

EFFECTS OF SOCIAL DISTANCE AND STIGMA ON REDUCTION IN LONELINESS: A
SOCIAL DISCOUNTING PROCEDURE

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Abstract

Social support has been shown to be beneficial for one's overall general well-being (Holt-Lunstad et al., 2010), mental health (Hefner & Eisenberg, 2009), and a crucial component for those diagnosed with a SMI (McCorkle et al., 2008). Interpersonal relationships are one-way individuals can obtain social support and these relationships are strongest when both persons engage in vulnerable self-disclosures (Reis & Shaver, 1988). However, stigma surrounding mental illness can have a negative impact on building interpersonal relationships. The current study investigates one's willingness to engage in disclosures as a function of social distance and the mental illness status of the individual to whom one is disclosing to through a social discounting task. Materials were presented online using the survey software, RedCap. Participants (N=92) completed self-report measures (Fear of Intimacy Scale, UCLA Loneliness

Scale v. 3, Medical Outcomes Study Social Support Survey, and Schwartz Outcome Scale-10) and a social distance discounting task and were subjected to data analysis. Scores on the social distance task were calculated using area under the curve (AUC). Results showed a significant Type x Social Distance interaction and correlations among self-report measures. The AUC scores were not shown to be correlated to any of the self-report measures. The significant differences in individual's willingness to disclose as a function of social distance and type tells us that individuals are more like to disclose to those very close to them (i.e spouse, friend) or people they hardly know. The interaction also shows that individuals are more willing to disclose to someone with no mental illness diagnosis than they are to those diagnosed with a mental illness or serious mental illness.

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INTRODUCTION

Social Support and Well-Being, Mental Health, and SMI

Research has shown that individuals lacking positive social relationships have a 50% greater likelihood of mortality than individuals who have these connections (Holt-Lunstad et al., 2010). Adequate social groups aid in one's well-being through social support, providing the individual with positive affect, a sense of predictability and stability in one's life situations, and a recognition of self-worth (Cohen & Wills, 1985). For college students, affectively positive interactions with other students are associated with greater well-being (Reifman & Dunkel-Schetter, 1990). One-way social support may contribute to well-being is through improving overall mental health.

A strong social support system reduces the likelihood and severity of mental illness. Additionally, strong social support has been found to reduce the likelihood of depression, anxiety, suicidality, and eating disorders (Hefner & Eisenberg, 2009). Support acts as a stress buffer through either supportive action -such as providing emotional, informational, or tangible resources- or through the perception that support is there, both of which aid in the individual's coping mechanisms (Holt-Lunstad et al., 2010; Lakey & Cohen, 2000). Further, social support has been linked to the course of mental health. These findings suggest that understanding social support may be important in understanding the development of a mental disorder and evaluating the severity of a disorder that may already be present. (Dalgard et al., 1995).

The findings between mental health and social support become significant when examining how the lack of social support impacts those diagnosed with a serious mental illness. The National Institute of Mental Health defines a serious mental illness (SMI) as a "mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially

interferes with or limits one or more major life activities" (2019), such as Schizophrenia or Bipolar Disorder. Oftentimes, individuals diagnosed with a SMI lack high-quality social support that is needed to buffer the impact of daily life stressors (Chronister et al., 2015). Consistent with this finding, social support has been found to be one of the main components of treatment leading to recovery in patients diagnosed with SMI (McCorkle et al., 2008). Consequently, social support can be viewed as both a dependent and independent variable, with some viewing it as an outcome of recovery from SMI and others viewing it as an essential part of the intervention that must be manipulated properly in order to produce change in the client (McCorkle et al., 2008).

Social support and the interpersonal model of intimacy

The impact of social support on mental health may be strongest when the social support includes intimate relationships (Cacioppo et al., 2015). Intimacy in relationships occurs from an interaction of both partners self-disclosing and receiving and seeking validation; this process can be illustrated using the Interpersonal Process Model of Intimacy (Reis & Shaver, 1988). Reis and Shaver's model maps out what events need to take place for an intimacy generating interaction to take place. First, Person A makes a vulnerable self-disclosure to Person B about their motives, fears, and/or needs, Person B must then make an emotional validating response, and finally Person A will interpret this response -perceived partner responsiveness- as feeling validated by Person B (Reis & Shaver, 1988). This model has been elaborated from a contextual behavior perspective to include both private and public behaviors that can all be characterized as a form of a behavioral response (Kanter et al., 2020). Private behaviors include motives, fears, needs, goals, and perceptual filters that help to facilitate the exchange between Person A and B, whereas public responses are Person A's vulnerable self-disclosure and Person B's validating response.

These private behaviors are important to the interaction, as they act as the establishing operations and antecedent stimuli for the interaction.

While self-disclosure can lead to positive interpersonal outcomes, the reciprocity of the disclosure is key to developing close interpersonal relationships (Sprecher et al., 2013). These relationships can be formed between complete strangers by engaging in a "Fast Friends Task" of answering closeness generating questions, such as "Given the choice of anyone in the world, whom would you want as a dinner guest?" and "What is your most terrible memory?" (Aron et al., 1997). The Aron et al. (1997) study developed an experimental paradigm that demonstrated how Reis and Shaver's Interpersonal Process Model of Intimacy (1988) could occur in a short but meaningful, forty-five-minute interaction. Extended research from this study has found that disclosure intensity and duration of the interpersonal relationship depends on partner responsiveness (Haworth et al., 2015). This process may play an important role in the development of social support. There is preliminary evidence that social willingness to disclose personal information leads to social support and that the pathway between social support and mental health is mediated by loneliness (Maitland, 2020).

Disruption of intimacy due to stigma

For individuals who have been labeled with a mental illness, stigmatization can have a negative impact on their life (Link & Phelan, 2001). For example, persons diagnosed with SMI experience high levels of societal and internalized stigma leading to negative beliefs about themselves and others diagnosed with SMI, contributing to adverse outcomes (Chronister et al., 2015). Many individuals diagnosed with a SMI want quality relationships, but they may not always be able to form those relationships (Townley & Kloos, 2011). Individuals may choose to hide their mental illness from others (Corrigan & Watson, 2002), therefore disrupting the

relationship formation as outlined in the Interpersonal Process Model of Intimacy (Reis & Shaver, 1988). Conversely, disclosing diagnostic status to others can have a positive impact on quality of life for those that have been diagnosed with SMI (Corrigan et al., 2010).

While a person's own mental health status may impact willingness to make disclosures, it is also important to look at how the stigma surrounding mental illness can lead to individuals avoiding self-disclosures to those who report mental health problems. Even for individuals reporting high levels of loneliness, it is possible that stigma prevents self-disclosure that would lead to enhanced relationships if the person they would be disclosing to has a known mental health diagnosis. However, there is limited information available on how diagnostic status of mental health impacts relationship building behaviors. A social discounting task may elucidate how willing individuals are to engage in disclosures to individuals who have been diagnosed with a mental illness. Social discounting tasks provide a behavioral description (Rachlin & Jones, 2008) of one's choices for obtaining rewards. In the case of the current study this would be a decrease in loneliness.

Social Discounting Task

Social discounting can be explained using the following equation:

$$v = V / (1 + sN)$$

Where v is the discounted value of the reinforcer, V is the undiscounted value of the reinforcer, N is a measure of social distance, and s is a constant measuring degree of social discounting (Jones & Rachlin, 2006; Rachlin & Jones, 2008). Social discounting studies tend to focus on the probability of giving money—and how much money—to individuals of varying degrees of closeness (Jones & Rachlin, 2006; Locey et al., 2013; Rachlin & Jones, 2008). However, instead of monetary outcomes, other rewards, such as reductions in loneliness can be investigated. By

substituting vulnerability into the equation, one could test how much an individual would self-disclose to persons at varying levels of social distance while also comparing these differences with individuals with no mental health issues, a general mental illness, or a serious mental illness. Social distance can be articulated by having individuals make an imaginary list of 100 individuals in their life with #1 being someone who they know well (as in a close friend or relative) and #100 being a mere acquaintance whom they can recognize but may not know their name (Jones & Rachlin, 2006).

Purpose of the current study

The proposed study is designed to investigate the willingness to engage in disclosures as a function of social distance and the mental illness status of the individual to whom one is disclosing. Findings from this study will begin to elucidate if and how stigma plays a role in one's willingness to disclose to persons diagnosed with a mental illness and further how it impacts the potential development of social connection and later social support.

METHOD

Participants and Procedures

Participants were recruited through Morehead State University (MSU) online subject pool SONA. Additional recruitment was made through social media platforms such as Facebook and Reddit. Individuals had to be over the age 18 to be eligible to participate in the study. Responses were collected from 176 participants, 44 participants were excluded for failing to complete the survey and 12 participants were excluded for failing too many attention checks. There were six attention check questions placed throughout the survey and it was determined that failing more than half of them was invalid responding. Upon further investigation of the data, it was determined that 28 of the participants should be excluded from that data due to inconsistent

responding on the social distance task, i.e. the AUC for a condition received a score of 0, indicating the participants did not answer the social distance questions. These participants would have passed through the initial validation screener because they met the three-attention check rule. Data from 92 participants were subjected to data analysis.

All materials were presented online to the participants using the survey software RedCap. Participants were allowed to answer questions at their own pace, on their own time, and have the option to discontinue the study at any time. Participants were also presented with the answer option "I choose not to answer" on all survey questions. Each of the surveys and tasks follow and they were presented to the participants in the same order.

Measures

Demographics Questionnaire. The demographics questionnaire asked participants to indicate their age, gender, race, ethnicity, school year and GPA, and employment. The participants were also asked to describe any current or past treatment for emotional/behavioral/mental health concerns, and their history with alcohol, tobacco, and traumatic experiences. Participants were also asked if they had ever interacted with someone whom they knew was diagnosed with a mental health disorder or a serious mental illness.

Fear of Intimacy Scale. The Fear of Intimacy Scale (FIS; Descutner & Thelen, 1991) is a 35-item self-report questionnaire that measures an individual's unwillingness to engage in personal disclosures in present and past relationships. Items are scored on a 5-point scale (1=not at all characteristic of me to 5= extremely characteristic of me) with higher scores indicating a higher fear of engaging in vulnerable behaviors. Fifteen of the items are reversed scored and a total is calculated. The measure shows high internal consistency ($\alpha = .93$).

Medical Outcomes Study Social Support Survey (SSS). The Medical Outcomes Study Social Support Survey (Sherbourne & Stewart, 1991) is a 19-item self-report scale that measures an individual's perceived social support on four dimensions: emotional/information support, tangible support, affectionate support, and positive social interactions. Items are scored on a 5-point scale (1=none of the time and 5=all of the time) with higher scores indicating more social support. Scores are calculated by taking the average of the questions making-up each subscale. The measure as a whole has high internal consistency ($\alpha = .91$) and the individual subscales ranging from $\alpha = .91$ to $\alpha = .96$ internal consistency.

UCLA Loneliness Scale Version 3. The UCLA Loneliness Scale (UCLA; Russell, 1996) is a 20-item self-report measure designed to assess subjective difference between perceived and desired social interactions. Items are scored on a 4-point scale, ranging from 1 (never) to 4 (often). Eleven of the items are negatively worded and nine of the items are positively worded (reversed scored). Research shows the UCLA Loneliness Scale has high internal consistency ($\alpha = .92$).

Schwartz Outcome Scale-10. The Schwartz Outcome Scale-10 (Blais et al., 1999) is a brief mental health outcome measure designed to evaluate the effectiveness of mental health treatment for various populations and services. Participants rate each item on a scale of 0 (never) to 6 (all of the time or nearly all of the time), and the items are summed together for the total score. The scale has a Cronbach's alpha of .96.

Social Discounting Task.

Participants engaged in a social discounting procedure to investigate their willingness to engage in disclosures as a function of social distance and the mental illness diagnosis of the person to whom they were disclosing. Participants engaged in a series of choices to gauge their

indifference point for willingness to disclose. The first question in each series started at a value 50 and subsequent question values were either increased or decreased by 50 of the difference between the current value and the minimum or maximum valuable possible in that choice path. The variable values are representative of the amount of loneliness one would have to reduce by making a disclosure. For example, if participants answered “no” to a 50% decrease in loneliness, they were then asked about a 75% decrease. If they had answered yes, the next question would have been a 25% decrease. The general methods of question generation are presented in Waltz (2011). All discounting assessment tasks utilized the "skip logic" feature of RedCap to allow for each indifference point to be estimated in five or six questions.

Social Distance. Participants were first asked a series of questions with the following format: *Would you make a vulnerable self-disclosure to someone of social distance X for a Y% decrease in loneliness?* Following each question, they were presented with the following options:

- A: Yes, I would disclose to someone of social distance X for a Y% decrease in loneliness.
- B: No, I would not disclose to someone of social distance X for a Y% decrease in loneliness.
- C: I choose not to answer

Y values change after every choice in the manner as described above to obtain an indifference point at each level of the inconvenience (X). The X values were presented in the following order: 100, 95, 90, 75, 50, 25, 10, 5, and 1. If participants chose to not answer the questions, they were directed to the next value of X.

After completing this series of questions, participants were asked: *Would you make a vulnerable self-disclosure to someone who has been diagnosed with a mental health disorder of social distance X for a Y% decrease in loneliness?* The definition of mental health disorder (MH)

and common examples were provided in the instructions. The answer options are the same as previously described, as were the descriptions of the Y values and X values.

Finally, participants were presented with the third series of questions looking at social distance and decrease in loneliness: *Would you make a vulnerable self-disclosure to someone who has been diagnosed with a serious mental illness of social distance X for a Y% decrease in loneliness?* A serious mental illness (SMI) was defined to the participants and examples provided in the instructions. The answer options are the same as previously described, as were the descriptions of the Y values and X values.

Based on preliminary findings, it was hypothesized that differences in loneliness among each diagnostic type (general well-being/no diagnosis, mental illness diagnosis, and SMI diagnosis) would be observed. Across all conditions, we hypothesized greater increases in loneliness as social distance decreases. Specifically, it was expected that individuals would experience a smaller decrease in loneliness in the MH condition versus the general well-being condition. Concurrently, it was expected that smaller decreases in loneliness for the individuals disclosing to those diagnosed with an SMI would occur relative to those diagnosed with a general mental health disorder.

RESULTS

Primary Analyses

The self-report measures were scored for each of the participants. The social distance task scores were calculated using the area under the curve (AUC) found for each participant. This dependent variable is a simpler and non-skewed measurement of a discounting curve (Myerson et al., 2001). For the current study, the dependent variable, AUC was calculated for each of the varying social distances and represents the area from one social distance value to the next social

distance value, i.e. the area under the curve from social distance 1 to social distance 5, social distance 5 to social distance 10, and so on for all nine values of social distance. These values were also summed for an overall AUC for each condition for each participant. Values of AUC represent the amount of loneliness one reduced for making the disclosure, thus smaller values of AUC represent more willingness to disclose. Table 1 displays the mean and standard deviation AUC values for each level of social distance and diagnostic type.

Using SPSS, a 3 (type: general well-being, mental health diagnosis, and SMI diagnosis) X 8 (social distance) quasi repeated-measures ANOVA with alpha set to $p = .05$ was utilized to analyze the data. Significant main effects for type, $F(2,92) = 41.661, p < .001, \eta^2_{\text{partial}} = .314$, and social distance, $F(7,92) = 416.742, p < .001, \eta^2_{\text{partial}} = .821$ were obtained. More importantly, results show there was a significant Type x Social Distance interaction on AUC, $F(14,92) = 20.652, .001, \eta^2_{\text{partial}} = .185$, which can be seen in Figure 1.

A bivariate correlational analysis was conducted to investigate the relationship between the self-report measures and the average AUC for each condition. Table 2 shows the means and standard deviations for the self-report measures. Results show that Fear of Intimacy (FIS) is significantly correlated ($p < .01$) with loneliness on the UCLA ($r = .440$), SOS ($r = -.501$), the Medical Outcomes Study Social Support Survey (SSS) total score ($r = -.284$), SSS emotional dimension ($r = -.347$), SSS affective dimension ($r = -.279$), and significantly correlated ($p < .05$) with the SSS positive dimension ($r = -.215$) and SSS additional dimension ($r = -.238$). The UCLA self-report measure was found to have significant correlations ($p < .01$) with the Schwarts Outcomes Scale-10 (SOS) ($r = -.666$), SSS total score ($r = -.598$), SSS emotional dimension ($r = -.522$), SSS tangible dimension ($r = -.455$), SSS affective dimension ($r = -.504$), SSS positive dimension ($r = -.478$) and SSS additional dimension ($r = -.387$). The SOS was found to have

positive correlations with the SSS measure, including total score ($r=.433$) and across all dimensions ($r=.275 - .385$). There were no significant correlations between the self-report measures and the social distancing task. The SPSS output of this analysis can be seen in Appendix F.

Secondary Analyses

Additional analyses were conducted to investigate the interactions at each specific distance and the SPSS output for these results can be found in Appendix G. The results of this analysis show that type 1 (no diagnosis manipulation) and type 3 (SMI diagnosis) have a significant interaction effect across all levels of social distance. There is also a significant interaction between type 2 (mental illness) and type 3 (SMI diagnosis) across all levels of social distance. For type 1 (no diagnosis manipulation) and type 2 (mental illness) there is a significant interaction effect for the AUC of type 1 social distances of 25 and 50, 50 and 75, 75 and 90, 90 and 95, and 95 and 100, as well as, the AUC for type 2 social distances 25 and 50, 50 and 75, 75 and 90, 90 and 95, and 95 and 100. At the lower levels of social distance, there is a significant interaction effect for the AUC of type 1 social distances 1 and 5 and type 2 social distances 1 and 5. However, there is no significant interaction for the AUC of type 1 social distance 5 and 10 and 10 and 25 nor for the AUC of type 2 social distances 5 and 10 and 10 and 25. These findings help to further explain the results shown in Figure 1.

Further investigations of the data lead to questions if higher or lower scores on the UCLA and FIS self-report measures differed in their effects on one's willingness to disclose. Scores on the UCLA were separated into two groups by median split, lonely versus non-lonely. Individuals were determined to be grouped into the lonely group if their scores were 50 or above. Scores 49 and below were grouped into the non-lonely category. Scores on the FIS were also divided into

two groups by median split, fearful of disclosure versus non-fearful. Individuals were determined to be grouped into the fearful category if their scores were 100 or above. Scores 99 and below were grouped into the non-fearful category. A quasi-design with repeated measures was conducted and no significant interactions or any main effects were observed.

DISCUSSION

The purpose of this study was to investigate one's willingness to engage in self-disclosures as a function of social distance and mental illness diagnosis. The study considered factors of stigma of mental illness, fear of disclosure, and loneliness as factors that may contribute to one's willingness to disclose to others. While we did not find any relationship between loneliness and one's willingness to disclose (as measured by AUC on the social distancing task), we did notice considerable differences between one's willingness to disclose across conditions.

As predicted, individuals being told that someone who has a mental illness were less willing to disclose to them and were even more unwilling to disclose to someone who has an SMI diagnosis. This is shown by the degree of loneliness they had to be reduced before they would make a self-disclosure. Our results also show that individuals are more willing to disclose information to those that are closest to them socially (i.e. a spouse, parent, or close friend). This is not surprising that individuals feel more open to those that they know very well. However, as one moves to the social distance range of 50 to 75, individuals become much more unwilling to disclose across all conditions. While it is unclear what leads to this change, it is evident that the person's diagnostic status plays a role. Finally, we can see that the differences (while still significant) are less at the higher social distances (90 to 100), individuals are more willing to

disclose. At this level of social distance, the person may not even know the other's name.

Therefore, one may speculate that a small factor of anonymity plays a role.

Correlational analysis shows that if one has higher scores on the fear of intimacy scale, then they are also going to report more feelings of loneliness, lower levels of general well-being, and less social support. It was also interesting to find that there were no significant correlations between FIS and the social distancing task. These negative correlations were also seen with the UCLA loneliness scale, indicating that individuals who are experiencing greater levels of loneliness are also reporting poorer general well-being and inability to recognize or obtain social support across all dimensions. As with the FIS, the UCLA was also not correlated with the social distancing task. Therefore, one could assume that loneliness is not related to one's willingness to disclose to others. The positive correlations between the SOS and all SSS dimensions tells us that one who has better general and psychological well-being is more likely to report having social support in multiple areas of their lives.

It is important to note some limitations to this current study. Firstly, since participants did not actively make disclosures to another person, we cannot conclusively say how diagnostic status and social distance could affect these interactions. Another limitation of the study is the question volume. Since participants were exposed to all three conditions, they had to answer a large number of questions. Keeping one's attention sustained for such a long time could impact the reliability of their answers on the questionnaires and this can also be seen in the number of participants who completed the social distancing task versus the number of participants who started the study and did not finish responding. A between-subjects design could have eliminated this issue of inconsistent responding. Another limitation to the current study is that there was no

random assignment to social distances or type; all participants received the same presentation order sequence.

This current study helps add to the literature on self-disclosure and mental health. This interaction effect between diagnostic status and social distance informs us that stigma may play a vital role in developing strong relationships with others by hindering self-disclosures. Another explanation may be that individuals are trying to protect those with mental health disorders by choosing not to make these vulnerable self-disclosures. Understanding factors that play into self-disclosure may be important as clinicians work with the family members of clients and ensuring they have quality social support.

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Tables and Figures**Table 1. Mean and Std. Deviation of Social Distance AUC**

	Mean	Std. Deviation	N
SD15	74.4	97.0	92
SD510	143.7	144.1	92
SD1025	583.5	469.2	92
SD2550	1248.8	769.7	92
SD5075	1488.1	782.0	92
SD7590	987.6	469.8	92
SD9095	339.3	154.7	92
SD95100	343.6	156.1	92
MH15	90.2	112.0	92
MH510	158.4	163.6	92
MH1025	625.9	466.8	92

MH2550	1376.7	767.2	92
MH5075	1641.0	727.7	92
MH7590	1086.9	436.7	92
MH9095	379.6	147.6	92
MH95100	387.4	144.6	92
SMI15	129.0	131.5	92
SMI510	220.9	174.1	92
SMI1025	833.6	507.9	92
SMI2550	1710.1	729.0	92
SMI5075	1923.9	673.7	92
SMI7590	1202.2	393.8	92
SMI9095	408.6	130.2	92
SMI95100	414.0	131.4	92

**Table 2. Means and Std. Deviations of Self-Report Measures**

	Mean	Std. Deviation	N
FIS	84.3	25.6	92
SSSemo	3.9	0.8	92
SSStang	4.1	0.9	92
SSSaff	4.1	1.0	92
SSSpos	4.4	0.7	92
SSSadd	4.4	0.8	92
SSStot	4.2	0.7	92
UCLA	44.8	10.6	92
SOS	40.3	10.8	92

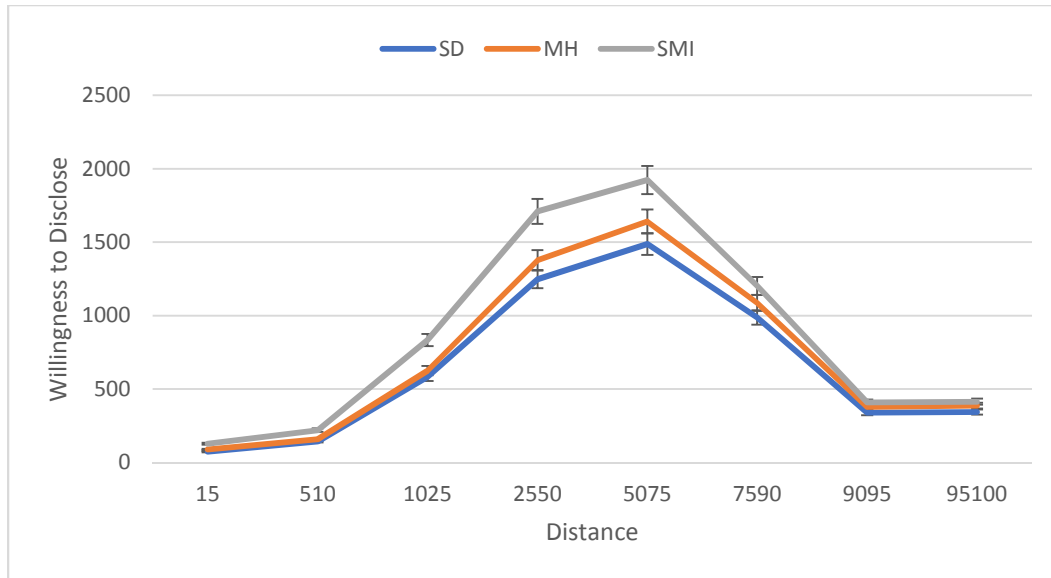


Figure 1. Graph of Type x Distance interaction effects. Smaller Y values represent more willingness to disclose.

Appendix A

Demographics

1. What is your age? _____
2. If you're in school, what is your current year in school?
 Fresh Soph Junior Senior Graduate
3. What is your gender? Male Female Other _____
4. Are you a full-time student? Yes No
5. If Yes, to question 4 what is your major? _____
6. If Yes, to question 4 what is your cumulative GPA? _____

7. If Yes, to question 4 what was your semester GPA in your most recently completed semester? _____
8. What is your ethnicity?
 ____ Hispanic or Latino
 ____ NonHispanic or Latino
9. What is your race?
 ____ White, Euro-American
 ____ African American
 ____ Native Hawaiian or Other Pacific Islander
 ____ Asian
 ____ American Indian or Alaska Native
 ____ More than one race
10. Are you employed? Yes (Full or part time? Circle one) No
11. Have you interacted with someone who has a mental health disorder (ex. Depression, anxiety) or a serious mental health disorder (ex. Schizophrenia, Bipolar Disorder)?
 Yes No
12. Are you *currently* in treatment for emotional/behavioral/mental health concerns?
 Yes No
 If yes, what is the focus of that treatment? _____
13. Do you have any *history* of mental health treatment? Yes No
 If yes, what was the focus of that treatment? _____
14. Are you *currently* taking medication for emotional/behavioral/mental health concerns?
 Yes No
 If yes, please indicate the medication, dose, and length of use for each medication:
 Med: Dose: Length of use:
15. Do you have a *history* of taking medication for emotional/behavioral/mental health concerns?
 Yes No
 If yes, please indicate the medication, dose, and length of use for each medication:
 Med: Dose: Length of use:
16. Do you use alcohol? Yes (# drinks per week: ____) No
17. Do you have any history of treatment for alcohol/substance abuse? Yes No

17. Do you use tobacco? Yes (smoke or chew? # of cigs or dips/day? ___) No
18. Are you a Veteran? Yes No
19. Have you had experience in a combat environment? Yes No
20. Have you ever had direct experience to a traumatic event in which your life was actually in danger, or you thought your life was in danger? Yes No
21. Have you ever witnessed a traumatic event in which someone else's life seemed to be in danger? Yes No
22. Have you learned that a traumatic event occurred to a close family member or close friend? (In the cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental) Yes No
23. Have you experienced repeated or extreme exposure to aversive details of traumatic events? Yes No

Appendix B

Fear of Intimacy Scale

1	2	3	4	5
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extremely characteristic of me

Part A Instructions: Imagine you are in a *close, dating* relationship. Respond to the following statements as you would *if you were in that close relationship*. Rate how characteristic each

statement is of you on a scale of 1 to 5 as described below, and put your responses on the answer sheet.

Note. In each statement "O" refers to the person who would be in the close relationship with you.

1. I would feel uncomfortable telling O about things in the past that I have felt ashamed of.
2. I would feel uneasy talking with O about something that has hurt me deeply.
3. I would feel comfortable expressing my true feelings to O.
4. If O were upset I would sometimes be afraid of showing that I care.
5. I might be afraid to confide my innermost feelings to O.
6. I would feel at ease telling O that I care about him/her.
7. I would have a feeling of complete togetherness with O.
8. I would be comfortable discussing significant problems with O.
9. A part of me would be afraid to make a long-term commitment to O.
10. I would feel comfortable telling my experiences, even sad ones, to O.
11. I would probably feel nervous showing O strong feelings of affection.
12. I would find it difficult being open with O about my personal thoughts.
13. I would feel uneasy with O depending on me for emotional support.
14. I would not be afraid to share with O what I dislike about myself.
15. I would be afraid to take the risk of being hurt in order to establish a closer relationship with O.
16. I would feel comfortable keeping very personal information to myself.
17. I would not be nervous about being spontaneous with O.

18. I would feel comfortable telling O things that I do not tell other people.
19. I would feel comfortable trusting O with my deepest thoughts and feelings.
20. I would sometimes feel uneasy if O told me about very personal matters.
21. I would be comfortable revealing to O what I feel are my shortcomings and handicaps.
22. I would be comfortable with having a close emotional tie between us.
23. I would be afraid of sharing my private thoughts with O.
24. I would be afraid that I might not always feel close to O.
25. I would be comfortable telling O what my needs are.
26. I would be afraid that O would be more invested in the relationship than I would be.
27. I would feel comfortable about having open and honest communication with O.
28. I would sometimes feel uncomfortable listening to O's personal problems.
29. I would feel at ease to completely be myself around O.
30. I would feel relaxed being together and talking about our personal goals.

Part B Instructions: Respond to the following statements as they apply to your past *relationships*. Rate how characteristic each statement is of you on a scale of 1 to 5 as described in the instructions for Part A.

31. I have shied away from opportunities to be close to someone.
32. I have held back my feelings in previous relationships.
33. There are people who think that I am afraid to get close to them.
34. There are people who think that I am not an easy person to get to know.

35. I have done things in previous relationships to keep me from developing closeness.

Appendix C

Medical Outcomes Social Support Survey

Instructions: People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kinds of support available to you if you need it? Select the appropriate number for each answer using the scale below.

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Emotional/Informational Support					

Someone you can count on to listen to you when you need to talk	1	2	3	4	5
Someone to give you information to help you understand a situation	1	2	3	4	5
Someone to give you good advice about a crisis	1	2	3	4	5
Someone to confide in or talk to about yourself or your problems	1	2	3	4	5
Someone whose advice you really want	1	2	3	4	5
Someone to share your most private worries and fears with	1	2	3	4	5
Someone to turn to for suggestions about how to deal with a personal problem	1	2	3	4	5
Someone who understands your problems	1	2	3	4	5
Tangible Support					
Someone to help you if you were confined to bed	1	2	3	4	5
Someone to take you to the doctor if you needed it	1	2	3	4	5
Someone to prepare your meals if you were unable to do it yourself	1	2	3	4	5
Someone to help with daily chores if you were sick	1	2	3	4	5

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
--	-------------------------	-----------------------------	-------------------------	-------------------------	------------------------

Affectionate Support					
Someone who shows you love and affection	1	2	3	4	5
Someone to love and make you feel wanted	1	2	3	4	5
Someone who hugs you	1	2	3	4	5
Positive Social Interaction					
Someone to have a good time with	1	2	3	4	5
Someone to get together with for relaxation	1	2	3	4	5
Someone to do something enjoyable with	1	2	3	4	5
Additional Item					
Someone to do things with to help you get your mind off things	1	2	3	4	5

Appendix D

UCLA Loneliness Scale Version 3

Instructions: The following statements describe how people sometimes feel. For each statement, please indicate how often you feel the way described by writing a number in the space provided. Here is an example:

How often do you feel happy?

If you never felt happy, you would respond "never"; if you always feel happy, you would respond "always."

NEVER 1	RARELY 2	SOMETIMES 3	ALWAYS 4
------------	-------------	----------------	-------------

-
1. How often do you feel that you are "in tune" with the people around you? _____

 2. How often do you feel that you lack companionship? _____

 3. How often do you feel that there is no one you can turn to? _____

 4. How often do you feel alone? _____

 5. How often do you feel part of a group of friends? _____

 6. How often do you feel that you have a lot in common with the people around you? _____

 7. How often do you feel that you are no longer close to anyone? _____

 8. How often do you feel that your interests and ideas are not shared by those around you? _____

 9. How often do you feel outgoing and friendly? _____

 10. How often do you feel close to people? _____

 11. How often do you feel left out? _____

 12. How often do you feel that your relationships with others are not meaningful? _____

 13. How often do you feel that no one really knows you well? _____

 14. How often do you feel isolated from others? _____

 15. How often do you feel you can find companionship when you want it? _____

16. How often do you feel that there are people who really understand you? _____

17. How often do you feel shy? _____

18. How often do you feel that people are around you but not with you? _____

19. How often do you feel that there are people you can talk to? _____

20. How often do you feel that there are people you can turn to? _____

Appendix E

Schwartz Outcomes Scale-10

Instructions: Please respond to each statement by circling the number that best fits how you have generally felt

over the last 7 days. There are no right or wrong responses. Often the first answer that comes to mind is best.

1. Given my current physical condition, I am satisfied with what I can do.

0 1 2 3 4 5 6

Never

All of the time or nearly all of the time

2. I have confidence in my ability to sustain important relationships.

0 1 2 3 4 5 6

Never

All of the time or nearly all of the time

3. I feel hopeful about my future.

0 1 2 3 4 5 6

Never

All of the time or nearly all of the time

4. I am often interested and excited about things in my life

0 1 2 3 4 5 6

Never

All of the time or nearly all of the time

5. I am able to have fun.

0 1 2 3 4 5 6

Never

All of the time or nearly all of the time

6. I am generally satisfied with my psychological health.

0 1 2 3 4 5 6

Never

All of the time or nearly all of the time

7. I am able to forgive myself for my failures.

0 1 2 3 4 5 6

Never

All of the time or nearly all of the time

8. My life is progressing according to my expectations.

0 1 2 3 4 5 6

Never

All of the time or nearly all of the time

9. I am able to handle conflicts with others.

Never 0 1 2 3 4 5 6 All of the time or nearly all of the time

10. I have peace of mind.

Never 0 1 2 3 4 5 6 All of the time or nearly all of the time

Appendix F. Correlational Analysis

		FIS	UCLA	SOS	SDauc	MHauc	SMIauc	SSStot	SSSemo	SSStang	SSSaff	SSSpos	SSSadd
FIS	Pearson Correlation	1	.440**	- .501**	.059	.056	.118	- .284**	-.347**	-.120	-.279**	-.215*	-.238*
	Sig. (2-tailed)		.000	.000	.579	.599	.263	.006	.001	.256	.007	.040	.022
	N	92	92	92	92	92	92	92	92	92	92	92	92
UCLA	Pearson Correlation	.440**	1	- .666**	.082	-.035	-.037	- .598**	-.522**	-.455**	-.504**	-.478**	-.387**
	Sig. (2-tailed)	.000		.000	.440	.741	.726	.000	.000	.000	.000	.000	.000
	N	92	92	92	92	92	92	92	92	92	92	92	92
SOS	Pearson Correlation	- .501**	- .666**	1	-.072	.038	-.015	.433**	.318**	.332**	.385**	.324**	.275**
	Sig. (2-tailed)	.000	.000		.495	.719	.891	.000	.002	.001	.000	.002	.008
	N	92	92	92	92	92	92	92	92	92	92	92	92
SDauc	Pearson Correlation	.059	.082	-.072	1	.796**	.735**	.058	.112	.068	-.014	.075	.110
	Sig. (2-tailed)	.579	.440	.495		.000	.000	.586	.289	.521	.895	.478	.297
	N	92	92	92	92	92	92	92	92	92	92	92	92
MHauc	Pearson Correlation	.056	-.035	.038	.796**	1	.847**	.113	.143	.159	.072	.073	.087
	Sig. (2-tailed)	.599	.741	.719	.000		.000	.286	.175	.130	.493	.492	.409

SSSpos	Pearson Correlation	-.215*	-.478**	.324**	.075	.073	.040	.857**	.559**	.418**	.633**	1	.857**
	Sig. (2-tailed)	.040	.000	.002	.478	.492	.702	.000	.000	.000	.000		.000
	N	92	92	92	92	92	92	92	92	92	92	92	92
SSSadd	Pearson Correlation	-.238*	-.387**	.275**	.110	.087	.099	.793**	.453**	.331**	.562**	.857**	1
	Sig. (2-tailed)	.022	.000	.008	.297	.409	.350	.000	.000	.001	.000	.000	
	N	92	92	92	92	92	92	92	92	92	92	92	92

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix G. Repeated Measures ANOVA**Tests of Within-Subjects Effects (SD15 and MH15)**

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	11494.503	1	11494.503	4.959	.028
	Greenhouse-Geisser	11494.503	1.000	11494.503	4.959	.028
	Huynh-Feldt	11494.503	1.000	11494.503	4.959	.028
	Lower-bound	11494.503	1.000	11494.503	4.959	.028
Error(Type)	Sphericity Assumed	210923.692	91	2317.843		
	Greenhouse-Geisser	210923.692	91.000	2317.843		
	Huynh-Feldt	210923.692	91.000	2317.843		
	Lower-bound	210923.692	91.000	2317.843		

Tests of Within-Subjects Effects (MH15 and SMI15)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	69234.721	1	69234.721	18.921	.000
	Greenhouse-Geisser	69234.721	1.000	69234.721	18.921	.000
	Huynh-Feldt	69234.721	1.000	69234.721	18.921	.000
	Lower-bound	69234.721	1.000	69234.721	18.921	.000
Error(Type)	Sphericity Assumed	332983.549	91	3659.160		
	Greenhouse-Geisser	332983.549	91.000	3659.160		
	Huynh-Feldt	332983.549	91.000	3659.160		
	Lower-bound	332983.549	91.000	3659.160		

Tests of Within-Subjects Effects (SD15 and SMI15)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	137149.740	1	137149.740	26.990	.000
	Greenhouse-Geisser	137149.740	1.000	137149.740	26.990	.000
	Huynh-Feldt	137149.740	1.000	137149.740	26.990	.000
	Lower-bound	137149.740	1.000	137149.740	26.990	.000
Error(Type)	Sphericity Assumed	462412.885	91	5081.460		
	Greenhouse-Geisser	462412.885	91.000	5081.460		
	Huynh-Feldt	462412.885	91.000	5081.460		
	Lower-bound	462412.885	91.000	5081.460		

Tests of Within-Subjects Effects (SD510 and MH510)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	9837.141	1	9837.141	1.550	.216
	Greenhouse-Geisser	9837.141	1.000	9837.141	1.550	.216
	Huynh-Feldt	9837.141	1.000	9837.141	1.550	.216
	Lower-bound	9837.141	1.000	9837.141	1.550	.216
Error(Type)	Sphericity Assumed	577626.914	91	6347.549		
	Greenhouse-Geisser	577626.914	91.000	6347.549		
	Huynh-Feldt	577626.914	91.000	6347.549		
	Lower-bound	577626.914	91.000	6347.549		

Tests of Within-Subjects Effects (SD510 and SMI510)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	274112.111	1	274112.111	24.688	.000
	Greenhouse-Geisser	274112.111	1.000	274112.111	24.688	.000
	Huynh-Feldt	274112.111	1.000	274112.111	24.688	.000
	Lower-bound	274112.111	1.000	274112.111	24.688	.000
Error(Type)	Sphericity Assumed	1010363.865	91	11102.900		
	Greenhouse-Geisser	1010363.865	91.000	11102.900		
	Huynh-Feldt	1010363.865	91.000	11102.900		
	Lower-bound	1010363.865	91.000	11102.900		

Tests of Within-Subjects Effects (MH510 and SMI510)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	180093.980	1	180093.980	20.836	.000
	Greenhouse-Geisser	180093.980	1.000	180093.980	20.836	.000
	Huynh-Feldt	180093.980	1.000	180093.980	20.836	.000
	Lower-bound	180093.980	1.000	180093.980	20.836	.000
Error(Type)	Sphericity Assumed	786533.005	91	8643.220		
	Greenhouse-Geisser	786533.005	91.000	8643.220		
	Huynh-Feldt	786533.005	91.000	8643.220		
	Lower-bound	786533.005	91.000	8643.220		

Tests of Within-Subjects Effects (SD1025 and MH1025)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	82424.764	1	82424.764	1.242	.268
	Greenhouse-Geisser	82424.764	1.000	82424.764	1.242	.268
	Huynh-Feldt	82424.764	1.000	82424.764	1.242	.268
	Lower-bound	82424.764	1.000	82424.764	1.242	.268
Error(Type)	Sphericity Assumed	6038965.665	91	66362.260		
	Greenhouse-Geisser	6038965.665	91.000	66362.260		
	Huynh-Feldt	6038965.665	91.000	66362.260		
	Lower-bound	6038965.665	91.000	66362.260		

Tests of Within-Subjects Effects (SD1025 and SMI1025)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	2877500.543	1	2877500.543	31.354	.000
	Greenhouse-Geisser	2877500.543	1.000	2877500.543	31.354	.000
	Huynh-Feldt	2877500.543	1.000	2877500.543	31.354	.000
	Lower-bound	2877500.543	1.000	2877500.543	31.354	.000
Error(Type)	Sphericity Assumed	8351602.582	91	91775.853		
	Greenhouse-Geisser	8351602.582	91.000	91775.853		
	Huynh-Feldt	8351602.582	91.000	91775.853		
	Lower-bound	8351602.582	91.000	91775.853		

Tests of Within-Subjects Effects (MH1025 and SMI1025)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	1985908.256	1	1985908.256	31.675	.000
	Greenhouse-Geisser	1985908.256	1.000	1985908.256	31.675	.000
	Huynh-Feldt	1985908.256	1.000	1985908.256	31.675	.000
	Lower-bound	1985908.256	1.000	1985908.256	31.675	.000
Error(Type)	Sphericity Assumed	5705356.392	91	62696.224		
	Greenhouse-Geisser	5705356.392	91.000	62696.224		
	Huynh-Feldt	5705356.392	91.000	62696.224		
	Lower-bound	5705356.392	91.000	62696.224		

Tests of Within-Subjects Effects (SD2550 and MH2550)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	753136.092	1	753136.092	4.570	.035
	Greenhouse-Geisser	753136.092	1.000	753136.092	4.570	.035
	Huynh-Feldt	753136.092	1.000	753136.092	4.570	.035
	Lower-bound	753136.092	1.000	753136.092	4.570	.035
Error(Type)	Sphericity Assumed	14998001.603	91	164813.204		
	Greenhouse-Geisser	14998001.603	91.000	164813.204		
	Huynh-Feldt	14998001.603	91.000	164813.204		
	Lower-bound	14998001.603	91.000	164813.204		

Tests of Within-Subjects Effects (SD2550 and SMI2550)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	9787725.034	1	9787725.034	57.141	.000
	Greenhouse-Geisser	9787725.034	1.000	9787725.034	57.141	.000
	Huynh-Feldt	9787725.034	1.000	9787725.034	57.141	.000
	Lower-bound	9787725.034	1.000	9787725.034	57.141	.000
Error(Type)	Sphericity Assumed	15587450.747	91	171290.668		
	Greenhouse-Geisser	15587450.747	91.000	171290.668		
	Huynh-Feldt	15587450.747	91.000	171290.668		
	Lower-bound	15587450.747	91.000	171290.668		

Tests of Within-Subjects Effects (MH 2550 and SMI2550)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	5110763.895	1	5110763.895	41.736	.000
	Greenhouse-Geisser	5110763.895	1.000	5110763.895	41.736	.000
	Huynh-Feldt	5110763.895	1.000	5110763.895	41.736	.000
	Lower-bound	5110763.895	1.000	5110763.895	41.736	.000
Error(Type)	Sphericity Assumed	11143420.676	91	122455.172		
	Greenhouse-Geisser	11143420.676	91.000	122455.172		
	Huynh-Feldt	11143420.676	91.000	122455.172		
	Lower-bound	11143420.676	91.000	122455.172		

Tests of Within-Subjects Effects (SD5075 and MH5075)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	1075227.210	1	1075227.210	8.510	.004
	Greenhouse-Geisser	1075227.210	1.000	1075227.210	8.510	.004
	Huynh-Feldt	1075227.210	1.000	1075227.210	8.510	.004
	Lower-bound	1075227.210	1.000	1075227.210	8.510	.004
Error(Type)	Sphericity Assumed	11498361.657	91	126355.623		
	Greenhouse-Geisser	11498361.657	91.000	126355.623		
	Huynh-Feldt	11498361.657	91.000	126355.623		
	Lower-bound	11498361.657	91.000	126355.623		

Tests of Within-Subjects Effects (SD5075 and SMI5075)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	8736460.810	1	8736460.810	49.415	.000
	Greenhouse-Geisser	8736460.810	1.000	8736460.810	49.415	.000
	Huynh-Feldt	8736460.810	1.000	8736460.810	49.415	.000
	Lower-bound	8736460.810	1.000	8736460.810	49.415	.000
Error(Type)	Sphericity Assumed	16088607.549	91	176797.885		
	Greenhouse-Geisser	16088607.549	91.000	176797.885		
	Huynh-Feldt	16088607.549	91.000	176797.885		
	Lower-bound	16088607.549	91.000	176797.885		

Tests of Within-Subjects Effects (MH5075 and SMI5075)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	3681865.712	1	3681865.712	32.024	.000
	Greenhouse-Geisser	3681865.712	1.000	3681865.712	32.024	.000
	Huynh-Feldt	3681865.712	1.000	3681865.712	32.024	.000
	Lower-bound	3681865.712	1.000	3681865.712	32.024	.000
Error(Type)	Sphericity Assumed	10462426.280	91	114971.717		
	Greenhouse-Geisser	10462426.280	91.000	114971.717		
	Huynh-Feldt	10462426.280	91.000	114971.717		
	Lower-bound	10462426.280	91.000	114971.717		

Tests of Within-Subjects Effects (SD7590 and MH7590)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	453522.962	1	453522.962	10.726	.001
	Greenhouse-Geisser	453522.962	1.000	453522.962	10.726	.001
	Huynh-Feldt	453522.962	1.000	453522.962	10.726	.001
	Lower-bound	453522.962	1.000	453522.962	10.726	.001
Error(Type)	Sphericity Assumed	3847686.022	91	42282.264		
	Greenhouse-Geisser	3847686.022	91.000	42282.264		
	Huynh-Feldt	3847686.022	91.000	42282.264		
	Lower-bound	3847686.022	91.000	42282.264		

Tests of Within-Subjects Effects (SD7590 and SMI7590)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	2118563.392	1	2118563.392	39.741	.000
	Greenhouse-Geisser	2118563.392	1.000	2118563.392	39.741	.000
	Huynh-Feldt	2118563.392	1.000	2118563.392	39.741	.000
	Lower-bound	2118563.392	1.000	2118563.392	39.741	.000
Error(Type)	Sphericity Assumed	4851180.749	91	53309.679		
	Greenhouse-Geisser	4851180.749	91.000	53309.679		
	Huynh-Feldt	4851180.749	91.000	53309.679		
	Lower-bound	4851180.749	91.000	53309.679		

Tests of Within-Subjects Effects (MH7590 and SMI7590)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	611660.742	1	611660.742	22.381	.000
	Greenhouse-Geisser	611660.742	1.000	611660.742	22.381	.000
	Huynh-Feldt	611660.742	1.000	611660.742	22.381	.000
	Lower-bound	611660.742	1.000	611660.742	22.381	.000
Error(Type)	Sphericity Assumed	2486930.273	91	27328.904		
	Greenhouse-Geisser	2486930.273	91.000	27328.904		
	Huynh-Feldt	2486930.273	91.000	27328.904		
	Lower-bound	2486930.273	91.000	27328.904		

Tests of Within-Subjects Effects (SD9095 and MG9095)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	74704.110	1	74704.110	14.612	.000
	Greenhouse-Geisser	74704.110	1.000	74704.110	14.612	.000
	Huynh-Feldt	74704.110	1.000	74704.110	14.612	.000
	Lower-bound	74704.110	1.000	74704.110	14.612	.000
Error(Type)	Sphericity Assumed	465229.093	91	5112.408		
	Greenhouse-Geisser	465229.093	91.000	5112.408		
	Huynh-Feldt	465229.093	91.000	5112.408		
	Lower-bound	465229.093	91.000	5112.408		

Tests of Within-Subjects Effects (SD9095 and SMI9095)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	221219.565	1	221219.565	37.949	.000
	Greenhouse-Geisser	221219.565	1.000	221219.565	37.949	.000
	Huynh-Feldt	221219.565	1.000	221219.565	37.949	.000
	Lower-bound	221219.565	1.000	221219.565	37.949	.000
Error(Type)	Sphericity Assumed	530467.935	91	5829.318		
	Greenhouse-Geisser	530467.935	91.000	5829.318		
	Huynh-Feldt	530467.935	91.000	5829.318		
	Lower-bound	530467.935	91.000	5829.318		

Tests of Within-Subjects Effects (MH9095 and SMI9095)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	38816.610	1	38816.610	13.443	.000
	Greenhouse-Geisser	38816.610	1.000	38816.610	13.443	.000
	Huynh-Feldt	38816.610	1.000	38816.610	13.443	.000
	Lower-bound	38816.610	1.000	38816.610	13.443	.000
Error(Type)	Sphericity Assumed	262766.202	91	2887.541		
	Greenhouse-Geisser	262766.202	91.000	2887.541		
	Huynh-Feldt	262766.202	91.000	2887.541		
	Lower-bound	262766.202	91.000	2887.541		

Tests of Within-Subjects Effects (SD95100 and MH95100)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	88484.918	1	88484.918	14.697	.000
	Greenhouse-Geisser	88484.918	1.000	88484.918	14.697	.000
	Huynh-Feldt	88484.918	1.000	88484.918	14.697	.000
	Lower-bound	88484.918	1.000	88484.918	14.697	.000
Error(Type)	Sphericity Assumed	547867.425	91	6020.521		
	Greenhouse-Geisser	547867.425	91.000	6020.521		
	Huynh-Feldt	547867.425	91.000	6020.521		
	Lower-bound	547867.425	91.000	6020.521		

Tests of Within-Subjects Effects (SD95100 and SMI95100)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	228032.643	1	228032.643	33.947	.000
	Greenhouse-Geisser	228032.643	1.000	228032.643	33.947	.000
	Huynh-Feldt	228032.643	1.000	228032.643	33.947	.000
	Lower-bound	228032.643	1.000	228032.643	33.947	.000
Error(Type)	Sphericity Assumed	611277.123	91	6717.331		
	Greenhouse-Geisser	611277.123	91.000	6717.331		
	Huynh-Feldt	611277.123	91.000	6717.331		
	Lower-bound	611277.123	91.000	6717.331		

Tests of Within-Subjects Effects (MH95100 and SMI95100)

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Type	Sphericity Assumed	32422.860	1	32422.860	10.687	.002
	Greenhouse-Geisser	32422.860	1.000	32422.860	10.687	.002
	Huynh-Feldt	32422.860	1.000	32422.860	10.687	.002
	Lower-bound	32422.860	1.000	32422.860	10.687	.002
Error(Type)	Sphericity Assumed	276075.577	91	3033.798		
	Greenhouse-Geisser	276075.577	91.000	3033.798		
	Huynh-Feldt	276075.577	91.000	3033.798		
	Lower-bound	276075.577	91.000	3033.798		

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