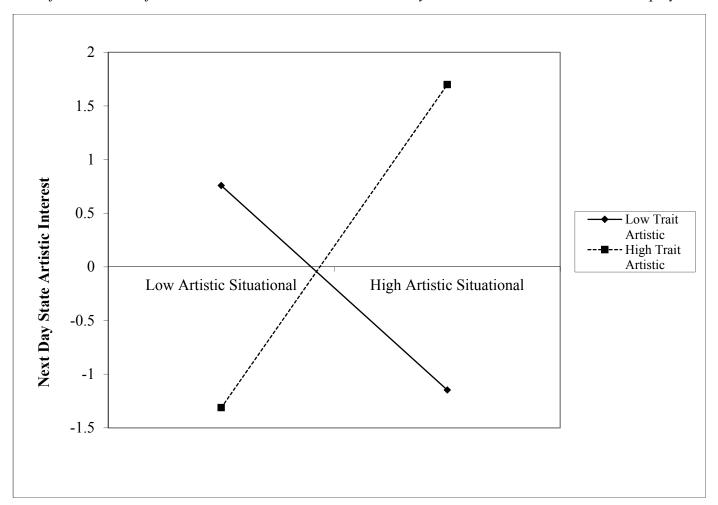
Response Plot of Congruence Between State Enterprising Interests and Daily Enterprising Activities Predicting Daily Perseverance.

Figure 44:



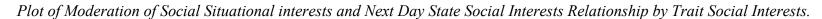
Response Plot of Congruence Between State Conventional Interests and Daily Conventional Activities Predicting Daily Perseverance.

Figure 45:



Plot of Moderation of Artistic Situational interests and Next Day State Artistic Interests Relationship by Trait Artistic Interests.

Figure 46:



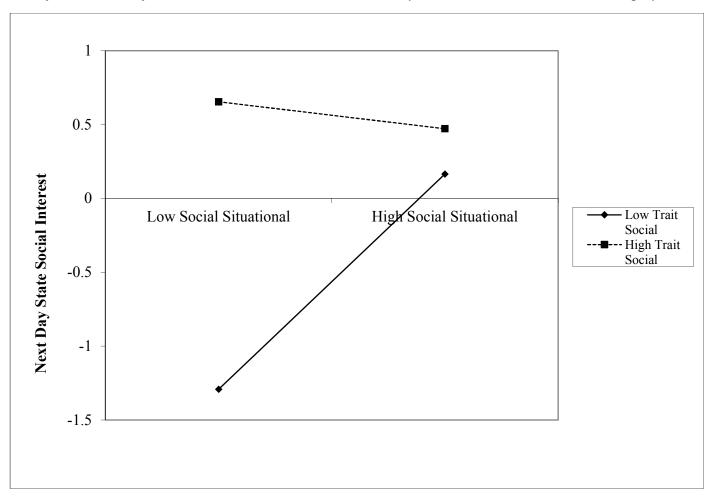


Figure 47:

Plot of Moderation of State Investigative interests and Same Day Investigative Situational Interests Relationship by Trait Investigative Interests.

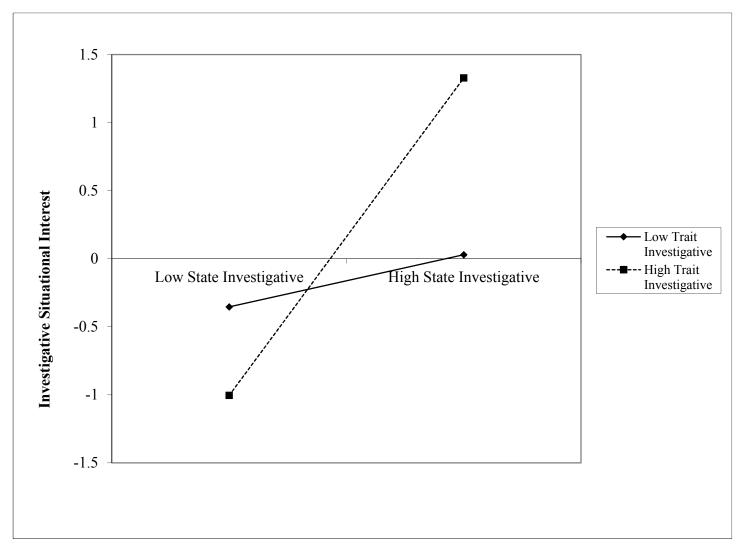
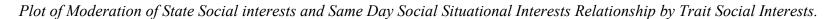


Figure 48:



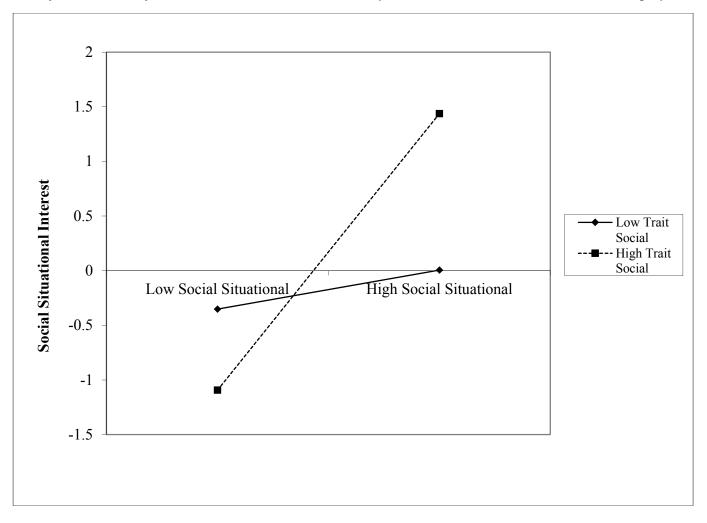


Figure 49:

Response Plot of Congruence Between State Realistic Interests (T) and Daily Realistic Activities (T) Predicting Next Day State Realistic Interests (T+1).

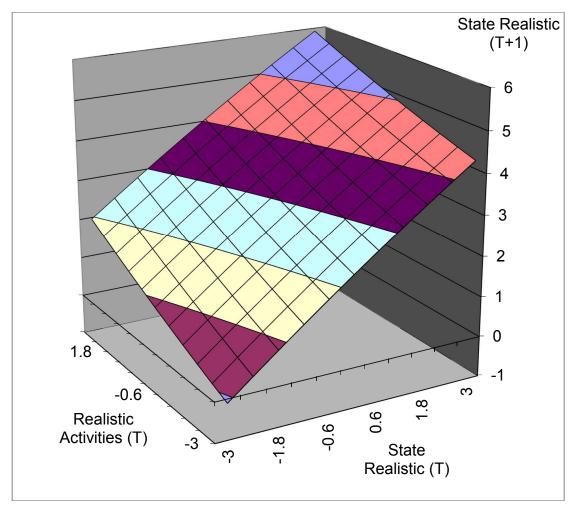
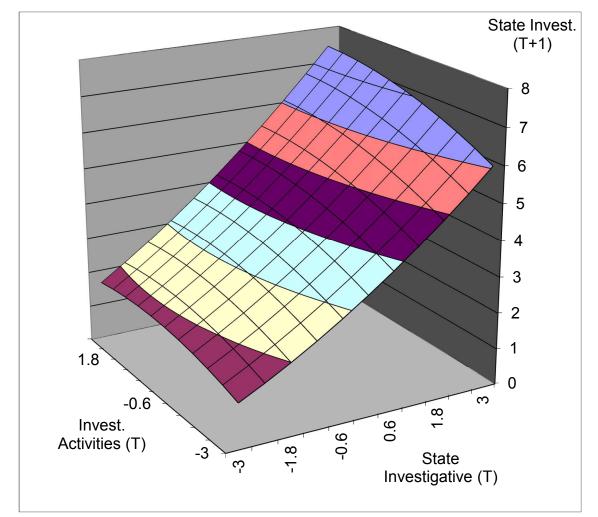
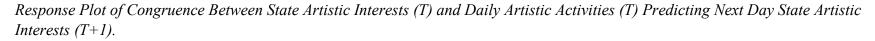


Figure 50:



*Response Plot of Congruence Between State Investigative Interests (T) and Daily Investigative Activities (T) Predicting Next Day State Investigative Interests (T+1).* 

Figure 51:



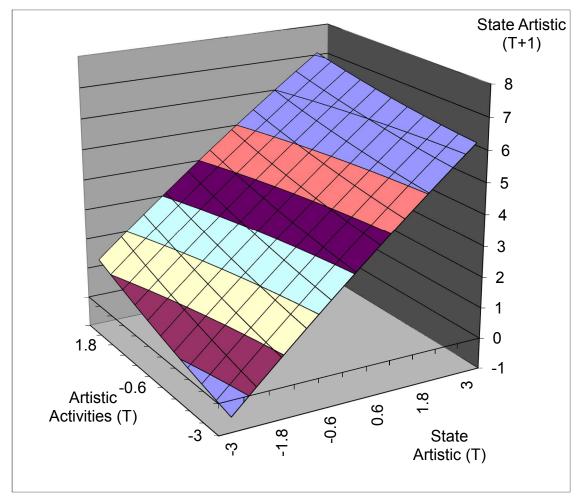


Figure 52:

Response Plot of Congruence Between State Social Interests (T) and Daily Social Activities (T) Predicting Next Day State Social Interests (T+1).

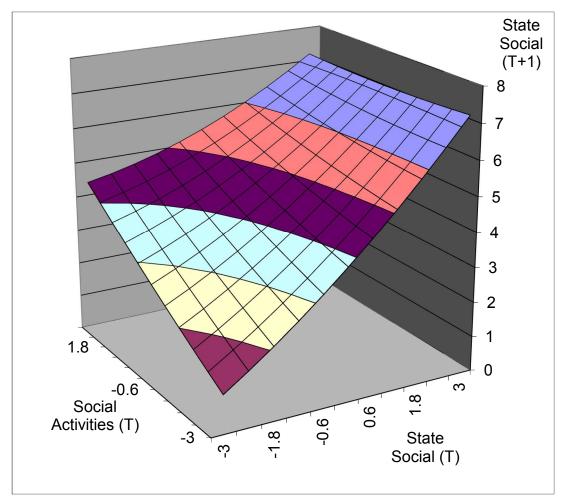


Figure 53:

*Response Plot of Congruence Between State Enterprising Interests (T) and Daily Enterprising Activities (T) Predicting Next Day State Enterprising Interests (T+1).* 

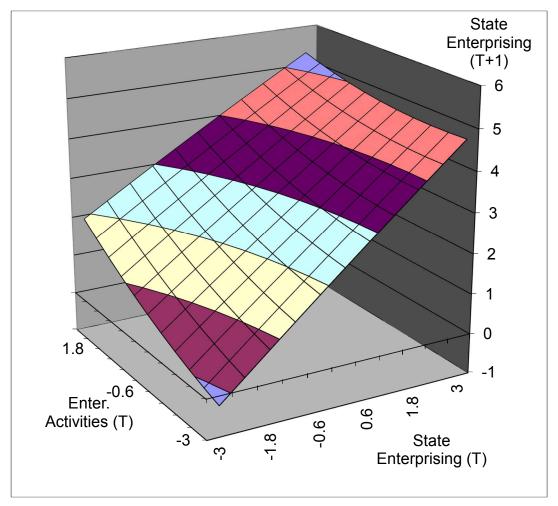
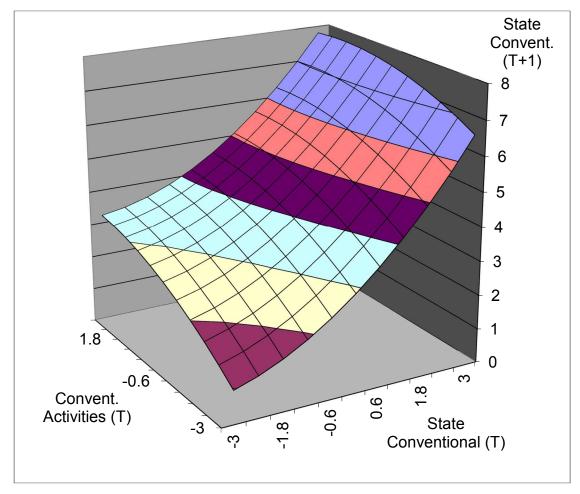


Figure 54:

Response Plot of Congruence Between State Conventional Interests (T) and Daily Conventional Activities (T) Predicting Next Day State Conventional Interests (T+1).



#### **APPENDIX B – DSIM Item Pool**

#### Developmental Item Pool for the Daily Short Interest Measure (DSIM)

People may prefer to engage in different activities. Please indicate how much you would prefer to do the following activities <u>today.</u>

"Today, I would prefer to do activities that involve..."

Realistic

- 1. "Hands-on" tasks
- 2. Being outdoors
- 3. Using tools
- 4. Fixing
- 5. Building
- 6. Physical activity
- 7. Technical activities
- 8. Working with gadgets
- 9. Straight forward problems
- 10. Practical tasks

Investigative

- 11. Research
- 12. Mathematics
- 13. Science
- 14. Exploration
- 15. Analytic thinking
- 16. Abstract ideas
- 17. Intellectual tasks
- 18. Individually focused tasks
- 19. Academics
- 20. New ideas

Artistic

21. Creativity

- 22. Artistic expression
- 23. Innovation
- 24. Little structure
- 25. Imagination
- 26. Art
- 27. Creating
- 28. Creative writing
- 29. Music
- 30. Design

<u>Social</u>

- 31. Teaching
- 32. Helping others
- 33. Caring for others
- 34. Working with others
- 35. Guiding others
- 36. Socializing
- 37. Volunteering
- 38. Communicating with others
- 39. Providing services to others
- 40. Close relationships

Enterprising

- 41. Leadership
- 42. Persuading others
- 43. Selling
- 44. Strategic thinking
- 45. Negotiation
- 46. Achievement
- 47. Risk
- 48. Managing others
- 49. Making decisions

50. Managing projects

Conventional

- 51. Routine
- 52. Organization
- 53. Structure
- 54. Systematic work
- 55. Detail focused tasks
- 56. Clear rules
- 57. Business
- 58. Analyzing data
- 59. Organizing information
- 60. Repeated tasks

# **APPENDIX C - Study 1 Consent Form**

#### **Research Participant Information and Consent Form**

You are being asked to take part in a research study. Researchers are required to provide research participants with a consent form to inform them of the research study, convey that participation is voluntary, explain the risks and benefits of participation in the study, and empower participants to make an informed decision to participate or not in the study.

Study Title: Measuring Interests and Interest Variability

This study has been approved by Michigan State University's Institutional Review Board (STUDY00003564)

# **1. PURPOSE OF RESEARCH**

The purpose of this survey is to develop a measure of interests, and compare this measure to related psychological constructs and a previously established measure from the psychological literature. A secondary aim of the present study is to pilot test additional measures and collect calibration data for a future study.

# 2. WHAT YOU WILL DO

If you choose to participate in this study, you will be asked a series of questions regarding the type of activities you prefer, your behavioral tendencies, thoughts on interests in general, and thoughts on your own interests, along with basic demographic information. Participation in this study is expected to take approximately 25 minutes.

# **3. POTENTIAL BENEFITS**

You may not benefit personally from being in this study. However, we hope that this research will assist in the development of a measure of interests that can be used in future research, as well as help advance our understanding of interests broadly.

# **4. POTENTIAL RISKS**

There are no foreseeable risks to participating in the present study.

# 5. PRIVACY AND CONFIDENTIALITY

Information provided in this research study will be treated as confidential. Only members of the research team will have access to your full survey responses and every effort will be made to keep your information safe. Any survey responses shared outside of the research team will be deidentified, in that any information tying responses to you will be removed before being shared.

# 6. YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

You have the right to say no to participating in this research. You have the right to stop at any time after you have started with no consequences to you. You will not lose any benefits that you would normally receive for completing the survey if you decide to stop before finishing.

# 7. COSTS AND COMPENSATION FOR BEING IN THE STUDY

Participants who consent to take part in this survey will be awarded SONA credits through https://msu-psychology.sona-systems.com. In the SONA system, 1 hour of research participation is worth 1 SONA credit and this credit is pro-rated in 15-minute increments. It is up to individual course instructors to determine how many points this converts to in their classes (this should be specified in the syllabus for each course).

The duration of this online survey is approximately <u>25 minutes</u>. Hence, participants who complete this survey will receive <u>.50 SONA credits</u>.

Please do not complete this survey if you did not register for it on SONA. Some studies have prerequisites. If you did not see this study advertised in your SONA account (e.g., if a friend forwarded you the link), you should not complete this study. <u>In order to receive credit for participation you MUST be registered for this study.</u>

Participation in this online survey is voluntary. You may withdraw at any time without penalty. This means that no SONA credits will be deducted from your account, nor will withdrawal have any effect on your relationship with any of your instructors. <u>However, to receive credit for participation you must click through the entire survey.</u>

# 8. CONTACT INFORMATION

If you have concerns or questions about this study or to report an injury, please contact Jacob Bradburn, Department of Psychology, Michigan State University, East Lansing, MI 48824, e-mail: bradbu17@msu.edu.

OR

Ann Marie Ryan, Ph.D., Department of Psychology, Michigan State University, East Lansing, MI 48824, phone: (517) 353-8855, e-mail: ryanan@msu.edu

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

# **APPENDIX D – Study 1 Debriefing Form**

#### **Debriefing Form**

Thank you for participating in our study. This form is designed to provide you with information about the purpose and importance of this study.

The purpose of this study was to develop a measure that can accurately gauge an individual's interests day-to-day. By interests, we are referring to an individual's preferences for different types of work or activities. If we are interested in studying constructs such as interests, personality, and attitudes that cannot be readily observed, we must develop measures that are able to assess these characteristics. Creating measures of psychological constructs that are accurate and reliable is critical for psychological research.

To learn more about interests, please see these articles:

Rounds, J., & Su, R. (2014). The Nature and Power of Interests. *Current Directions in Psychological Science*, 23(2), 98-103. DOI: 10.1177/0963721414522812

Holland, J. L. (1959). A Theory of Vocational Choice. *Journal of Counseling Psychology*, *6*(1), 35-45. DOI: 10.1037/h0040767

Armstrong, P. I., Allison, W., & Rounds, J. (2008). Development and initial validation of brief public domain RIASEC marker scales. *Journal of Vocational Behavior*, *73*(2), 287-299. DOI: 10.1016/j.jvb.2008.06.003

If you are interested in measuring your own interests and what occupations might fit these interests, consider taking the U.S. Department of Labor's <u>Interest Profiler</u> assessment.

Given the nature of the questions within this survey, we anticipate that there are and will be no risks involved for any of our participants. However, if you did recall an event that negatively impacted you, please contact the appropriate number below:

MSU Human Research Protection Program (517-355-2180) Office of Institutional Equity (517-353-3922) National suicide hotline (1-800-273-8255) Emergency number (911)

If you have questions or concerns regarding this study, please do not hesitate to contact the investigators. Additionally, if you would like more information about the study or have further questions about it, please feel free to contact:

Jacob Bradburn, Department of Psychology, Michigan State University, East Lansing, MI 48824, e-mail: bradbu17@msu.edu.

# OR

Ann Marie Ryan, Ph.D., Department of Psychology, Michigan State University, East Lansing, MI 48824, phone: (517) 353-8855, e-mail: ryanan@msu.edu

#### **APPENDIX E – Study 1 Measures**

# Daily Short Interest Measure Developmental Item Pool

People may prefer to engage in different activities. Please indicate how much you would prefer to do the following activities **today**.

"Today, I would prefer to do activities that involve..."

["Strongly disagree", "Disagree", "Somewhat disagree", "Neither disagree or agree", "Somewhat agree", "Agree", and "Strongly agree"]

- 1. "Hands-on" tasks
- 2. Being outdoors
- 3. Using tools
- 4. Fixing
- 5. Building
- 6. Physical activity
- 7. Technical activities
- 8. Working with gadgets
- 9. Straight forward problems
- 10. Practical tasks
- 11. Research
- 12. Mathematics
- 13. Science
- 14. Exploration
- 15. Analytic thinking
- 16. Abstract ideas
- 17. Intellectual tasks
- 18. Individually focused tasks
- 19. Academics
- 20. New ideas
- 21. Creativity
- 22. Artistic expression
- 23. Innovation

- 24. Little structure
- 25. Imagination
- 26. Art
- 27. Creating
- 28. Creative writing
- 29. Music
- 30. Design
- 31. Teaching
- 32. Helping others
- 33. Caring for others
- 34. Working with others
- 35. Guiding others
- 36. Socializing
- 37. Volunteering
- 38. Communicating with others
- 39. Providing services to others
- 40. Close relationships
- 41. Leadership
- 42. Persuading others
- 43. Selling
- 44. Strategic thinking
- 45. Negotiation
- 46. Achievement
- 47. Risk
- 48. Managing others
- 49. Making decisions
- 50. Managing projects
- 51. Routine
- 52. Organization
- 53. Structure

- 54. Systematic work
- 55. Detail focused tasks
- 56. Clear rules
- 57. Business
- 58. Analyzing data
- 59. Organizing information
- 60. Repeated tasks

### Brief Public Domain RIASEC Markers Scales (Armstrong et al., 2008)

Please indicate your preference for the following activities in general, not just for today.

In general, how much would you like to engage in the following tasks?

["Dislike very much", "Dislike", "Neither like nor dislike", "Like", "Like very much"]

- 1. Test the quality of parts before shipment
- 2. Lay brick or tile
- 3. Work on an offshore oil-drilling rig
- 4. Assemble electronic parts
- 5. Operate a grinding machine in a factory
- 6. Fix a broken faucet
- 7. Assemble products in a factory
- 8. Install flooring in houses
- 9. Study the structure of the human body
- 10. Study animal behavior
- 11. Do research on plants or animals
- 12. Develop a new medical treatment or procedure
- 13. Conduct biological research
- 14. Study whales and other types of marine life
- 15. Work in a biology lab
- 16. Make a map of the bottom of an ocean
- 17. Conduct a musical choir
- 18. Direct a play
- 19. Design artwork for magazines
- 20. Write a song
- 21. Write books or plays
- 22. Play a musical instrument
- 23. Perform stunts for a movie or television show
- 24. Design sets for plays
- 25. Give career guidance to people
- 26. Do volunteer work at a non-profit organization
- 27. Help people who have problems with drugs or alcohol

- 28. Teach an individual an exercise routine
- 29. Help people with family-related problems
- 30. Supervise the activities of children at a camp
- 31. Teach children how to read
- 32. Help elderly people with their daily activities
- 33. Sell restaurant franchises to individuals
- 34. Sell merchandise at a department store
- 35. Manage the operations of a hotel
- 36. Operate a beauty salon or barber shop
- 37. Manage a department within a large company
- 38. Manage a clothing store
- 39. Sell houses
- 40. Run a toy store
- 41. Generate the monthly payroll checks for an office
- 42. Inventory supplies using a hand-held computer
- 43. Use a computer program to generate customer bills
- 44. Maintain employee records
- 45. Compute and record statistical and other numerical data
- 46. Operate a calculator
- 47. Handle customers' bank transactions
- 48. Keep shipping and receiving records

#### Big Five Inventory-2 (Soto & John, 2017a)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please indicate the extent to which you agree or disagree that each statement applies to you.

["Disagree strongly", "Disagree a little", "Neutral; no opinion", "Agree a little", "Agree Strongly"]

- 1. Is outgoing, sociable.
- 2. Is compassionate, has a soft heart.
- 3. Tends to be disorganized.
- 4. Is relaxed, handles stress well.
- 5. Has few artistic interests.
- 6. Has an assertive personality.
- 7. Is respectful, treats others with respect.
- 8. Tends to be lazy.
- 9. Stays optimistic after experiencing a setback.
- 10. Is curious about many different things.

- 11. Rarely feels excited or eager.
- 12. Tends to find fault with others.
- 13. Is dependable, steady.
- 14. Is moody, has up and down mood swings.
- 15. Is inventive, finds clever ways to do things.
- 16. Tends to be quiet.
- 17. Feels little sympathy for others.
- 18. Is systematic, likes to keep things in order.
- 19. Can be tense.
- 20. Is fascinated by art, music, or literature.
- 21. Is dominant, acts as a leader.
- 22. Starts arguments with others.
- 23. Has difficulty getting started on tasks.
- 24. Feels secure, comfortable with self.
- 25. Avoids intellectual, philosophical discussions.
- 26. Is less active than other people.
- 27. Has a forgiving nature.
- 28. Can be somewhat careless.
- 29. Is emotionally stable, not easily upset.
- 30. Has little creativity.
- 31. Is sometimes shy, introverted.
- 32. Is helpful and unselfish with others.
- 33. Keeps things neat and tidy.
- 34. Worries a lot.
- 35. Values art and beauty.
- 36. Finds it hard to influence people.
- 37. Is sometimes rude to others.
- 38. Is efficient, gets things done.
- 39. Often feels sad.
- 40. Is complex, a deep thinker.

41. Is full of energy.

- 42. Is suspicious of others' intentions.
- 43. Is reliable, can always be counted on.
- 44. Keeps their emotions under control.
- 45. Has difficulty imagining things.
- 46. Is talkative.
- 47. Can be cold and uncaring.
- 48. Leaves a mess, doesn't clean up.
- 49. Rarely feels anxious or afraid.
- 50. Thinks poetry and plays are boring.
- 51. Prefers to have others take charge.
- 52. Is polite, courteous to others.
- 53. Is persistent, works until the task is finished.
- 54. Tends to feel depressed, blue.
- 55. Has little interest in abstract ideas.
- 56. Shows a lot of enthusiasm.
- 57. Assumes the best about people.
- 58. Sometimes behaves irresponsibly.
- 59. Is temperamental, gets emotional easily.
- 60. Is original, comes up with new ideas.

#### Self-Assessed Variance in State Interests

To what extent do you agree with the following statements:

["Strongly disagree", "Disagree", "Somewhat disagree", "Neither agree or disagree", "Somewhat agree", "Agree", "Strongly agree"]

- 1. The activities I'm interested in change day to day.
- 2. From day to day I enjoy doing different activities.
- 3. I generally prefer to do the same activities every day. (Reverse coded)

#### **Importance of Interests**

To what extent do you agree with the following statements:

["Strongly disagree", "disagree", "Somewhat disagree", "Neither agree or disagree", "Somewhat agree", "Agree", "Strongly agree"]

- 1. Being interested in the activities I am involved in is important to me.
- 2. I must be interested in something for me to do it.
- 3. I don't take part in activities that don't interest me.

#### **Experience Sampling Method Calibrating Questions**

On a typical day, approximately what time do you wake up in the morning? [Drop down menu from 4am to 12pm, in half hour increments]

On a typical day, approximately what time do you first check email? [Drop down menu from 5am to 1pm, in half hour increments]

On a typical day, approximately what time do you go to bed at night? [Drop down menu from 9pm to 3am, in half hour increments]

On a typical day, approximately what time do you check email for the last time? ? [Drop down menu from 4pm to 1am, in half hour increments]

#### Lay Theories of Interest Change

Do you think your preferences for different types of activities change day to day? If so, what do you think may drive this change? If not, why do you think they might not change? Please write a few sentences or more regarding your thoughts.

[Open response box for text answer]

#### Demographics

What is your age? [Numeric response]

What is your gender identity? (Male/Female/"I identify as..." (text box response) /Prefer not to specify)

What is your race/ethnicity? (Black or African American/Hispanic or Latinx/Other/White/Prefer not to specify/East Asian/ South Asian) (Can check multiple)

What is your academic major? [Drop down list with "Other" as an option and display logic for when other is selected to enable text entry]

What is your current college standing? (Freshman/Sophomore/Junior/Senior/Other).

# **APPENDIX F – Study 2 Consent Form**

#### **Research Participant Information and Consent Form**

You are being asked to take part in a research study. Researchers are required to provide research participants with a consent form to inform them of the research study, convey that participation is voluntary, explain the risks and benefits of participation in the study, and empower participants to make an informed decision to participate or not in the study. Study Title: Measuring Interests and Interest Variability

This study has been approved by Michigan State University's Institutional Review Board (STUDY00003564)

### **1. PURPOSE OF RESEARCH**

The purpose of this study is to better understand individual interests, interests day-to-day, the influence of different characteristics on the range of interests experienced, effects of interest-activity match on outcomes, and what may influence changes in interests day-to-day.

#### 2. WHAT YOU WILL DO

If you choose to participate in this study, you will be administered a variety of surveys. You will take a pre-survey reflecting your personality characteristics, interests, attitudes, and behavioral tendencies. This survey and instructions on the larger study this survey is related to is expected to take approximately 40 minutes.

You will then be asked to respond to daily morning and evening surveys over a period of seven days, for a total of 14 daily surveys. These surveys will ask you about topics such as your day-today experiences, preferences, and tendencies. Each of these surveys are expected to take approximately 10 minutes.

After this week of daily surveys, you will be asked to respond to a post-survey reflecting personality characteristics, interests, attitudes, and thoughts on interests. This survey is expected to take approximately 25 minutes.

# **3. POTENTIAL BENEFITS**

You may not benefit personally from being in this study. However, we hope that this research will assist in the advancement of our understanding of interests.

# **4. POTENTIAL RISKS**

There are no foreseeable risks to participating in the present study.

# 5. PRIVACY AND CONFIDENTIALITY

Information provided in this research study will be treated as confidential. Only members of the research team will have access to your full survey responses and every effort will be made to keep your information safe. Any survey responses shared outside of the research team will be deidentified, in that any information tying responses to you will be removed before being shared.

# 6. YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

You have the right to say no to participating in this research. This includes the right to say no to completing any surveys administered or any items asked. You have the right to stop at any time after you have started each survey with no consequences to you. You will not lose any benefits that you would normally receive for completing the survey if you decide to stop before finishing. However, to receive SONA credit for a survey you must click all the way through.

# 7. COSTS AND COMPENSATION FOR BEING IN THE STUDY

Participants who consent to take part in this survey will be awarded SONA credits through https://msu-psychology.sona-systems.com. In the SONA system, 1 hour of research participation is worth 1 SONA credit and this credit is pro-rated in 15-minute increments. It is up to individual course instructors to determine how many points this converts to in their classes (this should be specified in the syllabus for each course).

Total compensation in the form of SONA credit will depend on the degree to which you participate in the research study. A maximum total of 5.0 hours of SONA credit hours may be obtained for responding to all surveys administered. For taking part in the pre-survey and training, you will receive 1.0 hour of SONA credit. For each of the morning and evening surveys you take part in, you will receive 0.25 hours of SONA credit. A total of 14 morning and evening surveys will be administered, for a possible total of 3.5 hours of SONA credit for this portion of the study. For taking part in the post-survey, you will receive 0.5 hours of SONA credit.

Please do not complete this survey if you did not register for it on SONA. Some studies have prerequisites. If you did not see this study advertised in your SONA account (e.g., if a friend forwarded you the link), you should not complete this study. <u>In order to receive credit for participation you MUST be registered for this study.</u>

Participation in this study is voluntary. You may withdraw at any time without penalty. This means that no SONA credits will be deducted from your account, nor will withdrawal have any effect on your relationship with any of your instructors. <u>However, to receive credit for participation for each online survey you must click through the entire survey.</u>

# 8. CONTACT INFORMATION

If you have concerns or questions about this study or to report an injury, please contact Jacob Bradburn, Department of Psychology, Michigan State University, East Lansing, MI 48824, e-mail: <u>bradbu17@msu.edu</u>

# OR

Ann Marie Ryan, Ph.D., Department of Psychology, Michigan State University, East Lansing, MI 48824, phone: (517) 353-8855, e-mail: <u>ryanan@msu.edu</u>

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

#### APPENDIX G – Study 2 – Pre-Survey Measure

#### **Survey Identifiers**

First Name [Open text box for responses]

Last Name [Open text box for responses]

MSU Email Address [Open text box for responses]

Please reenter your MSU Email Address [Open text box for responses] Note that in order to be considered for the additional components of this research study, you must provide an accurate email address.

#### **Daily Short Interest Measure**

People may prefer to engage in different activities. Please indicate how much you would prefer to do the following activities <u>in general.</u>

"In general, I prefer activities that involve..."

["Strongly disagree", "Disagree", "Somewhat disagree", "Neither disagree or agree", "Somewhat agree", "Agree", and "Strongly agree"]

- 1. Using tools
- 2. Fixing
- 3. Building
- 4. Physical activity
- 5. Working with gadgets
- 6. Research
- 7. Science
- 8. Analytic thinking
- 9. Intellectual tasks
- 10. Academics
- 11. Creativity
- 12. Imagination
- 13. Art
- 14. Creating
- 15. Creative writing

- 16. Helping others
- 17. Working with others
- 18. Guiding others
- 19. Communicating with others
- 20. Providing services to others
- 21. Persuading others
- 22. Selling
- 23. Negotiation
- 24. Managing others
- 25. Managing projects
- 26. Routine
- 27. Structure
- 28. Systematic work
- 29. Organizing information
- 30. Repeated tasks

#### Brief Public Domain RIASEC Markers Scales (Armstrong et al., 2008)

Please indicate your preference for the following activity in general, not just for today.

In general, to what extent would you like to engage in the following tasks?

["Dislike very much", "Dislike", "Neither like nor dislike", "Like", "Like very much"]

- 1. Test the quality of parts before shipment
- 2. Lay brick or tile
- 3. Work on an offshore oil-drilling rig
- 4. Assemble electronic parts
- 5. Operate a grinding machine in a factory
- 6. Fix a broken faucet
- 7. Assemble products in a factory
- 8. Install flooring in houses
- 9. Study the structure of the human body
- 10. Study animal behavior
- 11. Do research on plants or animals
- 12. Develop a new medical treatment or procedure

- 13. Conduct biological research
- 14. Study whales and other types of marine life
- 15. Work in a biology lab
- 16. Make a map of the bottom of an ocean
- 17. Conduct a musical choir
- 18. Direct a play
- 19. Design artwork for magazines
- 20. Write a song
- 21. Write books or plays
- 22. Play a musical instrument
- 23. Perform stunts for a movie or television show
- 24. Design sets for plays
- 25. Give career guidance to people
- 26. Do volunteer work at a non-profit organization
- 27. Help people who have problems with drugs or alcohol
- 28. Teach an individual an exercise routine
- 29. Help people with family-related problems
- 30. Supervise the activities of children at a camp
- 31. Teach children how to read
- 32. Help elderly people with their daily activities
- 33. Sell restaurant franchises to individuals
- 34. Sell merchandise at a department store
- 35. Manage the operations of a hotel
- 36. Operate a beauty salon or barber shop
- 37. Manage a department within a large company
- 38. Manage a clothing store
- 39. Sell houses
- 40. Run a toy store
- 41. Generate the monthly payroll checks for an office
- 42. Inventory supplies using a hand-held computer
- 43. Use a computer program to generate customer bills
- 44. Maintain employee records
- 45. Compute and record statistical and other numerical data
- 46. Operate a calculator
- 47. Handle customers' bank transactions
- 48. Keep shipping and receiving records

# Big Five Inventory-2 (Soto & John, 2017)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please indicate the extent to which you agree or disagree that each statement applied to you.

["Disagree strongly", "Disagree a little", "Neutral; no opinion", "Agree a little", "Agree Strongly"]

- 1. Is outgoing, sociable.
- 2. Is compassionate, has a soft heart.
- 3. Tends to be disorganized.
- 4. Is relaxed, handles stress well.
- 5. Has few artistic interests.
- 6. Has an assertive personality.
- 7. Is respectful, treats others with respect.
- 8. Tends to be lazy.
- 9. Stays optimistic after experiencing a setback.
- 10. Is curious about many different things.
- 11. Rarely feels excited or eager.
- 12. Tends to find fault with others.
- 13. Is dependable, steady.
- 14. Is moody, has up and down mood swings.
- 15. Is inventive, finds clever ways to do things.
- 16. Tends to be quiet.
- 17. Feels little sympathy for others.
- 18. Is systematic, likes to keep things in order.
- 19. Can be tense.
- 20. Is fascinated by art, music, or literature.
- 21. Is dominant, acts as a leader.
- 22. Starts arguments with others.
- 23. Has difficulty getting started on tasks.

- 24. Feels secure, comfortable with self.
- 25. Avoids intellectual, philosophical discussions.
- 26. Is less active than other people.
- 27. Has a forgiving nature.
- 28. Can be somewhat careless.
- 29. Is emotionally stable, not easily upset.
- 30. Has little creativity.
- 31. Is sometimes shy, introverted.
- 32. Is helpful and unselfish with others.
- 33. Keeps things neat and tidy.
- 34. Worries a lot.
- 35. Values art and beauty.
- 36. Finds it hard to influence people.
- 37. Is sometimes rude to others.
- 38. Is efficient, gets things done.
- 39. Often feels sad.
- 40. Is complex, a deep thinker.
- 41. Is full of energy.
- 42. Is suspicious of others' intentions.
- 43. Is reliable, can always be counted on.
- 44. Keeps their emotions under control.
- 45. Has difficulty imagining things.
- 46. Is talkative.
- 47. Can be cold and uncaring.
- 48. Leaves a mess, doesn't clean up.
- 49. Rarely feels anxious or afraid.
- 50. Thinks poetry and plays are boring.

- 51. Prefers to have others take charge.
- 52. Is polite, courteous to others.
- 53. Is persistent, works until the task is finished.
- 54. Tends to feel depressed, blue.
- 55. Has little interest in abstract ideas.
- 56. Shows a lot of enthusiasm.
- 57. Assumes the best about people.
- 58. Sometimes behaves irresponsibly.
- 59. Is temperamental, gets emotional easily.
- 60. Is original, comes up with new ideas.

# Curiosity and Exploration Inventory – II (Kashdan et al., 2009)

Rate the statements below for how accurately they reflect the way you generally feel and behave.

["Very Slightly or Not At All", "A Little", "Moderately", "Quite a Bit", "Extremely"]

- 1. I actively seek as much information as I can in new situations.
- 2. I am the type of person who really enjoys the uncertainty of everyday life.
- 3. I am at my best when doing something that is complex or challenging.
- 4. Everywhere I go, I am out looking for new things or experiences.
- 5. I view challenging situations as an opportunity to grow and learn.
- 6. I like to do things that are a little frightening
- 7. I am always looking for experiences that challenge how I think about myself and the world.
- 8. I prefer jobs that are excitingly unpredictable.
- 9. I frequently seek out opportunities to challenge myself and grow as a person.
- 10. I am the kind of person who embraces unfamiliar people, events, and places.

# The Grit Scale (Duckworth et al., 2007)

How much do the following statements describe you?:

["Not like me at all", "Not much like me", "Somewhat like me", "Mostly like me", Very much like me"]

1. I often set a goal but later choose to pursue a different one.

- 2. New ideas and new projects sometimes distract me from previous ones.
- 3. I become interested in new pursuits every few months.
- 4. My interest change from year to year.
- 5. I have been obsessed with a certain idea or project for a short time but later lost interest.
- 6. I have difficulty maintaining my focus on projects that take more than a few months to complete.
- 7. I have achieved a goal that took years of work.
- 8. I have overcome setbacks to conquer an important challenge.
- 9. I finish whatever I begin.
- 10. Setbacks don't discourage me.
- 11. I am a hard worker.
- 12. I am diligent.

# Implicit Theory of Interests (O'Keefe et al., 2018)

How much do you agree or disagree with the following statements?

["Strongly disagree", "Disagree", "Somewhat disagree", "Somewhat agree", "Agree", "Strongly agree"]

- 1. To be honest, your core interests will remain your core interests. They won't really change.
- 2. No matter how central your interests are to you, they can change substantially.
- 3. You can be exposed to new things, but your core interests won't really change.
- 4. Even if you have very strong interests, they can change dramatically.

#### Self-Assessed Variance in State Interests

To what extent do you agree with the following statements?:

["Strongly disagree", "Disagree", "Somewhat disagree", "Neither agree or disagree", "Somewhat agree", "Agree", "Strongly agree"]

- 1. The activities I'm interested in change day to day.
- 2. From day to day I enjoy doing different activities.
- 3. I generally prefer to do the same activities every day. (Reverse coded)

# Vocational Identity Measure (Gupta et al., 2015)

The following statements describe thoughts and feelings about one's career. Please indicate how much you agree or disagree with each statement.

["Strongly disagree", "Disagree", "Neither agree nor disagree", "Agree", "Strongly agree"]

\*Specific items not included per request of inventory developers\*

### The Positive and Negative Affect Scales (Watson et al., 1987)

This scale consists of a number of words that describe different feelings and emotions. Read each item and mark the appropriate answer in the space next to that word. Indicate to what extent you **generally** feel this way, that is, how you feel **on average.** 

["Very slightly or not at all', "A little", "Moderately", "Quite a bit", "Extremely"]

- 1. Interested
- 2. Distressed
- 3. Excited
- 4. Upset
- 5. Strong
- 6. Guilty
- 7. Scared
- 8. Hostile
- 9. Enthusiastic
- 10. Proud
- 11. Irritable
- 12. Alert
- 13. Ashamed
- 14. Inspired
- 15. Nervous
- 16. Determined
- 17. Attentive
- 18. Jittery
- 19. Active
- 20. Afraid

# **Importance of Interests**

To what extent do you agree with the following statements?:

["Strongly disagree", "disagree", "Somewhat disagree", "Neither agree or disagree", "Somewhat agree", "Agree", "Strongly agree"]

- 1. I must be interested in something for me to do it.
- 2. I don't take part in activities that don't interest me.

#### **Academic Major**

What is your academic major? [Drop down list with "Other" as an option and display logic for when other is selected to enable text entry]

### Demographics

What is your age? [Numeric response]

What is your gender identity? (Male/Female/"I identify as..." [open text box response] /Prefer not to specify)

What is your race/ethnicity? (Asian/Black or African American/Hispanic or Latinx/Other/White/Prefer not to specify/East Asian/South Asian) (Can select multiple options)

What is your current college standing? (Freshman/Sophomore/Junior/Senior/Other).

Are you currently employed?

{if Yes} On average, how many hours a week do you work at your job?

#### **APPENDIX H – Study 2 – ESM Morning Survey Measures**

#### **Survey Identifiers**

First Name [Open text box for responses]

Last Name [Open text box for responses]

MSU Email Address [Open text box for responses]

#### **Daily Short Interest Measure**

People may prefer to engage in different activities. Please indicate how much you would prefer to do the following activities **today.** 

"Today, I prefer activities that involve..."

["Strongly disagree", "Disagree", "Somewhat disagree", "Neither disagree or agree", "Somewhat agree", "Agree", and "Strongly agree"]

- 1. Using tools
- 2. Fixing
- 3. Building
- 4. Physical activity
- 5. Working with gadgets
- 6. Research
- 7. Science
- 8. Analytic thinking
- 9. Intellectual tasks
- 10. Academics
- 11. Creativity
- 12. Imagination
- 13. Art
- 14. Creating
- 15. Creative writing
- 16. Helping others
- 17. Working with others

- 18. Guiding others
- 19. Communicating with others
- 20. Providing services to others
- 21. Persuading others
- 22. Selling
- 23. Negotiation
- 24. Managing others
- 25. Managing projects
- 26. Routine
- 27. Structure
- 28. Systematic work
- 29. Organizing information
- 30. Repeated tasks

#### Depletion (Lanaj et al., 2014)

Indicate to what extent you feel this way currently

["Very slightly or not at all', "A little", "Moderately", "Quite a lot", "Very much"]

- 1. I feel drained.
- 2. My mind feels unfocused.
- 3. My mental energy is running low.
- 4. I feel like my willpower is gone.
- 5. It would take a lot of effort for me to concentrate on something.

#### Sleep Quality (Buysse et al., 1989)

1. Last night, how would you rate your sleep quality overall? ["Very bad", "Fairly bad", "Fairly good", "Very good"]

#### Sleep Quality (Buysse et al., 1989)

 How many hours of actual sleep did you get last night? [Drop down box with "Less than 1 hour", 1 hour to 9.5 hours in half hour intervals, "10 or more hours"]

## Modified Positive and Negative Affect Scales (Watson et al., 1987)

This scale consists of a number of words that describe different feelings and emotions. Read each item and mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way today.

["Very slightly or not at all', "A little", "Moderately", "Quite a bit", "Extremely"]

- 1. Interested
- 2. Distressed
- 3. Excited
- 4. Upset
- 5. Scared
- 6. Enthusiastic
- 7. Inspired
- 8. Determined
- 9. Jittery
- 10. Afraid

#### **APPENDIX I – Study 2 – ESM Evening Survey Measures**

#### **Survey Identifiers**

First Name [Open text box for responses]

Last Name [Open text box for responses]

MSU Email Address [Open text box for responses]

#### Modified Positive and Negative Affect Scales (Watson et al., 1987)

This scale consists of a number of words that describe different feelings and emotions. Read each item and mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way today.

["Very slightly or not at all', "A little", "Moderately", "Quite a bit", "Extremely"]

- 11. Interested
- 12. Distressed
- 13. Excited
- 14. Upset
- 15. Scared
- 16. Enthusiastic
- 17. Inspired
- 18. Determined
- 19. Jittery
- 20. Afraid

#### **Daily Activities**

Today, I did activities involving...

["Never", "Rarely", "Rather infrequently", "Occasionally", "Sometimes", "Often", "Constantly"]

- 1. Using tools
- 2. Fixing
- 3. Building
- 4. Physical activity
- 5. Working with gadgets
- 6. Research

- 7. Science
- 8. Analytic thinking
- 9. Intellectual tasks
- 10. Academics
- 11. Creativity
- 12. Imagination
- 13. Art
- 14. Creating
- 15. Creative writing
- 16. Helping others
- 17. Working with others
- 18. Guiding others
- 19. Communicating with others
- 20. Providing services to others
- 21. Persuading others
- 22. Selling
- 23. Negotiation
- 24. Managing others
- 25. Managing projects
- 26. Routine
- 27. Structure
- 28. Systematic work
- 29. Organizing information
- 30. Repeated tasks

# State Perseverance (Modified Perseverance subscale of the Grit Scale; Duckworth et al., 2007)

How much do the following statements describe you?

["Not like me at all", "Not much like me", "Somewhat like me", "Mostly like me", Very much like me"]

- 1. Today, I overcame setbacks to conquer an important challenge.
- 2. Today, I finished whatever I began.
- 3. Today, setbacks didn't discourage me.
- 4. Today, I was a hard worker.
- 5. Today, I was diligent.

### **Situational Interests**

Today, did you engage in activities that involved <u>using tools, fixing, building, physical</u> <u>activity, or working with gadgets?</u>

Yes/No

\*\*Next question displayed if answer to previous is "Yes"\*\*

Please reflect on the activities you did today that involved<u>using tools, fixing, building,</u> physical activity, or working with gadgets. While engaging in these activities, to what extent did you feel...

["Not at all", "Rarely", "Not often", "Occasionally", "Sometimes", "Often", "Very Often"]

- 1. A sense of engagement with these activities
- 2. Like these activities were valuable.
- 3. Like you identified with these activities

Today, did you engage in activities that involved <u>research, science, analytic thinking,</u> <u>intellectual tasks, or academic?</u>

Yes/No

\*\*Next question displayed if answer to previous is "Yes"\*\*

Please reflect on the activities you did today that involved <u>research, science, analytic</u> <u>thinking, intellectual tasks, or academic</u>. While engaging in these activities, to what extent did you feel...

["Not at all", "Rarely", "Not often", "Occasionally", "Sometimes", "Often", "Very Often"]

- 1. A sense of engagement with these activities
- 2. Like these activities were valuable.
- 3. Like you identified with these activities

## Today, did you engage in activities that involved <u>creativity, imagination, art, creating,</u> <u>and creative writing?</u>

Yes/No

\*\*Next question displayed if answer to previous is "Yes"\*\*

Please reflect on the activities you did today that involved <u>creativity, imagination, art,</u> <u>creating, and creative writing</u>. While engaging in these activities, to what extent did you feel...

["Not at all", "Rarely", "Not often", "Occasionally", "Sometimes", "Often", "Very Often"]

- 1. A sense of engagement with these activities
- 2. Like these activities were valuable.
- 3. Like you identified with these activities

## Today, did you engage in activities that involved <u>helping others, working with others,</u> guiding others, communicating with others, or providing services to others?

Yes/No

\*\*Next question displayed if answer to previous is "Yes"\*\*

Please reflect on the activities you did today that involved <u>helping others, working with</u> <u>others, guiding others, communicating with others, or providing services to others</u>. While engaging in these activities, to what extent did you feel...

["Not at all", "Rarely", "Not often", "Occasionally", "Sometimes", "Often", "Very Often"]

- 1. A sense of engagement with these activities
- 2. Like these activities were valuable.
- 3. Like you identified with these activities

Today, did you engage in activities that involved <u>persuading others, selling,</u> <u>negotiation, managing others, or managing projects?</u>

Yes/No

\*\*Next question displayed if answer to previous is "Yes"\*\*

Please reflect on the activities you did today that involved **<u>persuading others, selling,</u> <u>negotiation, managing others, or managing projects</u>. While engaging in these activities, to what extent did you feel...** 

["Not at all", "Rarely", "Not often", "Occasionally", "Sometimes", "Often", "Very Often"]

- 1. A sense of engagement with these activities
- 2. Like these activities were valuable.
- 3. Like you identified with these activities

Today, did you engage in activities that involved <u>routine, structure, systematic work,</u> <u>organizing information, or repeated tasks?</u>

Yes/No

\*\*Next question displayed if answer to previous is "Yes"\*\*

Please reflect on the activities you did today that involved <u>routine, structure, systematic</u> <u>work, organizing information, or repeated tasks</u>. While engaging in these activities, to what extent did you feel...

["Not at all", "Rarely", "Not often", "Occasionally", "Sometimes", "Often", "Very Often"]

- 1. A sense of engagement with these activities
- 2. Like these activities were valuable.
- 3. Like you identified with these activities

## State Engagement (Modified Ultrech Work Engagement Scale; Breevart et al., 2012)

How much do you agree or disagree with the following statements?

["Strongly disagree", "Disagree", "Somewhat disagree", "Neither agree or disagree", "Somewhat agree", "Agree", "Strongly agree"]

- 1. Today, I felt bursting with energy.
- 2. Today, I felt strong and vigorous at my activities.
- 3. Today, I was enthusiastic about my activities.
- 4. Today, my activities inspired me.
- 5. Today, I felt happy when I was working intensely at my activities.
- 6. Today, I was immersed in my activities.

# Intrinsic Motivation (Modified Situational Motivation Scale – Intrinsic Motivation subscale; Guay et al., 2000)

How well do the statements below describe the reasons why you engaged in the activities you did today?

["Strongly disagree", "Disagree", "Somewhat disagree", "Neither agree or disagree", "Somewhat agree", "Agree", "Strongly agree"]

- 1. Because I thought the activities were interesting.
- 2. Because I thought the activities were pleasant.
- 3. Because the activities were fun.
- 4. Because I felt good while doing the activities.

### **APPENDIX J – Study 2 – Post-Survey Measures**

#### **Survey Identifiers**

First Name [Open text box for responses]

Last Name [Open text box for responses]

MSU Email Address [Open text box for responses]

#### **Daily Short Interest Measure**

People may prefer to engage in different activities. Please indicate how much you would prefer to do the following activities **in general.** 

"In general, I prefer activities that involve..."

["Strongly disagree", "Disagree", "Somewhat disagree", "Neither disagree or agree", "Somewhat agree", "Agree", and "Strongly agree"]

- 1. Using tools
- 2. Fixing
- 3. Building
- 4. Physical activity
- 5. Working with gadgets
- 6. Research
- 7. Science
- 8. Analytic thinking
- 9. Intellectual tasks
- 10. Academics
- 11. Creativity
- 12. Imagination
- 13. Art
- 14. Creating
- 15. Creative writing
- 16. Helping others
- 17. Working with others

- 18. Guiding others
- 19. Communicating with others
- 20. Providing services to others
- 21. Persuading others
- 22. Selling
- 23. Negotiation
- 24. Managing others
- 25. Managing projects
- 26. Routine
- 27. Structure
- 28. Systematic work
- 29. Organizing information
- 30. Repeated tasks

#### Brief Public Domain RIASEC Markers Scales (Armstrong et al., 2008)

Please indicate your preference for the following activities in general, not just for today.

In general, to what extent would you like to engage in the following tasks?

["Dislike very much", "Dislike", "Neither like nor dislike", "Like", "Like very much"]

- 1. Test the quality of parts before shipment
- 2. Lay brick or tile
- 3. Work on an offshore oil-drilling rig
- 4. Assemble electronic parts
- 5. Operate a grinding machine in a factory
- 6. Fix a broken faucet
- 7. Assemble products in a factory
- 8. Install flooring in houses
- 9. Study the structure of the human body
- 10. Study animal behavior
- 11. Do research on plants or animals
- 12. Develop a new medical treatment or procedure
- 13. Conduct biological research
- 14. Study whales and other types of marine life
- 15. Work in a biology lab

- 16. Make a map of the bottom of an ocean
- 17. Conduct a musical choir
- 18. Direct a play
- 19. Design artwork for magazines
- 20. Write a song
- 21. Write books or plays
- 22. Play a musical instrument
- 23. Perform stunts for a movie or television show
- 24. Design sets for plays
- 25. Give career guidance to people
- 26. Do volunteer work at a non-profit organization
- 27. Help people who have problems with drugs or alcohol
- 28. Teach an individual an exercise routine
- 29. Help people with family-related problems
- 30. Supervise the activities of children at a camp
- 31. Teach children how to read
- 32. Help elderly people with their daily activities
- 33. Sell restaurant franchises to individuals
- 34. Sell merchandise at a department store
- 35. Manage the operations of a hotel
- 36. Operate a beauty salon or barber shop
- 37. Manage a department within a large company
- 38. Manage a clothing store
- 39. Sell houses
- 40. Run a toy store
- 41. Generate the monthly payroll checks for an office
- 42. Inventory supplies using a hand-held computer
- 43. Use a computer program to generate customer bills
- 44. Maintain employee records
- 45. Compute and record statistical and other numerical data
- 46. Operate a calculator
- 47. Handle customers' bank transactions
- 48. Keep shipping and receiving records

## Big Five Inventory-2 (Soto & John, 2017)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please indicate the extent to which you agree or disagree that each statement applies to you.

["Disagree strongly", "Disagree a little", "Neutral; no opinion", "Agree a little", "Agree Strongly"]

- 1. Is outgoing, sociable.
- 2. Is compassionate, has a soft heart.
- 3. Tends to be disorganized.
- 4. Is relaxed, handles stress well.
- 5. Has few artistic interests.
- 6. Has an assertive personality.
- 7. Is respectful, treats others with respect.
- 8. Tends to be lazy.
- 9. Stays optimistic after experiencing a setback.
- 10. Is curious about many different things.
- 11. Rarely feels excited or eager.
- 12. Tends to find fault with others.
- 13. Is dependable, steady.
- 14. Is moody, has up and down mood swings.
- 15. Is inventive, finds clever ways to do things.
- 16. Tends to be quiet.
- 17. Feels little sympathy for others.
- 18. Is systematic, likes to keep things in order.
- 19. Can be tense.
- 20. Is fascinated by art, music, or literature.
- 21. Is dominant, acts as a leader.
- 22. Starts arguments with others.
- 23. Has difficulty getting started on tasks.
- 24. Feels secure, comfortable with self.
- 25. Avoids intellectual, philosophical discussions.

- 26. Is less active than other people.
- 27. Has a forgiving nature.
- 28. Can be somewhat careless.
- 29. Is emotionally stable, not easily upset.
- 30. Has little creativity.
- 31. Is sometimes shy, introverted.
- 32. Is helpful and unselfish with others.
- 33. Keeps things neat and tidy.
- 34. Worries a lot.
- 35. Values art and beauty.
- 36. Finds it hard to influence people.
- 37. Is sometimes rude to others.
- 38. Is efficient, gets things done.
- 39. Often feels sad.
- 40. Is complex, a deep thinker.
- 41. Is full of energy.
- 42. Is suspicious of others' intentions.
- 43. Is reliable, can always be counted on.
- 44. Keeps their emotions under control.
- 45. Has difficulty imagining things.
- 46. Is talkative.
- 47. Can be cold and uncaring.
- 48. Leaves a mess, doesn't clean up.
- 49. Rarely feels anxious or afraid.
- 50. Thinks poetry and plays are boring.
- 51. Prefers to have others take charge.
- 52. Is polite, courteous to others.

- 53. Is persistent, works until the task is finished.
- 54. Tends to feel depressed, blue.
- 55. Has little interest in abstract ideas.
- 56. Shows a lot of enthusiasm.
- 57. Assumes the best about people.
- 58. Sometimes behaves irresponsibly.
- 59. Is temperamental, gets emotional easily.
- 60. Is original, comes up with new ideas.

#### Modified Positive and Negative Affect Scales (Watson et al., 1987)

This scale consists of a number of words that describe different feelings and emotions. Read each item and mark the appropriate answer in the space next to that word. Indicate to what extent you felt this way <u>last week (Monday, DATE through Sunday, DATE)</u>.

["Very slightly or not at all', "A little", "Moderately", "Quite a bit", "Extremely"]

- 1. Interested
- 2. Distressed
- 3. Excited
- 4. Upset
- 5. Scared
- 6. Enthusiastic
- 7. Inspired
- 8. Determined
- 9. Jittery
- 10. Afraid

#### Academic Satisfaction (Schmitt et al., 2008)

Please indicate how much you agree or disagree with the following statements:

- 1. All in all, I am satisfied with my education I can get in this school.
- 2. I'm satisfied with the intelligence of my teachers here.
- 3. I'm satisfied with the extent to which my education will be useful in getting future employment.
- 4. I'm happy with the amount I learn in my classes.

5. I'm satisfied with the extent to which attending this school will have a positive effect on my future career.

## Dropout Intentions (Nye, Prasad, & Rounds, 2019)

Please indicate how much you agree or disagree with the following statements:

- 1 Overall, I am happy with my decision to attend MSU.
- 2 MSU was the right choice for me.
- 3 I am considering transferring to another school.
- 4 I am considering other job options instead of continuing in school.
- 5 I am gathering lots of information about other schools I could transfer to.
- 6 I am gathering lots of information about job options as opposed to continuing in school.

## Lay Theories of Interest Change

Do you think your preferences for different types of activities change day to day? If so, what do you think may drive this change. If not, why do you think they might not change? Please write a few sentences or more regarding your thoughts.

[Open response box for text answer]

## **APPENDIX K – Study 2 Debriefing Form**

Debriefing Form

Thank you for participating in our study. This form is designed to provide you with information about the purpose and importance of this study.

The purpose of this study was to explore if individuals' interests change from day-to-day. By interests, we are referring to an individual's preferences for different types of work or activities. Most research considers interests to be relatively stable, however we were interested in exploring how interests may change over the course of a week.

In addition to determining if interests change day-to-day, the purpose of this study was also to explore what other individual characteristics may relate to this variability, if the match between individuals' daily interests and activities relates to outcomes, and what may cause interests to change, if they do, day-to-day.

A summary of the different interest types, as well as example jobs that fit well with these interests, can he found <u>here</u>. To learn more about interests, please see these articles:

Rounds, J., & Su, R. (2014). The Nature and Power of Interests. Current Directions in Psychological Science, 23(2), 98-103. DOI: 10.1177/0963721414522812

Holland, J. L. (1959). A Theory of Vocational Choice. Journal of Counseling Psychology, 6(1), 35-45. DOI: 10.1037/h0040767

Armstrong, P. I., Allison, W., & Rounds, J. (2008). Development and initial validation of brief public domain RIASEC marker scales. Journal of Vocational Behavior, 73(2), 287-299. DOI: 10.1016/j.jvb.2008.06.003

If you are interested in measuring your own interests and what occupations might fit these interests, consider taking the U.S. Department of Labor's <u>Interest Profiler assessment</u>.

Given the nature of the questions within this survey, we anticipate that there are and will be no risks involved for any of our participants. However, if you did recall an event that negatively impacted you, please contact the appropriate number below:

MSU Human Research Protection Program (517-355-2180) Office of Institutional Equity (517-353-3922) National suicide hotline (1-800-273-8255) Emergency number (911)

If you have questions or concerns regarding this study, please do not hesitate to contact the investigators. Additionally, if you would like more information about the study or have further questions about it, please feel free to contact:

Jacob Bradburn, Department of Psychology, Michigan State University, East Lansing, MI 48824, e-mail: bradbu17@msu.edu.

OR

Ann Marie Ryan, Ph.D., Department of Psychology, Michigan State University, East Lansing, MI 48824, phone: (517) 353-8855, e-mail: <u>ryanan@msu.edu</u>

REFERENCES

#### REFERENCES

- Allemand, M., Steiger, A. E., Hill, P. L. (2013). Stability of Personality Traits in Adulthood. *GreoPsych*, 26(1), 5-13.
- Allen, B. P., & Potkay, C. R. (1981). On the arbitrary distinction between states and traits. *Journal of Personality and Social Psychology*, 41(5), 916-928.
- Anderson, M. Z., Tracey, T. J. G., & Rounds, J. (1997). Examining the Invariance of Holland's Vocational Interest Model Across Gender. *Journal of Vocational Behavior*, 50(1), 349-364.
- Armstrong, P. I., Allison, W., & Rounds, J. (2008). Development and initial validation of brief public domain RIASEC marker scales. *Journal of Vocational Behavior*, 73(2), 287-299.
- Augustine, A. A., & Larsen, R. J. (2012). Is a Trait Really the Mean of States?. *Journal of Individual Differences*, *33*(3), 131-137.
- Azevedo, F. S. (2018). An inquiry into the structure of situational interests. *Science Education*, *102*(1), 108-127.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44(1), 1-26.
- Baumert, A., Schmitt, M., Perugini, M., Johnson, W., Blum, G., Borkenau, P., Giulio, c., Denissen, J. J. A., Fleeson, W., Grafton, B., Jayawickreme, E., Kurzius, E., Macleod, C., Miller, L. C., Read, S. J., Roberts, B., Robinson, M. D., Wood, D., & Wrzus, C. (2017). Integrating Personality Structure, Personality Process, and Personality Development. *European Journal of Personality*, 31, 503-528.
- Beal, D. J. (2015). ESM 2.0: State of the art and future potential of experience sampling methods in organizational research. *Annual Review of Organizational Psychology and Organizational Behavior*, 2(1), 383-407.
- Beedie, C., Terry, P., & Lane, A. (2005). Distinctions between emotion and mood. *Cognition & Emotion, 16*(6), 847-878.
- Bliese, P. (2016). *Multilevel modeling in R(2.6): A brief introduction to R, the multilevel package and the nlme package*. Retrieved from https://cran.r-project.org/doc/contrib/Bliese Multilevel.pdf.
- Breevaart, K., Bakker, A. B., Demerouti, E., & Hetland, J. (2012). The measurement of state work engagement: A multilevel factor analytic study. *European Journal of Psychological Assessment*, 28(4), 305-312.

- Brown, S. P., & Gore, P. A. (1994). An Evaluation of Interest Congruence Indices: Distribution Characteristics and Measurement Properties. *Journal of Vocational Behavior*, 45(3), 310-327.
- Casper, W. C., Edwards, B. D., Wallace, J. C., Landis, R. S., & Fife, D. A. (2019). Selecting Response Anchors with Equal Intervals for Summated Rating Scales. *Journal of Applied Psychology*, Advance online publication.
- Camp, C. C., & Chartrand, J. M. (1992). A comparison and evaluation of interest congruence indices. *Journal of Vocational Behavior*, *41*(2), 162-182.
- Cervone, D. (2005). Personality Architecture: Within-Person Structure and Processes. *Annual Review of Psychology*, *56*, 423-452.
- Chernyshenko, O. S., Stark, S., & Nye, C. D. (2019). Interests Measurement. In C. D. Nye & J. Rounds (Eds.), *Vocational Interests: Rethinking Their Roles in Understanding Workplace Behavior and Practice*. New York, NY: Routledge
- Church, A. T., Katigbak, M. S., Ching, C. M., Zhang, H., Shen, J, Arias, R. M., Rincon, B. C., Morio, H., Tanaka-Matsumi, J., Takaoka, S., Mastor, K. A., Roslan, B. C., Ibáñez-Reyes, J., Vargas-Flores, J. J., Locke, K. D., Reyes, J. A. S., Wenmei, S., Ortiz, F. A., & Alvarez, J. M. (2013). Within-individual variability in self-concepts and personality states: Applying density distribution and situation-behavior approaches across cultures. *Journal of Research in Personality*,47(6), 922-935.
- Cordery, J., & Parker, S. K. (2012). Work Design: Creating Jobs and Roles That Promote Individual Effectiveness. In S. W. K. Kozlowski (Ed.), *The Oxford Handbook of Organizational Psychology (Vol. 1)*, 247-284. New York, NY: Oxford University Press.
- Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation, 10*(1), 7.
- Curran, P. G. (2016). Methods for the detection of carelessly invalid responses in survey data. *Journal of Experimental Social Psychology*, 66(1), 4-19.
- Day, S. X., & Rounds, J. (1998). Universality of Vocational Interest Structure Among Racial and Ethnic Minorities. *American Psychologist*, 53(7), 728-736.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology, 18*(1), 1107-1116.
- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227-268.
- Deffenbacher, J. L., Oetting, E. R., Thaites, G. A., Lynch, R. S., Baker, D. A., Stark, R. S., Thacker, S., & Eiswerth-Cox, L. (1996). State-Trait Anger Theory and the Utility of the Trait Anger Scale. *Journal of Counseling Psychology*, *43*(2), 131-148.

- Di Blas, L., Grassi, M., Carnaghi, A., Ferrante, D., & Calarco, D. (2017). Within-Person and between-person variability in personality dynamics: Knowledge structure, self-efficacy, pleasure appraisals, and the Big Five. *Journal of Research in Personality*, *70*(1), 84-92.
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review* of *Psychology*, 41(1), 417-440.
- Dinno, A. (2018). Package 'pran'. Retrieved from https://cran.rproject.org/web/packages/paran/paran.pdf.
- Drzakowski, S. M., Friede, A. J., Imus, A. L., Kim, B. H., & Shivpuri, S. (2005). *Non-cognitive criteria for college student success: Satisfaction and persistence*. Report submitted to College Board. East Lansing, MI: Department of Psychology, Michigan State University.
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Social Psychology*, *92*(6), 1087-1101.
- Dunn, S. L., Olamijulo, G. B., Fuglseth, H. L., Holden, T. P., Swieringa, L. L., Sit, M. J., Rieth, N. P., & Tintle, N. L. (2014). The State-Trait Hopelessness Scale: Development and Testing. Western Journal of Nursing Research, 36(4), 552-570.
- Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality, and development.* New York, NY: Psychology Press.
- Edwards, J. R. (1993). Problems with the Use of Profile Similarity Indices in the Study of Congruence in Organizational Research. *Personnel Psychology*, *46*(3), 641-665.
- Edwards, J. R. (2002). Alternatives to difference scores: Polynomial regression and response surface methodology. In F. Drasgow & N. W. Schmitt (Eds.), *Advances in measurement and data analysis* (pp. 350-400). San Francisco: Jossey-Bass.
- Edwards, J. R., Cable, D. M., Williamson, I. O., Lambert, L. S., & Shipp, A. J. (2006). The phenomenology of fit: Linking the person and environment to the subjective experience of person-environment fit. *Journal of Applied Psychology*, *91*(4), 802-827.
- Fiske, D. W., & Maddi, S. R. (1961). Functions of varied experience. Oxford, England: Dorsey.
- Fleeson, W. (2001). Toward a Structure- and Process-Integrated View of Personality: Traits as Density Distributions of States. *Journal of Personality and Social Psychology*, 80(6), 1011-1027.
- Fleeson, W. (2017). The production mechanism of traits: Reflections on two amazing decades. *Journal of Research in Personality*, 69(1), 4-12.
- Fleeson, W., & Gallagher, P. (2009). The Implications of Big Five Standing for the Distribution of Trait Manifestations in Behavior: Fifteen Experience-Sampling Studies and a Meta-Analysis. *Journal of Personality and Social Psychology*, 97(6), 1097-1114.

- Fleeson, W. & Jayawicreme, E. (2015). Whole Trait Theory. *Journal of Research in Personality*, 56(1), 82-92.
- Fleeson, W., & Law, M. K. (2015). Trait enactments as Density Distributions: The Role of Actors, Situations, and Observers in Explaining Stability and Variability. *Journal of Personality and Social Psychology*, 109(6), 1090-1104.
- Fleiss, J. (1986). The Design and Analysis of Clinical Experiments. Wiley: New York.
- Fouad, N. A., & Kozlowski, M. NB. (2019). Tuning Around to Look Ahead: Views of Vocational Psychology in 2001 and 2019. *Journal of Career Assessment, 27*(3), 375-390.
- Fridhandler, B. M. (1986). Conceptual Note on State, Trait, and State-Trait Distinction. *Journal* of Personality and Social Psychology, 50(1), 169-174.
- Gabriel, A. S., Podsakoff, N. P., Beal, D. J., Scott, B. A., Sonnentag, S., Trougakos, J. P., & Butts, M. M. (2019). Experience Sampling Methods: A Discussion of Critical Trends and Consideration for Scholarly Advancement. *Organizational Research Methods*, 22(4), 969-1006.
- Gati, I. (1991). The Structure of Vocational Interests. Psychological Bulletin, 109(2), 309-324.
- Geiser, C., Götz, T., Preckel, F., & Preund, P. A. (2017). States and Traits: Theories, Models, and Assessment. *European Journal of Psychological Assessment, 33*(4), 219-223.
- Giacomin, M., & Jordan, C. H. (2016). The wax and wane of narcissism: Grandiose narcissism as a process or state. *Journal of Personality*, 84(2), 154-164.
- Ginsberg, M. (2019, December 27). *There's a Skilled Trade Labor Shortage. Can We Fix it?* Retrieved from https://www.entrepreneur.com/article/339978.
- Goldberg, L. R. (1990). An Alternative "Description of Personality": The Big-Five Factor Structure. *Journal of Personality and Social Psychology*, 59(6), 1216-1229.
- Goretzko, D., Pham, T. T. H., & Bühner, M. (In Press). Exploratory factor analysis: Current use, methodological developments and recommendations for good practice. *Current Psychology*.
- Gray, E. K., & Watson, D. (2001). Emotion, mood, and temperament: Similarities, differences, and a synthesis. In R. Payne & C. Cooper (Eds.), *Emotions at work: Theory, research, and applications for management* (pp. 21-43). New York, NY: Wiley.
- Guay, F., Vallerand, R. J., & Blanchard, C. (2000). On the Assessment of Situational Intrinsic and Extrinsic Motivation: The Situational Motivation Scale (SIMS). *Motivation and Emotion*, 24(3), 175-213.
- Gupta, A., Chong, S., & Leong, F. (2015). Development and Validation of the Vocational Identity Measure. *Journal of Career Assessment, 23*(1), 79-90.

- Haak, E. A., Keller, P. S., & DeWall, C. N. (2017). Daily variations in attachment anxiety and avoidance: A density distributions approach. *Journal of Research in Personality*, 69(1), 218-224.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60(2), 159-170.
- Hackman, J. R., & Oldham, G. R. (1980). Work redesign. Reading, MA: Addison-Wesley.
- Harmon, L. W., Hansen, J. C., Borgen, F. H., & Hammer, A L. (1994). *Applications and technical guide for the Strong Interest Inventory*.
- Henn, J. B. (2010). Multimethod Analysis of Interests. Unpublished doctoral dissertation.
- Hidi, S., & Anderson, V. (1992). Situational interest and its impact on reading and expository writing. In K. A., Renninger, S. Hidi, & A. Krapp (Eds.), *The role of interest in learning and development* (pp.215-238). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Hidi, S., & Harackiewicz, J. M. (2000). Motivating the Academically Unmotivated: A Critical Issue for the 21<sup>st</sup> Century. *Review of Educational Research*, *70*(2), 151-179.
- Hidi, S., & Renninger, A. (2006). The Four-Phase Model of Interest Development. *Educational Psychologist*, *41*(2), 111-127.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational research methods*, *1*(1), 104-121.
- Hinkin, T. R., Tracey, J. B., & Enz, C. A. (1997). Scale construction: Developing reliable and valid measurement instruments. *Journal of Hospitality & Tourism Research*, 21(1), 100-120.
- Hoff, K. A., Briley, D. A., Wee, C. J. M., & Rounds, J. (2018). Normative Changes in Interests from Adolescence to Adulthood: A Meta-Analysis of Longitudinal Studies. *Psychological Bulletin*, 144(4), 426-451.
- Hoff, K. A., Wee, C. J. M., Song, C., Phan, W. M., & Rounds, J. (2018). Meta-analysis of Vocational Interests and Job Satisfaction: Challenging a Common Belief. Academy of Management Proceedings, 2018(1).
- Holland, J. L. (1959). A Theory of Vocational Choice. *Journal of Counseling Psychology*, 6(1), 35-45.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3<sup>rd</sup> ed.). Odessa, FL: Psychological Assessment Resources.
- Huang, J. L., Curran, P. G., Keeney, J., Poposki, E. M., & DeShon, R. P. (2012). Detecting and deterring insufficient effort responding to surveys. *Journal of Business and Psychology*, 27(1), 99-114.

- Huang, J. L., Liu, M., & Bowling, N. A. (2015). Insufficient effort responding: Examining an insidious confound in survey data. *Journal of Applied Psychology*, 100(3), 828-845.
- Huang, J. L., & Ryan, A. M. (2011). Beyond Personality Traits: A Study of Personality States and Situational Contingencies in Customer Service Jobs. *Personnel Psychology*, 64(2), 451-488.
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating Motivational, Social, and Contextual Work Design Features: A Meta-Analytic Summary and Theoretical Extension of the Work Design Literature. *Journal of Applied Psychology*, 92(5), 1332-1356.
- Ion, A., Nye, C. D., & Iliescu, D. (2019). Age and Gender Differences in the Variability of Vocational Interests. *Journal of Career Assessment*, 27(1), 97-113.
- Jayawickreme, E., Zachry, C. E., & Fleeson, W. (2019). Whole trait theory: An integrative approach to examine personality structure and process. *Personality and Individual Differences*, 136(1), 2-11.
- Johnson, P. C. (2014). Extension of Nakagawa & Schielzeth's R2GLMM to random slopes models. *Methods in Ecology and Evolution*, 5(9), 944-946.
- Jones, A. B., Brown, N. A., Serfass, D. G., & Sherman, R. A. (2017). Personality and density distributions of behavior, emotions, and situations. *Journal of Research in Personality*, 69(1), 225-236.
- Judge, T. A., Simon, L. S., Hurst, C., & Kelley, K. (2014). What I Experienced Yesterday is Who I Am Today: Relationship of Work Motivation and Behaviors to Within-Individual Variation in the Five-Factor Model of Personality. *Journal of Applied Psychology*, 99(2), 199-221.
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement, 20*(1), 141-151.
- Karasek, R. A., & Theorell, T. (1990). Healthy work. New York, NY: Basic Books.
- Kashdan, T. B., Gallagher, M. W., Silvia, P. J., Winterstein, B. P., Breen, W. E., Terhar, D., & Steger, M. F. (2009). The Curiosity and Exploration Inventory-II: Development, Factor Structure, and Psychometrics. *Journal of Research in Personality*, 43(6), 987-998.
- Knogler, M., Harackiewicz, J. M., Gegenfurtner, A., & Lewalter, D. (2015). How situational is situational interest? Investigating the longitudinal structure of situational interest. *Contemporary Educational Psychology*, 43, 43, 39-50.
- Korkmaz, S., Goksuluk, D., & Zararsiz, G. (2014). MVN: An R package for assessing multivariate normality. *The R Journal*, *6*(2), 151-162.

- Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 3-90). San Francisco, CA, US: Jossey-Bass.
- Krapp, A. (2003). Interest and human development A educational-psychological perspective. British Journal of Educational Psychology (Monograph Series II, Part 2), 57-84.
- Krapp, A. (2007). An educational-psychological conceptualization of interest. *International Journal of Education and Vocational Guidance*, 7(1), 5-21.
- Lanaj, K., Johnson, R. E., & Barnes, C. M. (2014). Beginning the workday yet already depleted? Consequences of late-night smartphone use and sleep. *Organizational Behavior and Human Decision Processes*, 124(1), 11-23.
- Larson, L. M., Rottinghaus, P. J., & Borgen, F. H. (2002). Meta-analyses of Big Six interests and Big Five personality factors. *Journal of Vocational Behavior*, *61*(2), 217-239.
- Levenson, R. W. (1994). Human emotion. A functional view. In P. Ekman & R.J. Davidson (Eds.) *The Nature of Emotion: Fundamental Questions*, pp. 123-126. New York: Oxford University Press.
- Lievens, F., Lang, J. W. B., De Fruyt, F., Corstjens, J., Van de Vijver, M., Bledow, R. (2018). The Predictive Power of People's Intravariability Across Situations: Implementing Whole Trait Theory in Assessment. *Journal of Applied Psychology*, 103(7), 753-771.
- Linnebrink-Garcia, L., Durik, A. M., Conley, A. M., Barron, K. E., Tauer, J. M., Karbenick, S. A., & Haackiewicz, J. M. (2010). Measuring Situational Interest in Academic Domains. *Educational and Psychological Measurement*, 70(4), 647-671.
- Loewenstein, G. (1994). The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin*, *116*(1), 75-98.
- Low, K. S. D., Yoon, M., Roberts, B. W., & Rounds, J. (2005). The Stability of Vocational Interests from Early Adolescence to Middle Adulthood: A Quantitative Review of Longitudinal Studies. *Psychological Bulletin*, 131(5), 713-737.
- Lydon-Staley, D. M., Zurn, P., & Bassett, D. S. (In Press). Within-Person Variability in Curiosity During Daily Life and Associations with Well-Being. *Journal of Personality*.
- Maitland, A. (2009). How many scale points should I include for attitudinal questions?. *Survey Practice, 6, 1-5.*
- McNiel, J. M., & Fleeson, W. (2006). The causal effects of extraversion on positive affect and neuroticism on negative affect: Manipulating state extraversion and state neuroticism in an experimental approach. *Journal of Research in Personality*, 40(5), 529-550.

- Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods*, *17*(3), 437-455.
- Mihalecz, M. C. (2011). Stability and Change in Goal Orientation and Their Relationship with Performance: Testing Density Distributions Using Latent Trait-State Models. Unpublished doctoral dissertation.
- Minbashian, A. Wood, R. E., & Beckmann, N. (2010). Task-Contingent Conscientiousness as a Unit of Personality at Work. *Journal of Applied Psychology*, *95*(5), 793-806.
- Mõttus, R., Epskamp, S., & Francis, A. (2017). Within- and between individual variability of personality characteristics and physical exercise. *Journal of Research in Personality*, 69(1), 139-148.
- Nakagawa, S., & Schielzeth, H. (2013). A general and simple method for obtaining R2 from generalized linear mixed  $\Box$  effects models. *Methods in Ecology and Evolution, 4*(2), 133-142.
- Naylor, F. D. (1981). A State-Trait Curiosity Inventory. Australian Psychologist, 16(2), 172-183.
- Neubauer, A. B, Voss, A., & Ditzen, B. (2018). Exploring need dynamics within and across days in everyday life: A three-level analysis. *Journal of Research in Personality*, 77(1), 101-112.
- Newman, D. (2014). Missing Data: Five Practical Guidelines. Organizational Research Methods, 17(4), 372-411.
- Nye, C. D., Butt, D. M., Bradburn, J., & Prasad, J. (2018b). Interests as Predictors of Performance: An Omitted and Underappreciated Variable. *Journal of Vocational Behavior*, *108*(1), 178-189.
- Nye, C. D., Prasad, J., Bradburn, J., & Elizondo, F. (2018a). Improving the operationalization of interest congruence using polynomial regression. *Journal of Vocational Behavior*, *104*, 154-169.
- Nye, C. D., Prasad, J. J., Rounds J., (2019). *The Effects of Vocational Interest Fit on Motivation, Satisfaction, and Performance: Test of a Mediated Model.* Unpublished Manuscript.
- Nye, C. D., Su, R., Rounds, J., & Drasgow, F. (2012). Vocational Interests and Performance: A Quantitative Summary of Over 60 Years of Research. *Perspective on Psychological Science*, 7(4), 384-403.
- Nye, C. D., Su, R., Rounds, J., & Drasgow, F. (2017). Interest congruence and performance: Revisiting recent meta-analytic findings. *Journal of Vocational Behavior*, 98(1), 138-151.
- O'Keefe, P. A., Dweck, C. S., & Walton, G. M. (2018). Implicit theories of interest: Finding your passion or developing it? *Psychological Science*, 29(10), 1653-1664.

- Parker, S. K. (2003). Longitudinal effects of lean production on employee outcomes and the mediating role of work characteristics. *Journal of Applied Psychology*, *83*(4), 620-634.
- Palmer, D., Dixon, J., Archer, J. (2017). Using Situational Interest to Enhance Individual Interest and Science-Related Behaviors. *Research in Science Education*, 47(4), 731-753.
- Parkinson, B., Totterdell, P., Briner, R. B., & Reynolds, S. A. (1996). *Changing moods: The psychology of mood and mood regulation*. Longman.
- Patrick, A. W., & Zuckerman, M. (1977). An Application of the State-Trait Concept to the Need for Achievement. *Journal of Research in Personality*, 11(1), 459-465.
- Peterson, N. G., Mumford, M. D., Borman, W. C., Jeanneret, P., & Fleishman, E. A. (1999). An occupational information system for the 21st century: The development of O\* NET. American Psychological Association. Washington, DC
- Phan, W. M. (2018). *The within-person variability of vocational interests*. Unpublished dissertation.
- Phan, W. M., Amrhein, R., Cho, S., & Rounds, J. (2017, April). Vocational Interests as Density Distributions? Results from Experience Sampling Studies. Paper presented at the 2017 Society for Industrial and Organizational Psychology Annual Conference in Orlando, FL.
- Phan, W. M., & Rounds, J. (2018). Examining the duality of Holland's RIASEC types: Implications for measurement and congruence. *Journal of Vocational Behavior*, 106(1), 22-36.
- Ployhart, R. E., Schneider, B., & Schmitt, N. (2006). *Staffing Organizations: Contemporary Research and Practice*. Mahwah, NJ: Erlbaum.
- Renninger, K. A., & Hidi, S. (2011). Revisiting the conceptualization, measurement, and generation of interest. *Educational Psychologist*, *46*(3), 168-184.
- Roberts, B. W., & DelVecchio, W. F. (2000). The Rank-Order Consistency of Personality Trait From Childhood to Old Age: A Quantitative Review of Longitudinal Studies. *Psychological Bulletin*, 126(1), 3-25.
- Rotgans, J. I., & Schmidt, H. G. (2017). Interest development: Arousing situational interest affects the growth trajectory of individual interest. *Contemporary Educational Psychology*, 49(1), 175-184.
- Rottinghaus, P. J., Coon, K. L., Gaffey, A. R., & Zytowski, D. G. (2007). Thirty-year stability and predictive validity of vocational interests. *Journal of Career Assessment*, 15(1), 5-22.
- Rounds, J., & Su, R. (2014). The Nature and Power of Interests. *Current Directions in Psychological Science*, 23(2), 98-103.

- Sackett, P. R., Laczo, R. M., & Lippe, Z. P. (2003). Differential Prediction and the Use of Multiple Predictors: The Omitted Variables Problem. *Journal of Applied Psychology*, 88(6), 1046-1056.
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Brining clarity to the concept. In M. P. Leiter & A. B. Bakker (Eds.), Work engagement: A handbook of essential theory and research (pp. 10-24). New York: Psychology Press.
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, 124(2), 262-274.
- Schmitt, N., Oswald, F. L., Friede, A., Imus, A., & Merritt, S. (2008). Perceived fit with an academic environment: attitudinal and behavioral outcomes. *Journal of Vocational Behavior*, 72(3), 317-335.
- Schneider, B. (1987). The People Make the Place. Personnel Psychology, 40(3), 437-453.
- Schneider, R. J., Hough, L. M., & Dunnette, M. D. (1996). Broadsided by Broad Traits: How to Sink Science in Five Dimensions or Less. *Journal of Organizational Behavior*, 17(6), 639-655.
- Schraw, G., & Lehman, S. (2001). Situational Interest: A Review of the Literature and Directions for Future Research. *Educational Psychology Review*, 13(1), 23-52.
- Schwartz, J. E., & Stone, A. A. (1998). Strategies for analyzing ecological momentary assessment data. *Health Psychology*, 17(1), 6-16.
- Soto, C. J., & John, O. P. (2017a). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology*, *113*(1), 117-143.
- Steyer, R., Schmitt, M., & Eid, M. (1999). Latent state-trait theory and research in personality and individual differences. *European Journal of Personality*, 13(5), 389-408.
- Stoll, G., Rieger, S., Lüdtke, O., Nagengast, B., Trautwein, U., Roberts, B. W. (2017). Vocational Interests Assessed at the End of High School Predict Outcomes Assessed 10 Years Later over and above IQ and Big Five Personality Traits. *Journal of Personality* and Social Psychology, 113(1), 167-184.
- Strong, E. K. (1943). *Vocational Interests of Men and Women*. Stanford, CA: Stanford University Press.
- Su, R. (2018). The three faces of interests. An integrative review of interest research in vocational, organization, and educational psychology. *Journal of Vocational Behavior*. Advance online publication.

- Su, R., & Rounds, J. (2015). All STEM fields are not created equal. People and things interests explain gender disparities across STEM fields. *Frontiers in Psychology*, 6(189).
- Su, R., Rounds, J., & Armstrong, P. I. (2009). Men and things, women and people. A metaanalysis of sex differences in interests. *Psychological Bulletin*, 135(6), 859-884.
- Su, R., Stoll, G., & Rounds, J. (2019). The Nature of Interests: Towards a Unifying Theory of Trait-State Interest Dynamics. In C. D. Nye & J. Rounds (Eds.), Vocational Interests: Rethinking Their Roles in Understanding Workplace Behavior and Practice. New York, NY: Routledge
- Tracey, T. J., & Sodano, S. M. (2008). Issues of stability and change in interest development. *The Career Development Quarterly*, *57*(1), 51-62.
- Twenge, J., Muraven, M., & Tice, D. (2004). *Measuring state self-control Reliability, validity,* and correlations with physical and psychological stress. Unpublished manuscript.
- Vancouver, J. B., Thompson, C. M., & Williams, A. A. (2001). The changing signs in the relationships among self-efficacy, personal goals, and performance. *Journal of Applied Psychology*, 86(4), 605-620.
- VandenBos, G. R. (2006). Affect. *APA Dictionary of Psychology*. Washington, DC: American Psychological Association.
- Van Iddekinge, C. H, Roth, P. L., Putka, D. J., & Lanivich, S. E. (2011). Are You Interested? A Meta-Analysis of Relations Between Vocational Interests and Employee Performance and Turnover. *Journal of Applied Psychology*, 96(6), 1167-1194.
- Van Iddekinge, C. H., Putka, D. J., & Campbell, J. P. (2011b). Reconsidering Vocational Interests for Personnel Selection: The Validity of an Interest-Based Selection Test in Relation to Job Knowledge, Job Performance, and Continuance Intentions. *Journal of Applied Psychology*, 96(1), 13-33.
- Wang, T, & Degol, J. L. (2017). Gender Gap in Science, Technology, Engineering, and Mathematics (STEM): Current Knowledge, Implications for Practice, Policy, and Future Directions. *Educational Psychology Review*, 29(1), 119-140.
- Watson, D., & Clark, L. A. (1994). Emotions, moods, traits, and temperament: Conceptual distinctions and empirical findings. In P. Ekman & R. J. Davidson (Eds.) *The Nature of Emotion: Fundamental Questions*, pp. 89-93. New York: Oxford University Press.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.
- Wiegand, J. P. (2018). Not All Misfit is Equal: A Re-Examination of Vocational Interest Fit and Job Satisfaction. Unpublished Doctoral Dissertation.

Wetzel, E., & Hell, B. (2014). Multidimensional Item Response Theory models in vocational interest measurement: An illustration using the AIST-R. *Journal of Psychoeducational Assessment*, 32(4), 342-35