**Additional Question Justification for Form 1366: Complete Survey**

Questions 7 and 8 address descriptive and injunctive norms. Descriptive norms are what a person thinks others in his or her referent group do. Injunctive norms are what a person thinks others in their referent group should do. With this question, we are capturing reported descriptive and injunctive norms surrounding seat belt use. Previous research has shown that individuals’ (and particularly younger adults’) perceptions of social norms affect their risk-taking behavior. Moreover, attitude and behavior change theories and interventions often emphasize leveraging or changing perceptions of social norms.

As seen in the table below, questions 12 through 24 all come from validated scales designed to measure constructs of interest in this research. Prior literature has shown that these constructs are related to seat belt use or other risky/protective behaviors.

|  |  |  |  |
| --- | --- | --- | --- |
| Survey Item | Construct | Theoretical Basis | Validated Scale |
| 12a-f | Risk aversion | Previous research has found risk aversion to be consistently related to several risky and protective health behaviors. | Risk-Taking Index  From Nicholson, N., Soane, E., Fenton-O'Creevy, M., & Willman, P. 2005. Personality and domain-specific risk taking. *Journal of Risk Research, 8*(2), 157-176.) |
| 13-14 | Risk perception | A great number of studies have found that engaging in protective and risky behaviors is generally influenced by assessments of risk. | No scale name but perceived risk items  From Stasson, M. & Fishbein, M. (1990). The Relation Between Perceived Risk and Preventive Action: A Within-Subject Analysis of Perceived Driving Risk and Intentions to Wear Seatbelts. *Journal of Applied Social Psychology*, 20(19), 1541-1557. |
| 15-16 | Fatalism | Previous research has found an association between fatalism and a variety of risky and protective health behaviors, including seat belt use. | Traffic Locus of Control [T-LOC]  From Özkan, T. & Lajunen, T.J. (2005). Multidimensional Traffic Locus of Control Scale (T-LOC): Factor structure and relationship to risky driving. *Personality and Individual Differences, 38*(3), 533-545. |
| 17a-m | Impulsivity | Previous research has found impulsivity to be consistently related to several risky and protective health behaviors. | Abbreviated Impulsivity Scale [ABIS]  From Coutlee, C., Politzer, C., Hoyle, R., & Huettle, S. (2014). An Abbreviated Impulsiveness Scale (ABIS) constructed through confirmatory factor analysis of the BIS-11. *Archives of Scientific Psychology*, 2(1), 1-12. |
| 18a-c | Anger | Previous studies have reported an inverse association between seat belt use and driving anger. We would like to explore whether this translates to trait-based anger, more generally. | Anger subscale from the Brief Aggression Questionnaire [BAQ]  From Webster, G.D., DeWall, C.N., Pond, R.S., Deckman, T., Jonason, P.K., Le, B.M., Nichols, A.L., Schember, T.O., Crysel, L.C., Crosier, B.S., Smith, C.V., Paddock, E.L., Nezlek, J.B., Kirkpatrick, LA., Bryan, A.D., & Bator, R.J. (2015). The Brief Aggression Questionnaire: Structure, validity, reliability, and generalizability. *Journal of Personality Assessment, 97*(6), 638-49. |
| 18d-f | Hostility | There is some evidence suggesting that hostility may be associated with alcohol-impaired driving and illicit substance use, at least among young men. We would like to see if an association also exists between hostility and seat belt use. | Hostility subscale from the Brief Aggression Questionnaire [BAQ]  From Webster, G.D., DeWall, C.N., Pond, R.S., Deckman, T., Jonason, P.K., Le, B.M., Nichols, A.L., Schember, T.O., Crysel, L.C., Crosier, B.S., Smith, C.V., Paddock, E.L., Nezlek, J.B., Kirkpatrick, LA., Bryan, A.D., & Bator, R.J. (2015). The Brief Aggression Questionnaire: Structure, validity, reliability, and generalizability. *Journal of Personality Assessment, 97*(6), 638-49. |
| 18g-n | Sensation Seeking | Existing evidence suggests that sensation seeking exerts an influence on seat belt use, as well as alcohol-impaired driving and illicit substance use. | Brief Sensation-Seeking Scale [BSSS]  From Hoyle, R.H., Stephenson, M.T., Palmgreen, P., Pugzles Lorch, E., & Lewis Donohew, R. (2002). Reliability and validity of a brief measure of sensation seeking. *Personality and Individual Differences*, 32, 401-414. |
| 18a-l | Delay of gratification | Future orientation and delay discounting both seem to have strong and consistent associations with several protective and risky behaviors. | Consideration of Future Consequences (CFC) scale  From Strathman, A., Gleicher, F., Boninger, D. S., & Edwards, C. S. (1994). The consideration of future consequences: Weighting immediate and distant outcomes of behavior. *Journal of Personality and Social Psychology*, 66, 742–752 |
| 20a-n | Social norms espousal | We expect the behavior of individuals who are higher on social norms espousal will exhibit behavior that matches their perception of social norms regarding risky and protective health behaviors, such as seat belt use. | Social Norms Espousal Scale (SNES)  From Bizer, G.Y., Magin, R.A., & Levine, M.R. (2014). The Social-Norm Espousal Scale. *Personality and Individual Differences, 58*, 106–111 |
| 21 | Resistance to peer influence | Previous studies have found that individuals who are more susceptible to peer pressure are more likely to conform to the behavior of their peers than those that are more resistant to peer pressure. | Resistance to Peer Influence (RPI) scale  From Steinberg, L. & Monahan, K. (2007). Age Difference in Resistance to Peer Influence. *Developmental Psychology*, 43(6), 1531-1543. |
| 22a-f | Life satisfaction | Previous studies have found that individuals who are more satisfied with their life circumstances may be more inclined to engage in protective health behaviors. | Satisfaction with Life Scale (SWLS)  From Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71-75. |
| 22g-k | Optimism | Optimism has been shown to be associated to risk behaviors such as smoking, alcohol consumption, and risky sexual behavior, but to our knowledge there has been no work on its relationship with seat belt usage. We would like to investigate this. | Revised Life Orientation Test [LOT-R]  From Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism and trait anxiety, self-mastery, and self-esteem: A re-evaluation of the Life Orientation Test. Journal of Personality and Social Psychology, 67, 1063-1078. |
| 22l-p | Loneliness | Studies have found a conflicting relationship between loneliness and risk behavior. Only one previous study (to our knowledge) has compared loneliness to seatbelt use and found that there were small, non-significant differences between the seatbelt use of lonely and non-lonely participants. Our study may help shed light on the conflicting findings. | Social subscale from the short form of the Social and Emotional Loneliness for Adults [SELSA] scale  From DiTommaso, E., Brannen, C., & Best, L. (2004). Measurement and validity characteristics of the short version of the social and emotional loneliness scale for adults. *Educational and Psychological Measurement*, 64(1), 99-119. |
| 23a-d | Government intervention orientation | We expect that individuals who believe that an appropriate activity of the government is “making decisions that promote the quality of life and well-being of the people” will be more inclined to follow seat belt laws. | Government Intervention Scale [GIS]  From Wagaman, M.A. & Segal, E.A. (2014). The relationship between empathy and attitudes towards government intervention. *The Journal of Sociology & Social Welfare*, 41(4), 91-112. |
| 24a-h | Social resistance orientation | Previous studies have found that individuals who are higher on social resistance orientation are generally less inclined to follow laws, including those regarding seat belt use. | Non-commitment to Law and Social Resistance Subscales of the UNREST questionnaire  From Factor, R., Kawachi, I., & Williams, D. R. (2013). Evaluation of the UNREST Questionnaire for Testing the Social Resistance Framework. *Journal of Epidemiology and Community Health*, 67(7), 618-624. |