THE IMPACT OF PARENTING AND PERSONALITY ON MENTAL ILLNESS STIGMA

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Abstract

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Public stigma towards people with mental illness is often comprised of incorrect beliefs and stereotypes about dangerousness and social and interpersonal deficits. Past research has examined the impact that one's personality and upbringing have on the willingness to endorse stigmatizing beliefs. While results have been mixed, low prosocial personality traits (Yuan et al., 2018) and high parental control/overprotectiveness (Zhao et al., 2015) have been shown to predict higher levels of mental illness stigma. Currently, no study has examined potential interaction effects between these factors; it is possible that higher levels of prosocial personality traits may lessen the impact controlling parenting has on mental illness stigma through the facilitation of contact experiences with stigmatized individuals, which commonly contributes to reduced endorsement of stigma (Yuan et al., 2018). It was predicted that controlling parenting would be positively associated with the endorsement of beliefs that mentally ill individuals are dangerous and possess poor social skills, and that this association would be lessened by high prosocial personality traits such as Agreeableness, Extraversion, and Openness. An overall sample of 268 participants between the ages of 18 and 24 were recruited from two separate online platforms and reported on measures of recalled parental overprotectiveness, personality traits, and stigmatizing beliefs. The present findings indicate that none of the interaction effects between parenting and personality were significant. Correlational analyses indicate that high Agreeableness and Openness predict lower perceived dangerousness and low social skills, while Extraversion shows a negative association with perceived poor social skills. Parental overprotectiveness displayed no significant correlations with any stigma measures, while regression models indicated that high parental overcontrol contributes to perceived poor social and

interpersonal skills for mentally ill individuals. Exploratory analyses found a significant two-way interaction between gender and Extraversion in determining perceived dangerousness. Implications of these findings are discussed.

Introduction

Stigmatizing beliefs, views, and misconceptions are widespread and those with mental illness contend with persistent difficulties, with four out of every five people with mental illness having faced a form of it (Mohammadzadeh et al., 2020). Stigma, as defined by the World Health Organization (2008), is a "distinguishing mark establishing a demarcation between the stigmatized person and others attributing negative characteristics to this person" (p. 21). The endorsement of stigma tends to emerge from factors such as the desire for conformity, power difference between groups, and the unique emotional and personality characteristics of perpetrators, all of which similarly contribute to prejudice and allow for comparisons between the two constructs (Phelan et al., 2008). Mental illness stigma is often comprised of three domains: endorsement of incorrect knowledge or stereotypes, prejudice and negative attitudes, and discrimination toward those who suffer from mental illnesses (Ottati et al., 2005; Thornicroft et al., 2007). Stigma typically affects individuals in two different forms, the first being stigmatizing beliefs originating from the misconceptions or stereotype endorsement of others or one's culture, known as public stigma, and the internalization of stigmatizing beliefs and views by those who suffer from the disorders themselves, known as self- or internalized stigma (Corrigan & Watson, 2002). Public stigma also contributes to the development of structural stigma, where individuals with mental disorders are placed at a disadvantage in receiving necessary services such as employment, income, and housing (Norman et al., 2008).

According to Goffman (1986), stigma is "deeply discrediting" and results in the individual being considered "not quite human" (p. 3-5). Individuals suffering from mental disorders ranging from substance use (Taylor et al., 2021) to depression (Barney et al., 2010) experience high levels of stigmatization from others and themselves. Such experiences are also common for individuals who identify as neurodivergent, such as those with autism spectrum disorder (ASD; Zuckerman et al., 2018) or attention-deficit/hyperactivity disorder (ADHD; Canu et al., 2008). These individuals often experience social labeling, stereotyping, separation, negative emotional reactions both within themselves and from others, a loss of status, and discrimination as a result of stigma (Zuckerman et al., 2018). Corrigan and

Rao (2012) postulate that a stigmatized individual need not even directly experience stigmatizing attitudes and behaviors for the internalization of stigmatizing beliefs to begin, citing awareness of public stigma as the first step towards the development of self-stigma. Experiences of both public stigma and self-stigma are negatively associated with one's likelihood to seek professional treatment or help due to anticipated discrimination and labeling and the perception that asking for aid is a sign of weakness or inferiority (Vogel et al., 2006). This expectation of experiencing discriminating behaviors and attitudes towards oneself, known as anticipated stigma, has been shown to decrease depressed individual's ability to engage in their profession (Fox et al., 2016).

A number of factors have been shown to contribute to a person's likelihood of endorsing mental illness stigma, with some of the most prevalent being a lack of direct contact experiences or familiarity with stigmatized individuals (Yuan et al., 2018), perceived dangerousness (Gillespie-Lynch et al., 2021), and low cognitive empathy (Gillespie-Lynch et al., 2021). In addition, demographic characteristics have also been shown to be indicative of endorsement of stigmatizing beliefs. Miller and colleagues (2021) found that level of education and income predicted willingness to endorse stigmatizing beliefs, such that college-educated individuals with an average annual income above the national median predicted the highest levels of stigmatizing beliefs. More so than these, however, gender has been shown to be a strong indicator of one's likelihood to stigmatize mentally ill individuals. Research has regularly found that women very often report far less stigma compared to men (Miller et al., 2021; Bradbury, 2020). Another predictor of endorsing stigmatizing beliefs is being a member of a racial minority in the US, who display more stigma towards disorders such as depression and anxiety compared to White people, the racial majority (Eylem et al., 2020). A systematic review conducted by Misra and colleagues (2021) showed that Asian Americans, Black Americans, and Latinx Americans reported higher levels of both public and self-stigma compared to White Americans, potentially due to differing cultural values and experiences of anticipated, structural, and public stigma. There were also indications that gender played a role in determining what stigmatizing beliefs they endorsed and anticipated. Adult African American women reported being fearful of being labelled "weak" or "crazy" due to the expectation that they uphold the

racial stereotype of the "strong black woman" (p. 499), and they especially didn't want to burden their child if they currently had a mental illness.

Family Influences and Mental Illness Stigma

Family experiences have also been shown to be contributing factors to increased risk of prejudice and stigma endorsement against people with mental illnesses. Parens (2012) found that harsh and/or abrasive parenting behaviors, such that the child experienced either punitive discipline or the removal of autonomy, predicted a transition from benign prejudicial tendencies towards unfamiliar or outside groups into malignant prejudice in young children. This was postulated to be due to the children internalizing and modelling the hostility displayed by their parents. Alternatively, secure parental attachment, associated with having had a caregiver who displayed warm and sensitive parenting and provided a stable environment with opportunities to explore, was associated with decreased social distance from individuals with serious mental illnesses (Zhao et al., 2015). In contrast to this, citing one of their parents as a safe haven endorsed heightened wariness of individuals with mental illness. This was postulated to potentially be due to overprotective parenting practices where children perceive their parents as indicators of what is and is not safe to be around, which could contribute to stigmatizing attitudes towards mental disorders that are commonly perceived as dangerous, such as schizophrenia and pain medication addiction (Gillespie-Lynch et al., 2021). Within the literature, direct contact experiences with stigmatized individuals is one of the universally agreed upon reduces of stigma endorsement (Brown, 2012; Yuan et al., 2018). If parental overprotectiveness might result in fewer contact experiences with mentally ill individuals, overall negative perceptions and beliefs about such individuals may become heightened as a result.

In addition to a reduction in contact experiences with mentally ill individuals, children may both internalize and model their own beliefs towards stigmatized groups based on their parent's actions and beliefs. Social learning theory posits that, in unfamiliar situations, children adapt aspects of a significant other's behaviors (such as a parent's gestures or facial expressions), linguistic expressions, or attitudes (Feinman, 1992). All this may point to a situation where children of overly protective and controlling

parents both lack contact experiences with stigmatized individuals and internalize negative attitudes towards such individuals as displayed by their parents. Studies of such situations where children model their attitudes toward stigmatized groups based on their parents' attitudes present contrasting results, typically related to the types of groups being stigmatized. Hellmich and Loeper (2019), in a sample of 753 children ranging in age from 7 to 11 years old, found that children's attitudes and interactions with peers with learning disabilities correlated with parental attitudes about said peers. In contrast to this, Hong and colleagues (2014) found, among a sample of 94 four to five-year-olds, no significant relationship between children's feelings about peers with physical and sensory disabilities and how their parents perceived people with disabilities. This may translate to other stigmatized groups aside from those with learning disabilities, such as LGBTQ+ individuals, or individuals who suffer from mental illnesses. Indeed, research has found that, while parents display generally positive attitudes towards the inclusion of children with special education needs (de Boer & Munde, 2015; Hong et al., 2014), parents hold the least positive attitudes towards children with either cognitive disabilities or social/emotional problems (de Boer et al., 2011). Another factor that could contribute to modelling one's behavior after their parents is when the individual already has a negative view of the stigmatized individual, such as if they were a different ethnicity from you. Considering that children tend to perceive individuals from other ethnicities more negatively compared to their own (Diamond & Tu, 2009), this is necessary to consider and account for when determining what might cause a child to adopt their parent's attitudes and behaviors, especially in situations where they may lack other forms of knowledge or models concerning mental illnesses, resulting in lower mental health literacy and high endorsement of stigmatizing behaviors (Michaels & Corrigan, 2013).

Personality Traits and Mental Illness Stigma

The literature on how personality contributes to mental illness stigma is both varied and multifaceted. One of the primary models for personality is known as the Five Factor model (FFM) (McCrae & John, 1992), which specifies Agreeableness, Openness to Experience, Conscientiousness, Extraversion, and Neuroticism as the five general domains of personality. Agreeableness measures

cooperation, politeness, and amicability. Openness to Experience measures the breadth of one's interests and willingness to try new things. Conscientiousness measures one's ability to focus and levels of organization, and Extraversion measures assertiveness and sociability. Finally, Neuroticism measures one's tendency to experience negative emotions, such as anger or anxiety (McCrae & Costa, 2003).

In general, past research most often concludes that Agreeableness and Openness most commonly predict lower overall stigmatizing beliefs towards individuals with mental illnesses, with both of the traits contributing to reduced perceptions of mentally ill individuals as being weak instead of sick (Yuan et al., 2018), lower perceived dangerousness (Brown, 2012; Yuan et al., 2018), reduced social distancing (Steiger et al., 2022; Yuan et al., 2018; Brown, 2012), and negative reactions (Brown, 2012). Of note is one study by Canu & colleagues (2008) that found no significant association between participants' levels of Openness and their attitudes toward ADHD individuals. However, this difference in findings may be due to differences in how mental disorders were operationalized and portrayed to the participants within the vignettes. The vignettes utilized by Canu and colleagues (2008) provided a target label of ADHD to the subjects of the vignettes, as well as ADHD being labeled a "weakness" in those vignettes (p. 702). This may have provided participants with context and primed them to view ADHD as a negative trait, causing participants to rank their views based on this assessment as opposed to their natural Openness. These findings mirror much of the research investigating the impact of personality traits on prejudicial behaviors. High levels of Agreeableness and Openness have been shown to be associated with lower prejudicial views and beliefs such as sexism, racism, homophobia, and negative views of the intellectually disabled (Ekehammar & Akrami, 2003; Ekehammar et al., 2009; Jackson & Poulsen, 2005; Akrami et al., 2009; Cullen et al., 2002). However, something that reduces the generalizability of these findings to stigma is that prejudice can often differ significantly based on which group it is being aimed towards. Ekehammar and Akrami (2003) measured intercorrelations between various measures of prejudice to only average out at a medium strength ($r = .36$).

Findings for the impact of Neuroticism, Extraversion, and Conscientiousness on mental illness stigma have not been as uniform. Neuroticism is typically associated with increased social distancing and

the perceived dangerousness of mentally ill individuals (Yuan et al., 2018; Steiger et al., 2022), though research has also detected no significant associations between these factors and Neuroticism (Canu et al., 2008; Szeto et al., 2015). Conscientiousness presents an even more varied presentation. Yuan et al. (2018) similarly found that Conscientiousness predicted higher perceptions of mentally ill individuals as "weak." Canu and colleagues (2008) similarly found that high Conscientiousness predicted lower social appraisals of individuals with ADHD, though this only applied in circumstances where Conscientious women were appraising men with ADHD, and this association was relatively weak (β = -.26). In contrast to these findings, other studies have found no significant association between Conscientiousness and mental illness stigma (Brown, 2012); one study found a negative association where higher Conscientiousness predicted lower mental illness stigma overall (Szeto et al., 2015). Regarding Extraversion, heightened Extraversion has been associated with higher perceptions of mentally ill individuals as being weak (Yuan et al., 2018), while other research has indicated that high Extraversion predicts lower overall mental illness stigma (Szeto et al., 2015). Contrary to all these findings, Brown (2012) found that Extraversion showed no significant association with social distancing, perceived dangerousness, or how participants would feel interacting with mentally ill individuals. Additionally, Extraversion's effects on prejudice have also been shown to be multi-faceted (see Silvestri & Richardson, 2001; Jackson & Poulsen, 2005). Extraversion has also been shown to differ based on gender. Canu et al. (2008) found that Extraversion predicted people's appraisals of ADHD individuals, although their findings differed based on the gender of the appraiser and the individuals with ADHD, with extraverted males having a negative appraisal of ADHD women while extraverted women had a positive appraisal of ADHD men. It is important to note that these studies tend to differ in important ways methodologically. Beyond sample characteristics such as the number of participants, ethnicity, and education, differing aspects of stigma and the specific stigmatized groups being assessed tend to vary as well. As a result of this, replication and further analysis of these findings is warranted.

Personality Traits and Parenting Behaviors

The relationship between parenting behaviors and child individual differences and personality traits has been shown to be bidirectional, with parenting behaviors and child traits both affecting one another (Kiff et al., 2011; Kiel et al., 2010; Van Den Akker et al., 2014). As a result, children high in traits such as frustration and impulsivity and low in effortful control can elicit negative parenting behaviors, which then can cause such traits to worsen and lead to negative outcomes later in life. Longitudinal studies have found that warm, sensitive, and child-centered parenting contributes to high Agreeableness, Extraversion, Conscientiousness, Openness, and low Neuroticism. Harsh, negative, or coercive/controlling parenting, as well as child maltreatment, contributes to either low Extraversion and Agreeableness, or low Extraversion and low Openness (de Haan et al., 2013; Scholte et al., 2005, Pulkkinen, 1996; Oshri et al., 2013).

In other research, personality traits have been shown to moderate the relationship between overly controlling/protective parenting and a number of child outcome factors, though findings are contradictory (Lengua et al., 2019). Children with psychologically controlling parents have been shown to develop more externalizing behaviors if the children have high Agreeableness (Mabbe et al., 2016). Alternatively, a 3-year longitudinal study examining the interaction effects between parenting and child personality found that membership in a Resilient personality profile lessened the relation between negative parental control and problem behaviors (Mabbe et al., 2019; Smack et al., 2015). A similar study conducted by van Leeuwen and colleagues (2004) found Agreeableness and Conscientiousness lessened the relationship between negative parental control and externalizing behaviors. So far, no study has assessed whether personality traits affect the relationships between parenting and stigmatizing attitudes towards individuals with mental illness is worthy of investigation, as no research has delved into such a topic so far.

The Present Study

The purpose of this study was twofold: (a) to determine associations between the participant's personality traits, recalled overly controlling parenting, and stigma towards mentally ill individuals through dangerousness and low social skill beliefs, and (b) to determine the moderating effects of personality traits on the relationship between overly protective, anxious parenting and mental illness

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stigma. While researchers have examined the effect of both FFM personality traits and parenting behaviors on various domains of mental illness stigma, no studies have investigated the potential moderation effects of personality on the relationship between controlling parenting and mental illness stigma. Given the dearth of research regarding parenting behaviors and mental illness stigma specifically, as well as the conflicting research on personality traits and mental illness stigma, further investigation of these variables is necessary. For the purposes of this assessment, Agreeableness, Openness, and Extraversion were assessed, due to Agreeableness and Openness' established association with stigma and prejudice and Extraversion's heightened social instructiveness, which could facilitate opportunities for contact experiences with mentally ill individuals. This study was intended to contribute to the literature regarding parenting behaviors and address the contradictory findings of past studies of personality traits and mental illness stigma.

In addition to the clear covariate of contact experiences, given the intrinsic influences that gender and race have been shown to have on both endorsement of stigmatizing beliefs and one's own experiences of stigma these variables were also accounted for as covariates. Following analyses of the key variables of parenting, personality, and stigma, exploratory analyses were planned where interaction effects between gender and key variables were to be assessed were also to be assessed. Additionally, information regarding the participant's highest completed schooling was gathered and controlled for, based on previous findings that reduced overall education/mental health literacy creates an increased likelihood of endorsing stigmatizing beliefs (Miller et al., 2021). Lastly, the participants' age was gathered and entered into analyses as a covariate as well.

Hypotheses

It should be noted that much of the past research on parenting dimensions and stigma has focused on either differing measures of parenting impact (attachment, parental attitudes towards individuals with a mental disorder) or non-mental illness-related measures of prejudice. Despite this, due to parenting dimensions contributing to attachment and general child outcomes, in addition to general prejudice embodying largely the same domains and factors as stigma (Phelan et al., 2008), conservative hypotheses

can be made. It was hypothesized that parental overprotection would be positively associated with mental illness stigma dimensions, and negatively associated with contact experiences with individuals with mental illnesses. High levels of Extraversion, Agreeableness, and Openness may facilitate opportunities for contact experiences with mentally ill individuals, protecting against the fear-preserving effects of anxious, controlling parenting. It was therefore hypothesized that interaction effects will be found between controlling parenting and Extraversion, Agreeableness, Openness, and mental illness stigma. It was also predicted that women would endorse fewer stigmatizing beliefs compared to men.

The impact that personality traits have on stigma towards others is less concrete, given the conflicting reports from past studies. Agreeableness and Openness were hypothesized to negatively predict stigma towards others, as both of these traits are most often displayed in the literature and encourage prosocial behaviors as well as willingness to interact with, and tolerance of, differing viewpoints and ideals. Exploratory analyses will be conducted for multiple regression associations between stigma towards others and Extraversion, Agreeableness, and Openness.

Chapter 2: Method

Participants

Participants were recruited from two sources, the survey website Prolific and WCU's undergraduate participant pool. Prerequisites for participation were being able to speak English fluently, living within the United States, and being between 18 and 24 years old. Participants recruited through Prolific were compensated with $4.50, while participants recruited from WCU's undergraduate participant pool received 0.5 credits towards required study participation for the semester.

The initial sample was comprised of 291 participants, with 68.7% ($n = 200$) of the sample originating from Prolific and 31.3% ($n = 91$) of the sample coming from WCU's undergraduates. The responses from two Prolific participants were removed as they had provided answers on an incomplete form of the survey that was posted due to researcher error, and 21 others (14 from Prolific and five from WCU) were excluded as they reported their ages as being either above 24 or below 18, resulting in a final sample size of 268. The sample contained slightly more Females (51.1%, $n = 137$) than Males (45.1%, $n = 121$), and nine individuals identified as *Other.* The sample was largely White (58.6%, $n = 157$), followed by Black (16.4%, $n = 44$), Native American (9.7%, $n = 26$), Hispanic (9.3%, $n = 25$), Asian (4.9%, $n = 13$) and then Other/Prefer not to Say (1.1%, $n = 3$). The majority of the sample reported High School or their GED as their highest level of education (59.3%, $n = 159$). The mean age of the sample was 20.8 years ($SD = 2.07$). About half of the sample reported that they had been personally diagnosed with a mental disorder in the past (50.7%, $n = 136$), and over half reported that they had lived with somebody with a mental disorder (59%, $n = 158$), had a close family member who had received a mental disorder (61.9%, $n = 166$), or had had a close friend who had been diagnosed with a mental disorder (70.9%, $n = 190$).

Measures

The Beliefs Towards Mental Illness Scale (BMI)

The BMI (Hirai & Clum, 2000) is a self-report questionnaire that was developed to measure cross-cultural differences in beliefs towards individuals with mental illnesses. The BMI has three

subscales which measure Dangerousness, Poor Social and Interpersonal Skills (PSIS), and Incurability. This study used the 5-item dangerousness subscale and the 10-item poor social and interpersonal skills subscales. The incurability subscale was not used as part of this study. Items are scored on a 6-point Likert scale ranging from 0 (*Totally disagree*) to 5 (*Totally agree*). Subscales scores were averaged so that higher aggregate scores reflected higher levels of the construct. These subscales have displayed acceptable reliability, with dangerousness having a Cronbach's alpha of .77 with an American sample and poor social and interpersonal skills having a Cronbach's alpha of .74 (Hirai & Clum, 2000). As part of this study these two subscales were also aggregated into an Overall Stigmatizing Beliefs (OSB) variable. In the present sample, scale reliability analyses determined that all of these scales displayed acceptable internal consistency with Cronbach's α values ranging from 0.75 for Dangerousness, 0.82 for PSIS, and 0.87 for OSB. While factors of stigma such as overall appraisals, perceived dangerousness, perceptions of weakness rather than being sick, and social distancing have made up the majority of stigma outcomes throughout the literature, it is worthy to note that no study so far has examined perception of mentally ill individuals as being socially unskilled with regard to parenting and personality traits.

Egna Minnen Betraffande Uppfostran – Short Form Overcontrolling Parenting Subscale (s-EMBUs)

The s-EMBU (Arrindell et al., 1999) is a self-report questionnaire that assesses adults' perceptions of their parents' rearing behaviors across their entire childhood (Perris et al., 1980). Translating to "my memories of upbringing" in Swedish, it is a 23-item scale that measures perceived parenting in three specific domains: Rejection, Emotional Warmth, and (Over)-Protection, with 7, 6, and 9 items respectively (as well as 1 unscaled item). This study used the 9-item (Over)-Protection subscale. Responses are measured on a 4-point Likert scale, ranging from 1 (*No, never*) to 4 (*Yes, most of the time*). Scores were averaged so that higher aggregate scores reflected higher levels of the construct. The (Over)-Protection subscale of the s-EMBU has shown to possess acceptable Cronbach's alphas ranging between .72 and .79 across multiple cultural contexts. Convergent validity was determined by Arrindell and Engebretsen (2000) by correlating the s-EMBU dimensions of parenting with the 3 dimensions of the

Parental Bonding Instrument (PBI), with the (Over)-Protectiveness subscale of the s-EMBU showing significantly high correlations with Protectiveness subscale of the PBI (0.73 and 0.84 for fathers and mothers). Scale reliability analyses of internal consistency from this study's sample showed a strong Cronbach's alpha of 0.87 for the (Over)Protectiveness subscale.

For this study, participants were asked to answer the questions with regard to their cumulative childhood experience or, if one parent engaged in different behaviors from another, to answer for the parent they felt had the greatest impact on them. This provides a single score for the cumulative effect a participant's parents had on them throughout both childhood and adolescence without asking participants to complete forms for both their mother and father. This has been done for two reasons. The first was to reduce survey completion time for the participant by minimizing the number of forms given to the participant. For the second reason, several studies have called into question the accuracy of retrospective self-report measures (see Bell & Bell, 2018; Halverson, 1988), as well as the impact that recalled parenting behaviors have on broad dimensions of adult personality (McCrae & Costa, 1988), such measures can still prove to be useful when given as preliminary observations for later longitudinal studies (Gerlsma et al., 1990).

M5-50 Agreeableness, Openness, and Extraversion Subscales

The M5-50 (McCord, 2002) is a 50-item questionnaire that measures the 5 traits consistent with the 5-factor model of personality. Items were pulled from Goldberg's International Personality Item Pool to assess the 5 domains measured by the NEO Personality Inventory–Revised (NEO-PI-R; Costa & McCrae, 1992). For this study, the subscales for Extraversion, Agreeableness, and Openness were used. Each factor subscale is comprised of 10 items that ask the participant to rate how accurate statements are to them through a 5-point Likert scale ranging from 1 (*inaccurate*) to 5 (*accurate*), with a midpoint of 3 (*neither*). Several items were reverse scored so that higher scores indicated higher levels of the trait. Scores for items were averaged to create overall subscale scores so that higher aggregate scores reflected higher levels of the construct. Confirmatory factor analyses conducted by Socha and colleagues (2010) found the M5-50 has both excellent reliability and validity, with Cronbach's alphas ranging from .76 to

.86 and excellent goodness-of-fit with the original proposed factor model. A measure of scale reliability for these subscales within the current sample found that internal consistency of these items was high, ranging from 0.73 for Openness, 0.75 for Agreeableness, and 0.90 for Extraversion.

Familiarity/Contact Experiences

The questions asked the participants a) if they had ever been diagnosed with a mental disorder, b) if they had ever lived with someone who had a mental disorder, c) if they had any close family members who had mental disorders, and d) if they had any close friends who had a mental disorder. The definition of mental disorder used for this study was derived from Docksey and colleagues' (2022) definition, which is "a pattern of behaviors, thoughts, and/or feelings that causes a person significant distress or impairment of personal functioning" (p. 3). Participants responded with yes or no to these questions. For calculations, and analyses, no was scored as 0 while yes was scored as 1, and the total scores of contact experiences were added together and then averaged to create an aggregate score.

Analysis Plan

To ensure sufficient sample size, a power analysis was conducted using G*Power (Faul et al., 2009) for multiple linear regression analyses, resulting in a suggested sample size of 264. Descriptive statistics and bivariate correlations were carried out for personality traits, recalled parenting behaviors, mental illness stigma, demographic variables and control variables, means and standard deviations for continuous variables, and frequencies and percentages for categorical variables being collected. Regression analyses were conducted through IBM SPSS Statistics (Version 28), using multiple linear regression analyses. Three separate models were run for each of the stigma variables (Dangerousness, PSIS, and OSB), with each model including (Over)-Protectiveness, one of the three personality traits, and their interaction effect as independent variables. Hierarchical regression analyses were used, with contact experiences, gender, race, age, and highest education completed fitting into the first step of the model, followed by a personality trait and controlling parenting being entered into the second step, and finally the corresponding interaction effect being entered into the third step. Contact experiences was aggregated into an average contact experiences score, and was then entered in as a covariate. Gender and race were both

dummy coded as dichotomized variables; for Gender, "*Male*" was coded as 0, while both "*Female*" and "*Other*" were coded as 1, creating a variable that effectively measures *"Male"* and *"Non-male."* Race was similarly dummy coded into a dichotomized variable, with "*White*" being coded as 0 and every other option being coded as 1, combining non-white ethnicities into a conglomerate sample compared to White participants. Education and age were coded as continuous variables and therefore unchanged. Given that any potential moderation depended upon controlling parenting significantly predicting mental illness stigma, the change in R^2 was determined. All independent variables were mean-centered before analysis. Significant interactions within the original nine models were to be probed using simple slope analyses for stigma toward others levels 1 SD above and below the mean. Following these initial analyses, additional analyses were planned where three models would be run with all key variables entered in at once, and then three final models were planned where interaction effects between gender and key predictor variables would be assessed.

Chapter 3: Results

Descriptive Statistics and Correlations

Analyses were conducted through IBM SPSS (IBM Corp., 2017). Means, standard deviations, and Pearson's *r* correlations among key study variables are displayed in Table 1. Agreeableness and Openness showed a significant positive association. Agreeableness also showed a significant positive relationship with Extraversion, though Openness showed no significant association with Extraversion. Generally, Agreeableness and Openness demonstrated significant negative associations with Dangerousness, PSIS, and OSB, while Extraversion demonstrated a significant negative association only with PSIS. (Over)Protectiveness was negatively associated with Agreeableness, although, contrary to the hypothesis, this variable demonstrated a positive significant correlation with Openness. (Over)Protectiveness demonstrated no significant association with either Dangerousness, PSIS, or OSB. Further, while (Over)Protectiveness demonstrated no significant correlation with the total number of contact experiences, higher levels of reported (Over)Protectiveness were associated with higher levels of specific contact experiences with mentally ill individuals, such as family members (0.17), friends (0.18), someone participants had lived with (0.25), or receiving a diagnosis themselves (0.23).

Regression Analyses

Histograms of standardized residuals indicated that the data contained approximately normally distributed errors, as did the normal P-P plot of standardized residuals, which showed points that never deviated too far from the line. Analyses of the nine moderated multiple regression models showed no significant interaction effects between personality traits and controlling parenting when predicting stigmatizing beliefs (see Tables 2-10). Due to the lack of any significant interaction effects, no simple slope analyses were carried out. Further analysis of these models showed that gender significantly predicted all three stigma outcomes across all nine models, with women endorsing lower levels of stigma compared to men. Total number of contact experiences significantly negatively loaded onto two OSB models, two PSIS models, and two Dangerousness model. For Dangerousness, PSIS, and OSB, gender had a stronger negative loading compared to number of contact experiences. Being a race other than

White was shown to significantly positively load onto one model measuring OSB and all three models measuring PSIS. In all models, levels of Agreeableness and Openness significantly loaded onto the dependent variables such that higher levels of these traits predicted lower levels of stigmatizing beliefs. Extraversion did not significantly load onto any stigmatizing variables across all nine models. (Over)Protectiveness displayed significant positive factor loadings for one of the models assessing PSIS and one of the models assessing OSB. Tables 2-10 present factor loadings of significant variables.

Exploratory Analyses

Three additional multiple moderated regression models were analyzed where all personality traits and controlling parenting made up the second block while all interaction effects between personality traits and controlling parenting were entered in the third block, with one model being conducted for Dangerousness, PSIS, and OSB. The results of these models can be seen in Tables 11-13. None of the three analyses indicated any significant interaction effects between controlling parenting and personality traits. Agreeableness and Openness remained the strongest negative predictors of all mental illness stigma variables, followed by gender.

Three additional hierarchical models were analyzed where potential two-way and three-way interaction effects between parental overcontrol, personality traits, and gender were analyzed. In these models, two-way interaction effects of gender with each of the key independent variables were entered into the third step of the model, followed by three-way interactions between parenting, one of key predicting personality traits, and gender were then entered into a fourth step of the regression model. Each of these models were conducted for the three stigma variables. A majority of these two-way and three-way interaction effects did not significantly load onto any stigma scores. However, two two-way interaction effects were discovered between gender and extraversion for both OSB and Dangerousness (see Tables 14-16).

Chapter 4: Discussion

This study and its results are from an online sample of 268 participants with the common characteristics of being between the ages of 18 to 24, speaking English fluently, and living within the United States. In this sample, information on participants' prosocial personality traits, recalled experiences of parental (Over)Protectiveness, and endorsement of stigmatizing beliefs were gathered. Hypotheses stated that controlling parenting behaviors would contribute to increased endorsement of beliefs that individuals with mental illnesses are dangerous or lack social skills, especially in participants with low Extraversion, Agreeableness, or Openness. Individuals who showed high levels of these traits would theoretically be more likely to have contact experiences with mentally ill individuals, which would contribute to reduced stigmatizing beliefs overall.

Participants' overall stigmatizing beliefs, specifically views of mentally ill individuals as possessing poor or weak social skills, were predicted by participants having experienced high parental overprotectiveness in the past. However, parental overprotectiveness did not determine participants' views of how dangerous mentally ill individuals were, and when Agreeableness and Extraversion were considered, parental overprotectiveness no longer showed any relationship with stigmatizing beliefs whatsoever. Additionally, people who had experienced high parental control in the past were more likely to have any of the four contact experience options presented in this study, which were also shown to contribute to reduced stigmatizing beliefs. These results were surprising, as it was believed that parental overprotectiveness would emerge in situations perceived as dangerous by either the child or the parent, therefore increasing general fear of dangerous situations. These results may be attributable to the specific tone of the s-EMBU's (Over)Protectiveness scale. Zhao et al. (2015) cited that increased distance from seriously mentally ill individuals was associated with seeking out a parent as a safe haven. Contrary to this idea of a parent's protectiveness being viewed in a positive light, overcontrolling parenting as measured by the s-EMBU might have portrayed a circumstance where the parent is not seen as a safe haven and is instead viewed in a negative light by the child. Item content of the s-EMBU notably had a negative tone with regard to participants' past experiences of parental control, as can be seen in items

such as "*I felt that my parents interfered with everything I did*" and "*I wished my parents would worry less about what I was doing.*" In a review of parental influence on child temperament and personality development, Lengua et al. (2019) describe how it is both parental overcontrol as well as certain sensitive and warm parenting behaviors that engender fearfulness towards unfamiliar or distressing situations. Lengua and colleagues (2019) proposed that this may be due to parents limiting exposure to experiences that, while frightening, might provide the child with an opportunity to overcome their fears and enhance confidence in themselves.

Based on this past research and this study's findings, it may be the case that a person's perception of their parents' controlling behaviors, specifically if they approve of said behaviors and the reasoning for them, that actually determines how much they agree with and adopt their parents' views of and reactions to those anxiety-provoking or dangerous situations. In a situation where they do not approve or agree with those behaviors, as was measured by the s-EMBU's (Over)Protectiveness subscale, it may have the opposite effect of causing those individuals to seek out those situations or experiences, as evidenced by our findings that (over)protectiveness was associated with both more contact experiences and higher Openness. Regarding parental control increasing the likelihood of the participant having received a mental disorder diagnosis themselves, having overly anxious parents has been shown to be a risk factor for children developing anxiety disorders (Lawrence et al., 2019; Aktar et al., 2019; Turner et al. 1987) as well as excessive shyness and fearfulness in one's earlier years (Rosenbaum, 1988). Given this information, even if a person agreed with their parents' overtly protective behaviors, it may be the case that participants who had experienced highly controlling parenting lived in a home where a parent or a close family member suffered from a mental disorder, and such experiences likely put them at greater risk for developing similar symptoms as they developed. All of these proposed theories are currently only speculative, but possible avenues for future research could include qualitative analyses of participants' perceptions and approval of their parents' controlling behaviors, as well as how these behaviors influenced their decision-making and general levels of Openness as they grew up.

Consistent with hypotheses, Agreeableness and Openness both significantly predicted lower Dangerousness, PSIS, and OSB, a finding that was present in both correlational analyses and every regression model run as part of this study. For the exploratory regression models where all key variables were assessed at once, Openness had a greater effect than Agreeableness when determining lower OSB and PSIS (with this difference being quite exacerbated in PSIS). High Agreeableness contributed more to Dangerousness compared to Openness. This mirrors much of the past research regarding these two personality traits and their impact on attitudes toward intergroup contact (Vezzali et al., 2016; Metin-Orta & Metin-Camgöz, 2018). Also mirroring findings by Brown (2012) is the fact that Openness and Agreeableness accounted more for stigma towards mental illness than contact experiences. This may be due to these two personality traits contributing to the quality of the contact experiences, a variable that has been shown to be highly important in prejudicial beliefs and was unaccounted for as part of this study. Gender also showed a stronger impact on stigma towards mental illness than contact experiences. Women generally endorsed lower levels of stigma than men throughout all regression analyses, even exploratory analyses. Research into the relationship between gender and stigmatizing attitudes is varied, with some research detecting no significant differences (Ouellette-Kuntz et al., 2010; Brown, 2012) while other research has detected a similar association (Leyser & Greenberger 2008; Page & Islam 2015). Openness was also positively associated with increased chances of all types of contact experiences aside from having a close family member with a mental disorder.

Higher Extraversion, on its own, was associated with a decreased likelihood of viewing mentally ill individuals as socially unskilled; however, Extraversion seemed to have no connection with one's belief in dangerousness or overall stigma, at least based on correlational analyses. Additionally, people with high Extraversion were also more likely to have a close friend who had received a diagnosis of a mental disorder, although it was not associated with any of the other options for contact experiences. Analyses for Extraversion were conducted without specific expectations in mind due to the fact that the relationship between Extraversion and stigma is unclear within the literature. Canu et al. (2008) found that low Extraversion was associated with low desire to interact with ADHD individuals while Yuan et al.

(2018) found that high Extraversion made it more likely for a person to think that mentally ill people are weak rather than being sick. Contrarily, other studies have noted a lack of relationships between Extraversion and mental illness stigma (specifically Dangerousness and Social Distancing, Brown 2012), how racially uniform or diverse one's friend group is (Antonoplis & John, 2022), and views and attitudes towards individuals with intellectual disabilities (Page & Islam, 2015). While Extraversion was considered alongside Agreeableness and Openness to be a prosocial personality trait, what each of these traits contributes to social interactions does differ. Extraversion may only indicate how often a person seeks out social interactions, and not one's willingness to interact with unfamiliar or unknown situations. As a result of this, individuals with high Extraversion could still show low levels of Openness or Agreeableness, which would result in fewer opportunities to engage in contact experiences with stigmatized individuals or reduce the overall quality of these experiences to the point where they're viewed negatively by the individual.

Regarding exploratory analyses, while regression models that considered all possible contributing factors to mental illness stigma again revealed no significant interaction effects, additional analyses of models that considered how gender may affect relationships between parenting, personality, and mental illness stigma revealed an unexpected interaction effect between gender, Extraversion, and mental illness stigma. For men, high Extraversion was associated with decreased levels of stigma endorsement, while for women and those who identified as "Other," higher levels of stigmatizing beliefs were reported, specifically perception of stigmatized individuals being dangerous. This goes against Canu et al.'s (2008) findings that Extraverted women had higher positive appraisals of ADHD men compared to Extraverted men. Canu et al. (2008) suggested that it may be possible that highly Extraverted women are more interested in engaging with and getting to know all types of people, resulting in them being more likely to become friends with mentally ill individuals, which is supported by our finding that people high in Extraversion were more likely to have had a friend who had a mental disorder. Alternatively, highly Extraverted women may expose themselves to more situations where they are engaged in a social interaction with a stigmatized individual, which may or may not result in a positive or negative

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experience. A measure of the quality of the contact experiences could help elucidate this surprising result in future research and replications, as while more opportunities for contact experiences opens room for overall reductions in stigma, the likelihood of having a bad contact experience is naturally higher when a person is more gregarious and constantly seeking experiences. Of course, this stands in contrast to the theory that Extraversion does not imply seeking out new experiences but just constantly seeking out the ones that are already know. Additional analyses will be conducted to further elucidate this unexpected interaction effect.

This study is subject to a number of limitations. First, it is likely that the s-EMBU suffered from diminished accuracy due to a number of factors, such as having participants serve as informants on their parents' behaviors as opposed to receiving responses from the parents directly, and responses relying on participants' memories of their parent's behaviors as opposed to direct observations (Halverson, 1988; Bell & Bell, 2018). Given the fact that parenting behaviors and their intensions can be varied, complex, and difficult to understand from a child's point of view, and that memories of the past can become altered by how a person currently makes sense of those events as opposed to accurately recalling every specific event or detail (Halverson, 1988), it may be the case that the s-EMBU actually looked at participant's conceptualizations of their parent's rearing behaviors and did not acknowledge the more complex intricacies of parenting behaviors. With reduced specificity of participant's experiences through not providing a specific parent or period of childhood for the behaviors measured, it is possible that this may have even further contributed to participants reporting on their conceptualizations of their overall experience with overcontrolling parenting as opposed to accurately reporting on the experiences themselves. Lastly, while a large number of covariates were accounted for as part of this study, past research has shown that the level of income has affected both stigmatizing beliefs (Omari et al., 2021; Foster 2021) and help-seeking behaviors (Yin et al., 2019), and might have served as a helpful covariate within these analyses.

While this study did not find significant interactions between parenting and personality, its results do support and contribute to previous research on the relationships between personality traits, gender,

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contact experiences, and willingness to endorse stigmatizing beliefs. Additionally, this study found evidence that low prosocial personality traits and (over)controlling parenting contributes to participant's negative appraisals of stigmatized individuals' social skills, which had not been examined before this study. Lastly, exploratory analyses revealed a previously unexpected moderation effect where males high in Extraversion endorsed even lower stigmatizing beliefs, while High Extraversion non-males endorsed higher stigmatizing beliefs, which contrasts with previous literature and opens up new avenues for further investigation, specifically with regards to both quality and quantity of contact experiences. Additionally, in future research a longitudinal design would allow for a more direct observation of both parental behaviors as well as examining development of children's willingness to stigmatize unfamiliar groups. Both parent and child's behaviors, attitudes, and perceptions of one another shift drastically over the course of the initial years of life, and analysis during that exact time would allow for direct examination of the developmental paths of both parents' controlling behaviors and the child's resulting fearfulness and dislike for outgroups. Specifically non-punitive overprotectiveness should be measured to further examine potential relationships between parental fearfulness, warmth, and overprotectiveness, as well as requesting information on how the child perceives factors such as parent authority and competence to determine if these affect whether the child models their behaviors after their parent or not. Additional exploratory analyses are planned for the currently gathered data, and based on the wide span of information this preliminary study gathered, multiple avenues for both understanding and designing interventions for stigma endorsement are now open.

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M5-50 Questionnaire Extraversion, Agreeableness, and Openness subscales

This is a personality questionnaire, which should take about 10 minutes. There are no right or wrong answers to these questions; without spending too much time dwelling on any one item, just give the first reaction that comes to mind.

		Inaccurate	Moderately Inaccurate	Neither	Moderately Accurate	Accurate
		1	2	3	4	5
1	Have a vivid imagination	1	2	3	4	5
2	Believe in the importance of art	1	2	3	4	5
3	Have a sharp tongue	1	2	3	4	5
4	Am not interested in abstract ideas	1	2	3	4	5
5	Tend to vote for liberal political candidates	1	2	3	4	5
6	Make friends easily	1	2	3	4	5
7	Suspect hidden motives in others	1	2	3	4	5
8	Do not like art	1	2	3	4	5
9	Keep in the background	1	2	3	4	5
10	Tend to vote for conservative political candidates	1	2	3	4	5
11	Avoid philosophical discussions	1	2	3	4	5
12	Believe that others have good intentions	1	2	3	4	5
13	Have little to say	1	2	3	4	5
14	Feel comfortable around other people	1	2	3	4	5
15	Do not enjoy going to art museums	1	2	3	4	5
16	Don't like to draw attention to myself	1	2	3	4	5
17	Insult people	1	2	3	4	5
18	Have a good word for everyone	1	2	3	4	5
19	Get back at others	1	2	3	4	5

		Inaccurate	Moderately Inaccurate	Neither	Moderately Accurate	Accurate
20	Would describe my experiences as somewhat dull	1	2	3	4	5
21	Carry the conversation to a higher level	1	2	3	4	5
22	Am skilled in handling social situations	1	2	3	4	5
23	Respect others	1	2	3	4	5
24	Am the life of the party	1	2	3	4	5
25	Enjoy hearing new ideas	1	2	3	4	5
26	Accept people as they are	1	2	3	4	5
27	Don't talk a lot	1	2	3	4	5
28	Cut others to pieces	1	2	3	4	5
29	Know how to captivate people	1	2	3	4	5
30	Make people feel at ease	1	2	3	4	5

Appendix B

BMI Questionnaire Dangerousness and PSIS Subscales

The following questions focus on beliefs towards those with mental disorders. Indicate to what degree you agree with the following statements. Do your best to answer as honestly as possible.

	Totally Disagree	Mostly Disagree	Moderately Disagree	Moderately Agree	Mostly Agree	Totally Agree
1. A mentally ill person is more likely to harm others than a normal person.	0	1	2	3	4	5
2. Mental disorder would require a much longer period of time to be cured than would other general diseases.	0	1	2	3	4	5
3. It may be a good idea to stay away from people who have psychological disorder because their behaviour is dangerous.	0	1	2	3	4	5
4. The term "Psychological disorder" makes me feel embarrassed.	0	1	2	3	4	5
5. A person with psychological disorder should have a job with minor responsibilities.	0	1	2	3	4	5
6. Mentally ill people are more likely to be criminals.	0	1	2	3	4	5

	Totally Disagree	Mostly Disagree	Moderately Disagree	Moderately Agree	Mostly Agree	Totally Agree
7. I am afraid of what my boss, friends, and other would think if I were diagnosed as having a psychological disorder.	0	1	2	3	4	5
8. It might be difficult for mentally ill people to follow social rules such as being punctual or keeping promises.	0	1	2	3	4	5
9. I would be embarrassed if people knew that I dated a person who once received psychological treatment	0	1	2	3	4	5
10. I am afraid of people who are suffering from a psychological disorder because they may harm me.	0	1	2	3	4	5
11. A person with a psychological disorder is less likely to function well as a parent	0	1	2	3	4	5
12. I would be embarrassed if a person in my family became mentally ill.	0	1	2	3	4	5

	Totally Disagree	Mostly Disagree	Moderately Disagree	Moderately Agree	Mostly Agree	Totally Agree
13. Mentally ill people are unlikely to be able to live by themselves because they are unable to assume responsibilities.	0	1	2	3	4	5
14. Most people would not knowingly be friends with a mentally ill person.	0	1	2	3	4	5
15. I would not trust the work of a mentally ill person assignment to my work team.	0	1	2	3	4	5

Appendix C

s-EMBU Questionnaire (Over)Protectiveness Subscale

The following questions detail specific parenting behaviors experienced during childhood. Please try and recall how accurate these statements are to your own experiences. If your parents displayed differing behaviors, answer for the parent that you feel had the greatest impact on you. Please leave questions regarding parental behavior towards siblings blank if you do not have any brother(s) or sister(s).

	No, never	Yes, but seldom	Yes, often	Yes, most of the time
1. I wished my parents would worry less about what I was doing	1	2	3	4
2. When I came home, I then had to account for what I had been doing to my parents	1	2	3	4
3. My parents forbade me to do things other children were allowed to do because they were afraid that something might happen to me	1	2	3	4
4. My parents would look sad or in some other way show that I had behaved badly so that I got real feelings of guilt.	1	2	3	4
5. My parents' anxiety that something might happen to me was exaggerated	1	2	3	4
6. I was allowed to go where I liked without my parents caring too much	1	2	3	4
7. I felt that my parents interfered with everything I did	1	2	3	4
8. My parents put decisive limits for what I was and was not allowed to do	1	2	3	4
9. My parents wanted to decide how I should be dressed or how I should look	1	2	3	4

Appendix D: Analyses Tables

Table 1

Key Variable Means, Standard Deviations, and Correlations

Variables	1	2	3	4	5	6	7	8	*M*	*SD*
1. (Over)Protectiveness	1.00	-0.20**	-0.48	0.19**	0.27**	-0.01	0.03	0.01	2.30	0.70
2. Agreeableness		1.00	0.24**	0.19**	-0.07	-0.23**	-0.28**	-0.28**	3.66	0.57
3. Extraversion			1.00	0.09	0.11	-0.06	-0.13*	-0.10	2.79	0.90
4. Openness to Experiences				1.00	0.26**	-0.25**	-0.29**	-0.30**	3.83	0.61
5. Total Contact Experiences					1.00	-0.16**	-0.21**	-0.20**	2.42	1.48
6. Dangerousness						1.00	0.68**	0.92**	2.85	0.87
7. Perceived Low Social and Interpersonal Skills (PSIS)							1.00	0.91**	2.52	0.79
8. Overall Stigmatizing Beliefs (OSB)								1.00	2.69	0.76

Note: N = 268. * *p* < .05. ** *p* < .01

Table 2

Moderated Regression Predicting Overall Stigmatizing Beliefs from (Over)Protective Parenting, Participant Agreeableness, and their Interaction with Age, Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates

Predictor	B	SE	β	t	p	95% CI for B Lower	Upper	r_{sp}
Step 1								
Gender	-0.31	0.09	-.20	-3.40	<.001	-0.48	-0.13	-.19
Race	0.18	0.09	.11	1.95	.052	-0.002	0.36	.11
Age	0.03	0.02	.07	1.10	.274	-0.02	0.07	.06
Education	0.01	0.05	.01	0.14	.887	-0.10	0.11	.01
Total Contact Experiences	-0.09	0.03	-.17	-2.85	.005	-0.15	-0.03	-.16
Step 2								
(Over)Protectiveness	0.03	0.07	.03	0.44	.664	-0.10	0.16	.02
Agreeableness	-0.33	0.08	-.25	-4.31	<.001	-0.49	-0.18	.24
Step 3								
Protectiveness*Agreeableness	-0.11	0.10	-.06	-1.07	.284	-0.30	0.09	-.06

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. N = 268. The interaction effect accounted for 0.4% of the variance, $\Delta R2$ = .004. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 3

Moderated Regression Predicting Overall Stigmatizing Beliefs from (Over)Protective Parenting, Participant Extraversion, and their Interaction with Age, Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates

Predictor	B	SE	β	t	p	95% CI for B Lower	Upper	r_{sp}
Step 1								
Gender	-0.37	0.09	-.24	-3.93	<.001	-0.55	-0.18	-.23
Race	0.18	0.09	.11	1.86	.063	-0.01	0.36	.11
Education	0.004	0.06	.01	0.08	.937	-0.10	0.11	.01
Total Contact Experiences	-0.08	0.03	-.16	-2.49	.014	-0.15	-0.02	.15
Step 2								
(Over)Protectiveness	0.09	0.07	.08	1.32	.188	-0.04	0.22	.08
Extraversion	-0.03	0.05	-.03	-0.50	.615	-0.13	0.08	-.03
Step 3								
Protectiveness*Extraversion	-0.02	0.07	-.01	-0.24	.810	-0.16	0.12	-.01

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$. The interaction effect accounted for 0% of the variance, $\Delta R2 = .000$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 4

Moderated Regression Predicting Overall Stigmatizing Beliefs from (Over)Protective Parenting, Participant Openness, and their Interaction with Age, Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates

Predictor						95% CI for B		
	B	SE	β	t	p	Lower	Upper	r_{sp}
Step 1								
Gender	-0.30	0.09	-.20	-3.35	<.001	-0.48	-0.12	-.19
Race	0.22	0.09	.14	2.41	.017	0.04	0.40	.14
Age	0.04	0.02	.11	1.75	.085	-0.01	0.09	.10
Education	0.001	0.05	.001	0.01	.990	-0.10	0.10	.001
Total Contact Experiences	-0.06	0.03	-.11	-1.73	.085	-0.12	0.01	-.10
Step 2								
(Over)Protectiveness	0.13	0.07	.12	1.99	.047	0.001	0.26	.11
Openness	-0.35	0.08	-.28	-4.64	<.001	-0.50	-0.20	-.26
Step 3								
Protectiveness*Openness	-0.05	0.100	-.03	-0.48	.635	-0.25	0.15	-.03

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$. The interaction effect accounted for 0% of the variance, $\Delta R2 = .000$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 5

Moderated Regression Predicting Dangerousness from (Over)Protective Parenting, Participant Agreeableness, and their Interaction with Age,

Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 1								
Gender	-0.31	0.11	-.18	-2.87	.005	-0.52	-0.10	-.17
Race	0.05	0.11	.03	0.49	.625	-0.16	0.26	.03
Age	0.03	0.03	.06	0.96	.338	-0.03	0.08	.06
Education	0.03	0.06	.04	0.56	.577	-0.09	0.16	.03
Total Contact Experiences	-0.08	0.04	-.14	-2.27	.024	-0.16	-0.01	-.13
Step 2								
(Over)Protectiveness	0.01	0.08	.01	0.15	.879	-0.14	0.17	.01
Agreeableness	-0.32	0.09	-.21	-3.49	<.001	-0.50	-0.14	-.20
Step 3								
Protectiveness*Agreeableness	-0.12	0.12	-.06	-1.01	.314	-0.35	0.11	-.06

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$. The

interaction effect accounted for 0.3% of the variance, $\Delta R2 = .0030$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 6

Moderated Regression Predicting Dangerousness from (Over)Protective Parenting, Participant Extraversion, and their Interaction with Age,

Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates

Predictor	B	SE	β	t	p	95% CI for B Lower	Upper	r_{sp}
Step 1								
Gender	-0.37	0.11	-.21	-3.40	<.001	-0.58	-0.16	-.20
Race	0.05	0.11	.03	0.48	.635	-0.16	0.27	.03
Age	0.03	0.03	.07	1.06	.291	-0.03	0.09	.06
Education	0.03	0.06	.03	0.45	.652	-0.10	0.15	.03
Total Contact Experiences	-0.08	0.04	-.13	-2.05	.042	-0.15	-0.003	-.12
Step 2								
(Over)Protectiveness	0.07	0.08	.06	0.95	.344	-0.08	0.23	.06
Extraversion	0.003	0.06	.003	0.05	.960	-0.12	0.12	.003
Step 3								
Protectiveness*Extraversion	0.01	0.08	.01	0.13	.893	-0.15	0.17	.01

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$. The interaction effect accounted for 0% of the variance, $\Delta R2 = .000$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 7

Moderated Regression Predicting Dangerousness from (Over)Protective Parenting, Participant Openness, and their Interaction with Age,

Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates

Predictor	B	SE	β	t	p	95% CI for B Lower	Upper	r_{sp}
Step 1								
Gender	-0.31	0.11	-.18	-2.86	.005	-0.52	-0.10	-.17
Race	0.09	0.11	.05	0.87	.388	-0.12	0.31	.05
Age	0.04	0.03	.10	1.47	.143	-0.01	0.10	.09
Education	0.03	0.06	.03	0.45	.651	-0.09	0.15	.03
Total Contact Experiences	-0.05	0.04	-.09	-1.33	.184	-0.13	0.02	-.08
Step 2								
(Over)Protectiveness	0.11	0.08	.09	1.39	.167	-0.05	0.26	.08
Openness	-0.33	0.09	-.23	-3.70	<.001	-0.50	-0.15	-.22
Step 3								
Protectiveness*Openness	-0.02	0.12	-.01	-0.13	.899	-0.25	0.22	-.01

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$. The interaction effect accounted for 0% of the variance, $\Delta R2 = .000$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 8

Moderated Regression Predicting PSIS from (Over)Protective Parenting, Participant Agreeableness, and their Interaction with Age, Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates

Predictor	B	SE	β	t	p	Lower	Upper	r_{sp}
						95% CI for *B*		
Step 1								
Gender	-0.31	0.09	-.19	-3.30	.001	0.49	-0.12	-.18
Race	0.30	0.09	.19	3.22	.001	0.12	0.48	.18
Age	0.03	0.02	.07	1.03	.306	-0.02	0.07	.06
Education	-0.02	0.05	-.02	-0.36	.716	-0.13	0.09	-.02
Total Contact Experiences	-0.09	0.03	-.18	-2.93	.004	-0.16	-0.03	-.16
Step 2								
(Over)Protectiveness	0.05	0.07	.04	0.67	.504	-0.09	0.18	.04
Agreeableness	-0.35	0.08	-.25	-4.35	<.001	-0.51	-0.19	-.24
Step 3								
Protectiveness*Agreeableness	-0.09	0.10	-.05	-0.93	.355	-0.29	0.11	-.05

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$. The interaction effect accounted for 0.1% of the variance, $\Delta R2 = .0010$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 9

Moderated Regression Predicting PSIS from (Over)Protective Parenting, Participant Extraversion, and their Interaction with Age, Gender, Race,

Highest Completed Education, and Total Contact Experiences as Covariates

Predictor	B	SE	β	t	p	95% CI for B Lower	95% CI for B Upper	r_{sp}
Step 1								
Gender	-0.36	0.10	-.23	-3.78	<.001	-0.55	-0.17	-.22
Race	0.30	0.10	.19	3.08	.002	0.11	0.49	.18
Age	0.02	0.03	.06	0.93	.355	-0.03	0.08	.05
Education	-0.02	0.06	-.02	-0.36	.719	-0.13	0.09	-.02
Total Contact Experiences	-0.08	0.03	-.16	-2.51	.013	-0.15	-0.02	-.14
Step 2								
(Over)Protectiveness	0.10	0.07	.09	1.49	.138	-0.03	0.24	.09
Extraversion	-0.06	0.05	-.06	-1.04	.302	-0.16	0.05	-.06
Step 3								
Protectiveness*Extraversion	-0.05	0.07	-.04	-0.62	.536	-0.19	0.10	-.04

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$. The

interaction effect accounted for 0.1% of the variance, $\Delta R2 = .0010$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 10

Moderated Regression Predicting PSIS from (Over)Protective Parenting, Participant Openness, and their Interaction with Age, Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates.

Predictor	B	SE	β	t	p	95% CI for B Lower	95% CI for B Upper	r_{sp}
Step 1								
Gender	-0.30	0.09	-.19	-3.21	.001	-0.48	-0.12	-.18
Race	0.34	0.09	.21	3.68	<.001	0.16	0.53	.20
Age	0.04	0.02	.11	1.70	.090	-0.01	0.09	.09
Education	-0.03	0.05	-.03	-0.50	.621	-0.13	0.08	-.03
Total Contact Experiences	-0.06	0.03	-.11	-1.83	.069	-0.13	0.01	-.10
Step 2								
(Over)Protectiveness	0.15	0.07	.13	2.28	.024	0.02	0.28	.13
Openness	-0.37	0.08	-.28	-4.77	<.001	-0.52	-0.22	-.26
Step 3								
Protectiveness*Openness	-0.08	0.10	-.04	-0.78	.438	-0.28	0.12	-.04

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$. The interaction effect accounted for 0.1% of the variance, $\Delta R2 = .0010$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 11

Moderated Regression Predicting Overall Stigmatizing Beliefs from (Over)Protective Parenting, Key Personality Variables, and Interactions

Between Parenting and Personality with Age, Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates.

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 1								
Gender	-0.26	0.09	-.17	-2.89	.004	-0.43	-0.08	-.16
Race	0.22	0.09	.14	2.42	.016	0.04	0.39	.13
Age	0.04	0.02	.11	1.66	.099	-0.01	0.09	.09
Education	0.00	0.05	.00	0.00	.999	-0.10	0.10	.00
Total Contact Experiences	-0.07	0.03	-.13	-2.13	.034	-0.13	-0.01	-.12
Step 2								
(Over)Protectiveness	0.07	0.07	.07	1.12	.262	-0.06	0.20	.06
Agreeableness	-0.27	0.08	-.21	-3.41	<.001	-0.43	-0.12	.19
Extraversion	0.03	0.05	.03	0.53	.594	-0.07	0.13	.03
Openness	-0.29	0.08	-.24	-3.87	<.001	-0.44	-0.14	-.21

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 0.7% of the variance, $\Delta R2 = .0070$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 11 (Continued)

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 3								
Protectiveness*Agreeableness	-0.12	0.10	-.07	-1.18	.239	-0.31	0.08	-.07
Protectiveness*Extraversion	-0.03	0.07	-.03	-0.47	.636	-0.17	0.10	-.03
Protectiveness*Openness	-0.06	0.10	-.03	-0.58	.560	-0.25	0.14	-.03

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 0.7% of the variance, $\Delta R2 = .0070$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 12

Moderated Regression Predicting Dangerousness from (Over)Protective Parenting, Key Personality Variables, and Interactions Between Parenting and Personality with Age, Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates.

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 1								
Gender	-0.27	0.11	-.15	-2.50	.013	-0.48	-0.06	-.14
Race	0.09	0.11	.05	0.85	.398	-0.12	0.30	.05
Age	0.04	0.03	.10	1.50	.136	-0.01	0.10	.09
Education	0.03	0.06	.03	0.41	.685	-0.10	0.15	.02
Total Contact Experiences	-0.06	0.04	-.11	-1.70	.091	-0.14	0.01	-.10
Step 2								
(Over)Protectiveness	0.06	0.08	.04	.707	.480	-0.10	0.21	.04
Agreeableness	-0.27	0.10	-.18	-2.82	.005	-0.46	-0.08	-.16
Extraversion	0.05	0.06	.06	0.91	.362	-0.06	0.17	.05
Openness	-0.28	0.09	-.19	-3.06	.002	-0.46	-0.10	-.18

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 0.4% of the variance, $\Delta R2 = .0040$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 12 (Continued).

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 3								
Protectiveness*Agreeableness	-0.13	0.12	-.07	-1.12	.265	-0.36	0.10	-.06
Protectiveness*Extraversion	-0.001	0.08	-.001	-0.02	.988	-0.16	0.16	-.001
Protectiveness*Openness	-0.02	0.12	-.01	-0.19	.847	-0.25	0.21	-.01

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 0.4% of the variance, $\Delta R2 = .0040$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 13

Moderated Regression Predicting PSIS from (Over)Protective Parenting, Key Personality Variables, and Interactions Between Parenting and

Personality with Age, Gender, Race, Highest Completed Education, and Total Contact Experiences as Covariates.

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 1								
Gender	-0.25	0.09	-.16	-2.71	.007	-0.43	-0.07	-.15
Race	0.34	0.09	.21	3.71	<.001	0.16	0.52	.20
Age	0.04	0.03	.10	1.48	.139	-0.01	0.09	.08
Education	-0.03	0.05	-.03	-0.47	.638	-0.13	0.08	-.03
Total Contact Experiences	-0.07	0.03	-.13	-2.17	.031	-0.14	-0.01	-.12
Step 2								
(Over)Protectiveness	0.09	0.07	.08	1.37	.173	-0.04	0.23	.07
Agreeableness	-0.28	0.08	-.20	-3.36	<.001	-0.44	-0.12	-.18
Extraversion	-0.001	0.05	-.001	-0.02	.983	-0.10	0.10	-.001
Openness	-0.31	0.08	-.24	-3.97	<.001	-0.46	-0.16	-.22

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 0.4% of the variance, $\Delta R2 = .0040$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 13 (Continued).

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 3								
Protectiveness*Agreeableness	-0.10	0.10	-.06	-1.00	.319	-0.30	0.10	-.05
Protectiveness*Extraversion	-0.06	0.07	-.05	-0.90	.367	-0.20	0.07	-.05
Protectiveness*Openness	-0.09	0.10	-.05	-0.91	.363	-0.29	0.11	-.05

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 1% of the variance, $\Delta R2 = .010$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 14

Moderated Regression Predicting OSB from (Over)Protective Parenting, Key Personality Variables, and Interactions Between Parenting,

Personality, and Gender with Age, Race, Highest Completed Education, and Total Contact Experiences as Covariates.

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 1								
Gender	-0.25	0.09	-.16	-2.72	.007	-0.43	-0.07	-.15
Race	0.24	0.09	.16	2.67	.008	0.06	0.42	.15
Age	0.04	0.02	.10	1.48	.140	-0.01	0.08	.08
Education	-0.001	0.05	-.001	-0.02	.984	-0.10	0.10	-.001
Total Contact Experiences	-0.06	0.03	-.12	-1.95	.053	-0.13	0.001	-.11
Step 2								
(Over)Protectiveness	0.13	0.10	.12	1.27	.206	-0.07	0.34	.07
Agreeableness	-0.26	0.12	-.20	-2.29	.023	-0.49	-0.04	-.13
Extraversion	-0.10	0.08	-.12	-1.31	.193	-0.24	0.05	-.07
Openness	-0.34	0.11	-.27	-3.22	.001	-0.55	-0.13	-.18

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 0.4% of the variance, $\Delta R2 = .0040$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 14 (Continued).

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 3								
Protectiveness*Agreeableness	-0.16	0.14	-.09	-1.11	.268	-0.43	0.12	-.06
Protectiveness*Extraversion	-0.10	0.11	-.08	-0.89	.375	-0.31	0.12	-.05
Protectiveness*Openness	-0.11	0.14	-.06	-0.75	.454	-0.39	0.18	-.04
Gender*Protectiveness	-0.19	0.14	-.13	-1.36	.174	-0.45	0.08	-.07
Gender*Agreeableness	-0.01	0.16	-.01	-0.08	.934	-0.33	0.30	-.01
Gender*Extraversion	0.23	0.10	.20	2.33	.021	0.04	0.43	.13
Gender*Openness	0.13	0.15	.07	0.87	.384	-0.16	0.42	.05
Step 4								
Gender*Protectiveness*Agreeableness	0.22	0.21	.08	1.06	.289	-0.19	0.62	.06
Gender*Protectiveness*Extraversion	0.09	0.14	.06	0.67	.506	-0.18	0.37	.04
Gender*Protectiveness*Openness	0.11	0.20	.05	0.57	.570	-0.28	0.51	.03

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 1% of the variance, $\Delta R2 = .010$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 15

Moderated Regression Predicting Dangerousness from (Over)Protective Parenting, Key Personality Variables, and Interactions Between Parenting, Personality, and Gender with Age, Race, Highest Completed Education, and Total Contact Experiences as Covariates.

Predictor	B	SE	β	t	p	95% CI for B Lower	95% CI for B Upper	r_{sp}
Step 1								
Gender	-0.26	0.11	-.15	-2.41	.017	-0.48	-0.05	-.14
Race	0.13	0.11	.07	1.19	.236	-0.08	0.34	.07
Age	0.04	0.03	.09	1.35	.178	-0.02	0.10	.08
Education	0.03	0.06	.03	0.41	.680	-0.10	0.15	.02
Total Contact Experiences	-0.06	0.04	-.11	-1.66	.098	-0.14	0.01	-.09
Step 2								
(Over)Protectiveness	0.15	0.12	.12	1.21	.227	-0.09	0.39	.07
Agreeableness	-0.28	0.14	-.19	-2.08	.039	-0.55	-0.02	-.12
Extraversion	-0.12	0.09	-.12	-1.34	.181	-0.29	0.06	-.08
Openness	-0.28	0.13	-.20	-2.26	.025	-0.53	-0.04	-.13

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 0.4% of the variance, $\Delta R2 = .0040$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 15 (Continued).

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 3								
Protectiveness*Agreeableness	-0.18	0.17	-.09	-1.08	.283	-0.51	0.15	-.06
Protectiveness*Extraversion	-0.01	0.13	-.01	-0.11	.914	-0.27	0.24	-.01
Protectiveness*Openness	-0.08	0.17	-.04	-0.46	.648	-0.42	0.26	-.03
Gender*Protectiveness	-0.25	0.16	-.15	-1.55	.122	-0.57	0.07	-.09
Gender*Agreeableness	0.03	0.19	.01	0.15	.881	-0.35	0.40	.01
Gender*Extraversion	0.34	0.12	.25	2.86	.005	0.10	0.57	.16
Gender*Openness	0.08	0.18	.04	0.44	.659	-0.27	0.43	.03
Step 4								
Gender*Protectiveness*Agreeableness	0.26	0.24	.09	1.05	.294	-0.22	0.74	.06
Gender*Protectiveness*Extraversion	-0.001	0.17	.000	-0.004	.997	-0.33	0.33	.000
Gender*Protectiveness*Openness	0.12	0.24	.05	0.52	.604	-0.34	0.59	.03

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 1% of the variance, $\Delta R2 = .010$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 16

Moderated Regression Predicting PSIS from (Over)Protective Parenting, Key Personality Variables, and Interactions Between Parenting,

Personality, and Gender with Age, Race, Highest Completed Education, and Total Contact Experiences as Covariates.

Predictor	B	SE	β	t	p	95% CI for B Lower	95% CI for B Upper	r_{sp}
Step 1								
Gender	-0.24	0.10	-.15	-2.48	.014	-0.43	-0.05	-.14
Race	0.35	0.09	.22	3.79	<.001	0.17	0.54	.21
Age	0.03	0.03	.09	1.31	.193	-0.02	0.08	.07
Education	-0.03	0.05	-.03	-0.51	.609	-0.13	0.08	-.03
Total Contact Experiences	-0.06	0.03	-.11	-1.86	.064	-0.13	0.004	-.10
Step 2								
(Over)Protectiveness	0.12	0.11	.10	1.06	.290	-0.10	0.33	.06
Agreeableness	-0.24	0.12	-.18	-2.04	.043	-0.48	-0.01	0.11
Extraversion	-0.08	0.08	-.09	-0.98	.327	-0.23	0.08	-.05
Openness	-0.40	0.11	-.31	-3.63	<.001	-0.62	-0.18	-.20

Note. Male coded 0, Female + Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 0.4% of the variance, $\Delta R2 = .0040$. Effect size r_{sp} is the semi-partial Pearson correlation.

Table 16 (Continued).

Predictor	B	SE	β	t	p	95% CI for B		r_{sp}
						Lower	Upper	
Step 3								
Protectiveness*Agreeableness	-0.13	0.15	-.07	-0.91	.362	-0.42	0.15	-.05
Protectiveness*Extraversion	-0.18	0.11	-.14	-1.59	.114	-0.40	0.04	-.09
Protectiveness*Openness	-0.14	0.15	-.08	-0.92	.358	-0.43	0.16	-.05
Gender*Protectiveness	-0.12	0.14	-.09	-0.85	.394	-0.40	0.16	-.05
Gender*Agreeableness	-0.06	0.17	-.03	-0.33	.740	-0.38	0.27	-.02
Gender*Extraversion	0.13	0.10	.11	1.23	.220	-0.08	0.33	.07
Gender*Openness	0.18	0.16	.10	1.17	.241	-0.12	0.49	.06
Step 4								
Gender*Protectiveness*Agreeableness	0.18	0.21	.07	0.85	.398	-0.24	0.60	.05
Gender*Protectiveness*Extraversion	0.19	0.15	.11	1.29	.199	-0.10	0.48	.07
Gender*Protectiveness*Openness	0.10	0.21	.04	0.50	.616	-0.30	0.51	.03

Note. Male coded 0, Female+Other coded 1 for Gender. White coded 0, all other races coded 1 for Race. CI = confidence interval. $N = 268$.

Interaction effects accounted for 1% of the variance, $\Delta R2 = .010$. Effect size r_{sp} is the semi-partial Pearson correlation.