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# Peer Perceptions of Parent-Students Seeking Higher Education

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## PEER PERCEPTIONS OF PARENT-STUDENTS SEEKING HIGHER EDUCATION

By

Alexandria M. Wall, Bachelor of Science

Presented to the Faculty of the Graduate School of Stephen F. Austin State University In Partial Fulfillment Of the Requirements

> For the Degree of Master of Arts in Psychology

STEPHEN F. AUSTIN STATE UNIVERSITY May 2023

## PEER PERCEPTIONS OF PARENT-STUDENTS SEEKING HIGHER EDUCATION

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## ABSTRACT

With a growing number of parents pursuing academia, it is imperative that researchers understand the social environment in which parent-students function. Stereotypes of parent-students may be held by peers, faculty, and other educational supervisors. Across two previous independent studies, evidence and rationale were provided to suggest that both positive and negative perceptions of parent-students exist, with noted differences between gender. The purpose of the current 2x2x2 between-subjects study was to analyze the social perceptions of students enrolled in higher education as varied by parenthood status, age, and gender. The social perceptions included measures accounting for perceptions of intelligence and academic success, personality, and level of parental involvement. Findings indicated a significant difference in perceptions of intelligence and academic success across age and parenthood status, such that parents were perceived as more friendly and hardworking in academia, and younger parent-students particularly were perceived to choose more difficult academic majors as compared to their same-age, childless counterparts. The findings of this study, both statistically significant and nonsignificant, contribute to the expansion of the limited knowledge base of perceptions of parent-students.

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## INTRODUCTION

The combined financial burden, psychological strain, and societal expectations placed on traditional U.S. college students (i.e., never married, 18 to 24 years of age, financially dependent on parent[s], and lacking their own dependent[s]) are daunting (Fischer et al., 2021; Hanson, 2022; Hunt & Eisenberg, 2012; Lee et al., 2021). However, students from various minority demographic groups face the same stressors as those from majority groups, in addition to other unique stressors. One such minority demographic that is largely understudied is students who are currently raising children, herein referred to as parent-students. As of 2020, the total number of undergraduate college students in the United States (U.S.) was approximately 15.9 million and is predicted to increase by eight percent, or roughly 1.2 million students, within the next 10 years (National Center for Education Statistics, 2022). With roughly one out of every five undergraduate students reporting that they are parents, it is becoming increasingly necessary to understand the struggles and barriers faced by this subgroup of students to inform educational policy and social expectations (National Center for Educational Statistics, 2022). Because previous literature has emphasized the potentially long-term effects of snap judgements, or thin slicing, in social situations, this series of studies examined the perceptions college students had about parent-student peers as a foundational understanding of the social climate experienced by parent-students (Ambaday &

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Rosenthal, 1993; Ambaday & Rosenthal, 1992; Carney et al., 2007; Curhan & Pentland, 2007; Garb, 2013). Specifically, this work examined how the disclosure of important factors, such as age and gender, might also influence the social perceptions of parent-students as held by their peers.

#### **Overview of Parenthood Perceptions**

The parent-student population gained national, legal recognition with the passing of the Title IX law in 1972. This legislation, specifically, served to protect all students in academic or school-oriented programs from discrimination, including both pregnant and parenting students. (U.S. Department of Education, 2013). Additionally, with the removal of reproductive rights legislation in many states due to the overturning of the 1973 Supreme Court case of *Roe v. Wade*, the number of parent-students is likely to increase, as women in many states now have no ways to terminate their unwanted pregnancies (*Dobbs v. Jackson Women's Health Organization*, 2022). Therefore, developing an extensive psychosocial understanding of this demographic is imperative to serve parent-students in an empathic, effective, and efficient manner. A first step to accumulating an extensive understanding of the parent-student experience is by expanding on the limited existing psychosocial research regarding the social climate that these students face, which could potentially have a lasting impact on their mental health and their overall academic success.

Previous research suggests that parents, particularly mothers, are subject to higher levels of discrimination and negative social stigmatization when choosing to either pursue a career or a degree in higher education (Cheung et al., 2022; Ling, 2002). Furthermore, recent research by Dolson and Deemer (2022) indicates that the higher the academic degree pursued by the parent-student, the higher the perceived level of discrimination experienced within their academic department. Contrasted with the high grades maintained by parent-students (Institution for Women's Policy Research, 2019; McNeil at al, 2014), these negative stereotypes within academia are possibly due to higher expectations of parental involvement by the mother compared to the father, therefore, women pursuing other goals outside of parenthood are subject to negative social consequences and possible discrimination as a result of gender stereotypes, rather than academic merit (García-Mendoza et al., 2022; Institute for Women's Policy Research, 2019).

Parents are also highly susceptible to experiences of interrole conflict, which occurs when pressures within one social domain do not coincide with the pressures in another (i.e., parenthood, college student, friend, employee, etc.; Aryee et al., 1999; van Rhijn, 2018). Previous research has provided context for the effects of work-family conflict (WFC) and school-family conflict (SFC) among parents, specifically that parentstudents experience both forms of role conflict, but may have more difficulty balancing SFC than WFC (Dolson & Deemer, 2022).

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Balancing interrole conflict can have multiple adverse psychological effects, such as burnout. Burnout is characterized as a syndrome that includes symptoms such as emotional/physical exhaustion, emotional distancing from others, and reduced social role efficacy (Dolson & Deemer, 2022). Parents, especially those with high levels of neurotic personality traits, are at a higher risk of experiencing burnout (Le Vigouroux et al., 2017). Because parent-students balance multiple social roles, there is an increased risk for burnout, in addition to the traditional effects (i.e., depression, stress, and anxiety) associated with enrollment in higher education (Dolson & Deemer, 2022; Hunt & Eisenberg, 2010; Lee, et al., 2021). The prototypical parent personality is typically associated with more positive personality traits (i.e., agreeableness and conscientiousness). Therefore, parent-students' peers may incorrectly interpret this burnout as a lack of interest in academic or social experiences, which could lead to negative interpersonal consequences or social stigmatization for the parent-students (Lenhausen et al., 2022).

Conversely, evidence exists to support the impact of social support on mediating the negative effects of interrole conflict, specifically among those in a caregiving role, like parents (Morimoto, 2019). Various studies have illustrated the positive impact of social support and acceptance in combating the negative effects of social stigmatization, such as poor self-esteem, increased rates of depression and anxiety, and decline in family-life satisfaction (Dolson & Deemer, 2022; Harandi et al., 2017; Hefner & Eisenberg, 2009; Kondrat et al., 2018; Thoits, 1995; Wagstaff et al., 2014). Previous

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research has highlighted the precarious position held by parent students, that creates role conflict, and likely influences peers' perceptions of these parent-students. This series of studies aims to address issues encountered by parent-students enrolled in higher education by establishing a baseline of the current social climate in academia with which they are immersed.

#### **Overview of Gender Perceptions**

Strict gender role stereotypes for men and women are longstanding and continue to be emphasized through media, thereby potentially contributing to the perpetuation of gender roles and differences in representation for masculinity and femininity (Ward & Grower, 2020). In addition to media representation, gender-related discrimination has an extensive history in the workplace and in academia as well. Although women are typically perceived as more friendly, open, and cautious, they tend to be viewed more negatively when pursuing a career, and are more likely to receive lower perceptions of educational attainment level than their male counterparts (Chapman et al., 2007; Costa et al, 2001; Lovell, 2014; Miller & Chamberlin, 2000; Schmitt et al., 2016; Weisberg et al., 2011). This perpetuation of gender stereotyping can be internalized to be endorsed by the individual on the intellectual level as well (Reilly et al., 2022). Previous research has indicated that women tend to engage in self-limiting behavior due to internalizing these gender-role stereotypes regarding professional performance, such that they view themselves as less assertive and as less competent leaders. Conversely, men tended to rate themselves as the opposite of their ascribed gender-role stereotypes (i.e., more social; Hentschel et al., 2019).

These gender-related perceptions have also interacted with parent perceptions as well. In a study conducted by Fuegen and colleagues (2004), researchers hypothesized that parenting social roles, as opposed to gender roles, would more greatly influence the perceptions of students regarding prospective job applicant. Results indicated that parents were viewed as having less autonomy in their decisions and lower commitment than nonparents. Additionally, findings further indicated that fathers were held to the most flexible standards as opposed to mothers, non-parent men, and non-parent women. Subsequently, a study conducted by Mottarella and colleagues in 2009 indicated that mothers received more negative attributions (i.e., higher perceptions of arrogance, cold-heartedness, and dominance, in addition to lower perceptions of femininity and agreeableness) when they returned to educational pursuits after the birth of their child, rather than choosing to discontinue education after becoming a mother. The results of this study were further emphasized by Cheung and colleagues (2022) more recently, which experimental findings indicated that working mothers attempting to apply for a position in the workforce were rejected more quickly and viewed more negatively than non-parent women, and men overall. Additionally, the findings indicated that mothers faced higher rates of hostility as opposed to non-parent women.

Discrimination and stereotyping based on gender in academic and professional settings has noted negative effects (i.e., differentiation in pay, perceptions of performance capabilities, lack of women representation in leadership positions, and differentiation in professional behavioral standards; Bishu & Alkadry, 2017; Fuegen et al., 2004; Heilman, 2012; Heilman et al., 1995; Hentschel et al., 2019; Spencer et al., 1999) Gender-related discrimination experiences have various detrimental personal effects as well, such as problems with self-esteem, depression, and anxiety (Becerra, et al., 2020; Sowislo & Orth, 2013). With mothers making up the majority of the parent-student population, further understanding of the extent to which gender stereotypes are endorsed and effect the individual is warranted in order to help combat the aforementioned negative social and psychological effects (Institute for Women's Policy Research, 2019).

### **Overview of Age Perceptions**

In addition to parenthood status and gender, age also plays an important role in the formation of peer perceptions. Recent analyses indicate that the average age of firsttime parents is rising, with the mean age reported as 26 and 31 years of age for mothers and fathers, respectively (Bui & Miller, 2018; Khandwala et al., 2017). Furthermore, recent research has also indicated that older students (i.e., students 25 years of age or older) are more likely to experience age-related discrimination, or ageism, in academic settings (Mikton, et al., 2021; Simi & Matusitz, 2016). Although older students are subject to negative social stereotypes, the academic data derived from older students is quite the opposite. A study conducted by McNeil and colleagues (2014) among non-traditional college students (i.e., older than 24 years of age, working 35+ hours per week, financially independent, having nonspousal dependents [e.g., children], and not having a high school diploma) enrolled in engineering courses revealed that older college students obtained consistently higher grades in their coursework compared to their younger, traditional-student peers. Researchers also noted a lower average time to completion, indicating that older, non-traditional college students have a higher retention rate and graduate quicker than traditional college students.

In addition to the social stigmas surrounding the older student group, younger parents are another highly stigmatized group that deal with many negative social perceptions as well, and consequentially they are subject to discrimination based on their parenting status (Conn et al., 2018). Younger parents (i.e., 16 to 25 years of age) describe feeling discrimination and shame based on their young age at the time of the birth of their first child. Furthermore, younger parents have specific feelings of stigmatization related to their moral attitudes, judgments, and capability as a parent (Conn et al., 2018).

Both the older student group and the young parent group are subject to overlap, thereby creating the possibility for compounded negative perceptions and social stigmatization. However, similar to previous literature discussed above (Becerra, et al., 2020; Sowislo & Orth, 2013), the positive effects of social support in combating these harmful stereotypes cannot be ignored. For younger parents in particular, a study conducted by Brown and colleagues (2018) sought to investigate the role of social support in relation to parental competence (i.e., views of self-efficacy and overall satisfaction as a parent) among mothers in the early post-partum stage (i.e., from birth to six months afterwards). Researchers specified social support to include various elements, such as emotional, informational, tangible, and problematic support. The results were significant among young mothers, such that there was a positive correlation found with higher levels of social support and higher reports of parental competence and parental satisfaction (Brown et al., 2018). The results of this study echoed similar findings, stressing the importance of social support in providing parents with feelings of confidence, satisfaction in their new role, and staving off adverse psychological effects (e.g., depression; Angley, 2015; DeVito, 2007; Steinberg, 2003). Previous research has effectively demonstrated the social implications of both pursuing higher education at an older age (i.e., older than 24 years of age), and becoming a young parent (i.e., 16 to 25 years of age; Conn et al., 2018). With 25% of the parent-student population reported as ages 24 to 29, it is reasonable to consider an overlapping of negative social experiences. Therefore, this series of studies seeks to specifically understand the current social climate of parent-students as impacted by age.

## **OVERVIEW OF PRIOR STUDIES**

The aforementioned factors, such as parenthood status, age, and gender, are potentially important when forming quick judgments of academic peers. Combating negative stereotypes especially plays a vital role in elevating the retention rate among this growing demographic in institutions of higher education (Lovell, 2014). However, there remains a gap in the literature regarding peer perceptions of parenting-students' capabilities and personality traits. Therefore, a first step towards the remediation of the potentially negative factors experienced by parent-students is to assess and understand the level of social support already present or absent among the peers of the parent-student demographic; thereby creating a foundational understanding to establish progress towards a truly inclusive college experience for all students.

Due to the gap in literature regarding peer perceptions of parent-students, it was necessary to conduct two pilot studies to sufficiently inform the hypotheses for the current study. Pilot Study 1 was designed to test the hypothesis that perceptions of parent-students by their college peers would vary based on the gender and parenthood status of the student. Pilot Study 2 was designed to replicate the results of Pilot Study 1 and test the hypothesis that perceptions of parent-students by their student. Pilot Study 2 was designed to replicate the results of Pilot Study 1 and test the hypothesis that perceptions of parent-students by their peers would vary based on the age of the parent-student.

## PILOT STUDY 1

The purpose of Pilot Study 1 was to test the hypothesis that perceptions of students by their college peers would vary based on the gender and parenting status of the student. Using a 2 (man or woman) X 2 (parent or nonparent) design, it was predicted that the nonparent-man target would be perceived to be more intelligent than all other targets (nonparent woman, parent mother, and parent father). In order to test peer perceptions, participants reviewed a vignette that detailed the profile of an ostensible fellow student, Sam, who was presented as either a man or woman and who either was or was not a parent. Next, participants offered their perceptions about the target accordingly.

## Method

### **Participants**

Participants (N = 274) were recruited for an online study at a public university in East Texas. The study sample included 204 (74.5%) female participants, 48 (17.5%) male participants, and 22 (8.0%) participants who declined to respond. The participants were 65.0% White, 12.8% African American/Black, 1.1% Indigenous American, 0.4% Asian, 0.4% Pacific Islander, 6.9% more than one race, 5.5% other/prefer not to say, and 8.0% who did not answer the demographic portion of the study. Additionally, 77.4% of participants ethnically identified as Not Hispanic.

Prior to conducting final analyses, 57 participants were excluded due to factors such as, failure to read assigned vignette (n = 21), overall response time that deviated +/-12 standard deviations from the mean (n = 1), and failure to correctly answer attention check questions (n = 35). A total of 217 participants were included in the final analyses. The final demographics for the study sample included 180 (82.9%) female participants, 36 (16.6%) male participants, and one (0.5%) participant who declined to respond. The participants were 70.5% White, 13.8% African American/Black, 1.4% Indigenous American, 0.5% Asian, 0.5% Pacific Islander, 6.9% more than one race, 6.0% other/prefer not to say, and 0.5% who did now answer the demographic portion of the study. Additionally, 77.9% of participants ethnically identified as Not Hispanic.

#### Materials

#### Vignette Manipulation

A total of four vignettes were created to manipulate gender (man or woman student) and parenting status (parent or nonparent) of an ostensible student, Sam (See Appendix A). The gender-neutral name was chosen so that questions about the target would remain consistent across vignettes to reduce variability. Participants were randomly assigned to view one vignette about the target, Sam, who served as a reference for the following dependent measures.

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## Manipulation Check Questions

Two manipulation check questions were included with the perceptions of intelligence measures. The first question read "Thinking back on what you read about Sam, do you remember reading that Sam had a child?" with the options of yes and no. The second question read, "Thinking back on what you read about Sam, is Sam a man or a woman?" with the options of man and woman. The correct answer to these questions depended on which vignette the participant was randomly assigned to read.

## Perceptions of Intelligence and Academic Success Measures

The purpose of these measures was to assess participants' perceptions of academic capabilities and the overall intelligence of the target individual, Sam.

*Perceptions of Intelligence*. A question regarding the participants' perceptions of intelligence was assessed using a single-item, "How intelligent do you think Sam is?" Responses were given on a Likert-type scale with anchors of 1 (*Extremely below average*) and 5 (*Extremely above average*). Higher scores indicated a perception of greater intelligence of Sam (See Appendix B).

*Perceptions of Academic Success*. Participant perceptions of the target's academic major were assessed qualitatively with a simple question (i.e., "Based on the previous vignette, what do you think Sam's major is?") and subsequently asked to fill in the blank space provided (See Appendix B). Participants were asked about perceptions of the

previously disclosed academic major's level of difficulty using a single, Likert-type item with scale anchors of 1 (*Not difficult at all*) to 5 (*Extremely difficult*). Higher scores indicated higher perceived major's difficulty (See Appendix B). Participants were presented with a sliding-scale question regarding perceptions of Sam's grade point average (GPA) on a 4.0 scale, and asked to adjust the slider to the GPA they deemed as most suitable for Sam. The slider could be toggled from zero to 4.0 to indicate the participants' answers (See Appendix B). To assess perceptions of how hard the target worked to maintain the previously disclosed GPA, participants were presented with a single, Likert-type item. Anchors ranged from 1 (*Not hard at all*) to 5 (*Extremely hard*) with higher scores indicating greater perceptions in the target's diligence to maintain their previously ascribed GPA (See Appendix B). These measures served collectively as the first set of dependent measures.

## Trait Self-Control Scale

The Trait Self-Control Scale (Tangeny et al., 2004) was included to measure participants' perceptions of the trait self-control of the target, Sam. The scale, which originally measured perceptions of one's own trait self-control, was altered to assess perceptions of Sam's self-control. A sample question read as follows: "Sam is good at resisting temptation." Anchors ranged from 1 (*Extremely unlike them*) to 5 (*Extremely like them*) with higher scores indicating greater perceptions of the target's self-control. Additionally, some items were reverse coded, with lower scores indicating participants perceived Sam had greater self-control, so these items were reverse coded before average the items together (See Appendix C). This measure served as another dependent variable.

## **Ten-Item Personality Inventory Scale**

Participants were directed to the Ten-Item Personality Inventory (TIPI; Gosling et al., 2003). Originally measuring perceptions of one's own personality on the Big-5 personality dimensions (i.e., openness to new experience, extraversion, conscientiousness, agreeableness, and neuroticism) the TIPI was altered to assess perceptions of Sam's personality. Sample questions included, "Sam is dependable, selfdisciplined" and "Sam is anxious, easily upset." Anchors ranged from 1 (*Disagree strongly*) to 7 (*Agree strongly*), with higher scores indicating how strongly participants attributed the personality traits to the given target (See Appendix D). This measure also served as a dependent variable.

## **Demographics** Questionnaire

Participants completed a demographic survey that asked about their own sex, gender identity, ethnicity, race, and age in years.

## Procedure

Students were recruited online via SONA systems and redirected to Qualtrics, an online, survey collection platform, for completion of the survey. Participants were informed that the purpose of the study was to gauge perceptions of other college students.

Next, participants were asked to give their consent to participate in the study. After consent was given, participants were randomly presented with one of four vignettes that manipulated gender (man or woman student) and parenthood status (parent or nonparent) of the target (See Appendix A). Next, participants were instructed to answer the questions regarding the target's perceived level of intelligence, perceived college major, perceived ascribed major difficulty, perceived GPA, perceived GPA difficulty, perceived level of self-control, and perceived personality traits. Participants were then asked to complete a demographics questionnaire and were thanked and debriefed. Participants were compensated for participation via R-points that counted toward partial course credit.

### Results

## **Manipulation Check**

Before conducting primary analyses, two independent-samples *t*-tests were completed to confirm gender and parenting status were effectively manipulated, (i.e., participants accurately remembered the target condition to which they were randomly assigned). To do this, an independent samples *t*-test was conducted with gender as the independent variable and the gender manipulation check question included in the survey as the dependent variable. The results were significant, suggesting successful manipulation of target's gender, t(215) = -38.79, p < .001. A second independent-samples *t*-test was conducted with parenting status as the independent variable and the parenting status manipulation check question as the dependent variable. The results were

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significant, suggesting successful manipulation of target's parenting status, t(194.96) = -23.39, p < .001.

#### **Perceptions of Intelligence/Academic Difficulty Measures**

To test the effects of gender and parenting status on perceived intelligence, data were subjected to a Factorial Univariate Analysis of Variance (ANOVA). Although results revealed no main effect for parenting status and no interaction between parenting status and gender, a significant main effect of gender on perceived intelligence was observed, such the woman target (M = 3.73) was perceived to be more intelligent than the man target (M = 3.54), F(1,213) = 6.73, p = .01.

To test the effects of gender and parenting status on perceived GPA, data were subjected to another Factorial Univariate ANOVA. Although results revealed no main effect for gender, a significant main effect of parenting status on perceived GPA was observed. Specifically, the nonparent target (M = 3.2) was perceived as having a higher GPA than the parent target (M = 3.1), F(1,213) = 4.03, p = .05. The results of this main effect, however, may be qualified by a marginal interaction between gender and parenting status on perceived GPA, F(1,213) = 3.08, p = .08, such that the woman target received lower perceived GPA ratings when parenting status was disclosed as compared to the man target.

Analyses conducted to test the effects of gender and parenting status on other dependent peer-perceptions of intelligence and academic success, such as major

difficulty, and GPA maintenance difficulty, yielded no marginal or significant results (ps > .1).

## **Perceptions of Personality Measures**

To test the effects of gender and parenting status on perceived agreeableness, data were subjected to another Factorial Univariate ANOVA. Although results revealed no main effect for gender, a significant main effect of parenting status on agreeableness was observed, such that the parent target (M = 4.9) was perceived as more agreeable than the nonparent target (M = 4.6), F(1,212) = 4.22, p = .04. The results of this main effect, however, may be qualified by a marginal interaction between gender and parenting status on perceived agreeableness, F(1,212) = 2.60, p = .09, such that the man target received higher ratings of perceived agreeableness when their parenting status was disclosed, as opposed to the woman target, who received much lower ratings for perceived agreeableness.

Analyses conducted to test the effects of gender and parenting status on other dependent peer-perceptions of personality (e.g., extraversion, conscientiousness, neuroticism, and openness) yielded no marginal or significant effects (ps > .1).

## **Perceptions of Self-Control**

Analyses conducted to test the effects of gender and parenting status on dependent peer perceptions of target self-control yielded no marginal or significant effects (p > .1).

## Discussion

The results of Pilot Study 1 indicated that observable differences exist across gender and parenting status regarding perceptions of intelligence and academic success, as well as perceptions of personality. Specifically, this study revealed interesting attitudes held by students towards the target's perceived intelligence level, perceived GPA, and perceived agreeableness as dependent upon the gender and parenting status of the target.

Results for Pilot Study 1 indicated that students perceived parent-students to have significantly lower GPAs than nonparent-students, F(1,213) = 4.03, p = .05. These results are in direct contrast with previous data indicating that parent-students actually receive higher GPAs overall as compared to their nonparent peers (Institute for Women's Policy Research, 2019.) This dichotomy in student perception versus real-world data provides further rationale for the necessity to study peer attitudes toward parent-students. Additionally, results for Pilot Study 1 showed a discrepancy with past research in that the woman target was perceived to be significantly more intelligent than the man target, F(1,213) = 6.73, p = .01. This result was perplexing given that a majority of participants were women (74.5%) and past research that has indicated that women tend to engage in self-limiting behavior by rating themselves more negatively when it comes to

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performance (Hentschel et al., 2019). This contrast between Pilot Study 1 and real-world results provides further rationale for the importance of studying the effect of gender on perceptions of intelligence and academic success.

Results for Pilot Study 1 also yielded significant findings regarding perceptions of personality as dependent on parenting status. Specifically, that parent-students were perceived to be more agreeable than nonparent-students. Unlike the aforementioned contrasting results for perceptions of intelligence and academic success, and real-world data, the significant results observed for parenting status on perceptions of agreeableness provided further support to existing literature (Lenhausen et al., 2022).

## **Limitations & Future Directions**

Certain potential confounds existed that warranted further exploration in Pilot Study 2. Specifically, Pilot Study 1 used a somewhat-dated, gender-neutral name (i.e., Sam) for the target of the vignettes and did not specify age of the target or their child. Both of the previous confound variables could have primed participants to perceive the target was older than researchers initially intended, thereby possibly influencing responses to outcome variables.

## PILOT STUDY 2

Pilot Study 2 was designed to replicate, remedy, and extend the findings from Pilot Study 1. Additionally, the purpose of Pilot Study 2 was to test the hypothesis that perceptions of students by their peers would vary based on the gender, parenting status, and specified age of the parent-student. To this end, the name of the target was changed to a modern, gender-neutral alternative (e.g., Taylor; NameCensus.com, 2022). Furthermore, the ages of both the target and the child were disclosed as 20 and two years, respectively, to eliminate any age-related ambiguity and to imply that the parent-student was a teen-parent. Parenting status was also manipulated in the same manner as in Pilot Study 1. All other details within the vignettes remained unchanged. Additionally, a single-item question was added to the perceptions of intelligence and academic success measures to assess for overall responsibility of the target.

## Method

## **Participants**

Participants (n = 274) were recruited for an online study at a public university in East Texas. The study sample included 225 (82.1%) female participants, 41 (15.0%) male participants, and eight (3.0%) participants who declined to respond. The participants were 74.1% White, 12.4% African American/Black, 1.1% Indigenous American, 1.8% Asian, 1.1% Pacific Islander, 3.3% more than one race, 3.3% other/prefer not to say, and 2.9% who did now answer the demographic portion of the study. Additionally, 75.9% of participants ethnically identified as Not Hispanic.

A total of 51 participants were excluded due to factors such as, failure to read assigned vignette (n = 4), overall response time that deviated from the average +/- 12 standard deviations from the mean (n = 1), disclosure of parenthood status in the demographics (n = 11), and failure to correctly answer attention check question (n = 35). A total of 223 participants were included in the final analyses. The final demographics for the study sample included 188 (84.3%) female participants, 34 (15.2%) male participants, and one (0.4%) participant who declined to respond. The participants were 75.8% White, 13.0% African American/Black, 1.3% Indigenous American, 1.3% Asian, 1.3% Pacific Islander, 3.6% more than one race, 3.1% other/prefer not to say, and 0.4% who did not answer the demographic portion of the study. Additionally, 77.6% of participants ethnically identified as Not Hispanic.

## Materials

## Vignette Manipulation

All vignettes used were identical to Pilot Study 1, with the exception of changes made to the name of the target (Taylor) as well as the disclosure of the target and the child's ages, 20 and 2 years, respectively (See Appendix E).

#### Perceptions of Intelligence and Academic Success Measures

A new question regarding the participants' perceptions of general target responsibility was assessed using a single-item, "Based on what you read, how responsible do you think Taylor is?" Responses were given on a Likert-type scale with anchors of 1 (*Not responsible at all*) and 5 (*Extremely responsible*). Higher scores indicated a greater perception of overall responsibility of the target, Taylor. All other measures within this scale remained the same as in Pilot Study 1 (See Appendix F).

## All Other Items

All manipulation check, attention check, and other dependent variable items (i.e., perceptions of self-control and perceptions of personality) were identical to those in Pilot Study 1, with the exception that Sam's name was changed to Taylor (See Appendices C & D).

## **Demographics** Questionnaire

Participants completed a demographic survey identical to Pilot Study 1, with an additional item that inquired about caregiver status (See Appendix G).

## Procedure

The procedure for Pilot Study 2 was identical to the procedure in Pilot Study 1.

#### Results

#### **Manipulation Check**

Before conducting primary analyses, two independent-samples *t*-tests were completed to confirm gender and parenting status were effectively manipulated for Pilot Study 2. An independent-samples *t*-test was conducted with gender as the independent variable and the gender manipulation check question included in the survey as the dependent variable. The results yielded a significant difference for gender, which confirmed successful manipulation of this independent variable, t(112.0) = -55.25, p < .001. A second independent-samples *t*-test was conducted with parenting status as the independent variable and the parenting status manipulation check question as the dependent variable. The results also yielded a subsequent, significant difference for parenting status, which confirmed successful manipulation of this independent variable, t(221) = -29.42, p < .001.

## Perceptions of Intelligence/Academic Difficulty Measures

To test the effects of gender and parenting status on perceived intelligence, data were subjected to a Factorial Univariate ANOVA. In contrast to the results of this analysis conducted in Pilot Study 1, Pilot Study 2 yielded no significant findings (p > .1). Additionally, to test the effects of gender and parenting status on perceived GPA, data were subjected to another Factorial Univariate ANOVA. Pilot Study 2 yielded no significant findings (p > .1).
To test the effects of gender and parenting status on perceived GPA difficulty, data were subjected to a Factorial Univariate ANOVA. Results revealed a significant main effect of parenting status on perceived GPA difficulty, such that, the nonparent target (M = 3.8) was perceived as less diligent in maintaining their ascribed GPA the parent target (M = 4.1), F(1,219) = 10.01, p = .002. Additionally, results revealed a significant main effect of gender on perceived GPA difficulty, such that the man target (M = 3.8) was perceived as less diligent in maintaining ascribed GPA than the woman target (M = 4.1), F(1,219) = 7.12, p = .01.

To test the effects of gender and parenting status on perceived major difficulty, data were subjected to a Factorial Univariate ANOVA. Although results did not reveal significant main effects or interactions, a marginal main effect of gender on perceived major difficulty was observed, such that the woman target (M = 3.2) was perceived as selecting more a difficult major than the man target (M = 3.0), F(1,218) = 3.21, p = .08.

To test the effects of gender and parenting status on perceived responsibility, data were subjected to a Factorial Univariate ANOVA. Results revealed a significant main effect for parenting status on perceived responsibility, such that the parent target (M = 4.6) was perceived to be more responsible than the nonparent target (M = 4.3), F(1,219) = 8.14, p = .01.

Analyses conducted to test the effects of gender and parenting status on other dependent peer perceptions of intelligence and academic success measures (i.e., predicted GPA) yielded no marginal or significant findings (p > .1).

#### **Perceptions of Personality Measures**

To test the effects of gender and parenting status on perceived extraversion, data were subjected to another Factorial Univariate ANOVA. Results revealed a significant interaction between gender and parenting status on perceived extraversion, such that that the nonparent man target was perceived to be less extraverted than the woman target (with or without children) and the man with children target, F(1,219) = 4.56, p = .03. No main effects were observed (ps > .1).

To test the effects of gender and parenting status on perceived agreeableness, data were subjected to a Factorial Univariate ANOVA. Results revealed a significant main effect of parenting status on agreeableness, such that the parent target (M = 5.0) was perceived as more agreeable than the nonparent target (M = 4.5), F(1,219) = 16.48, p <.001. Results also revealed a significant main effect of gender on agreeableness, such that the man target (M = 4.6) was perceived as less agreeable than the woman target (M =4.9), F(1,219) = 6.00, p = .02. These findings are qualified by a significant interaction, such that the man target was perceived to be significantly more agreeable when described as a parent, as opposed to the woman target, who received lower ratings in perceived agreeableness when it was revealed the target woman had a child, F(1,219) = 3.96, p = .05.

To test the effects of gender and parenting status on perceived neuroticism, data were subjected to a Factorial Univariate ANOVA. Results revealed a significant main effect of gender on perceived neuroticism, such that the man target (M = 5.0) was perceived to be more neurotic than the woman target (M = 4.6), F(1,219) = 4.70, p = .03.

Analyses conducted to test the effects of gender and parenting status on other dependent peer perceptions of personality (i.e., conscientiousness, and openness), yielded no marginal or significant effects (ps > .1).

### **Perceptions of Self-Control**

Analyses conducted to test the effects of gender and parenting status on peer perceptions of target self-control yielded no marginal or significant effects (ps > .1).

## Discussion

The results of Pilot Study 2 expanded upon the observable differences that exist across gender and parenting status in regard to perceptions of intelligence and academic success, as well as perceptions of personality. The addition of the specified ages of the target and child yielded various significant results, many of which differed from Pilot Study 1, indicating the effects of parental age on various peer perceptions. Although results from Pilot Study 1 revealed a main effect for parenting status on perceptions of GPA, those results were not replicated in Pilot Study 2. However, a main effect was observed for parenting status on perceptions of GPA maintenance difficulty (i.e., how much effort the target put in to maintain their ascribed GPA), such that parent-students were perceived to work harder to maintain their GPA than nonparent-students, F(1,219) = 10.01, p = .002. This positive perception indicates that the hard work parent-students put forth is potentially being recognized by their peers.

Additionally, the results for Pilot Study 2 failed to replicate significant findings from Pilot Study 1 regarding the effect of gender on perceptions of intelligence. However, a main effect was observed for gender on perceptions of GPA maintenance difficulty, such that the woman target was perceived as more diligent in working to maintain her GPA than the man target, F(1,219) = 7.12, p = .01. Similar to Pilot Study 1, these results regarding perceptions of diligence and hard work in academia are contradictory to previous research, which indicates that women tend to downplay their own abilities, rather than provide endorsement (Hentschel et al., 2019; Reilly et al., 2022).

The significant effect observed for parenting status on perceived responsibility in Pilot Study 2 can also provide positive interpretations for parent-students. Although previous research has reported negative stereotypes associated with young parents, the results of this study, which included a young parent target, were significant in that the

parent target was perceived as more responsible than the nonparent target, F(1,219) = 8.14, p = .01 (Conn et al., 2018).

The significant effect of gender on perceived agreeableness observed in Pilot Study 2 provides further support to existing literature, as research has indicated that women tend to be more agreeable than men (Weisberg et al., 2011). However, significant results observed for the effect of gender on neuroticism contradicts existing literature in that men tend to be perceived as less neurotic than women (Schmitt, 2016; Weisberg et al, 2011). A possible explanation for this result can be related to the gender demographics used in final analysis, such that women constituted a majority of our sample (82.1%). Furthermore, parenting status was not used as an exclusion criterion in the previous study.

#### **Limitations & Future Directions**

Although improvements were made to Plot Study 2, certain potential confounds and limitations existed that warranted further exploration. Specifically, Pilot Study 1 did not include the measure for perceptions of responsibility in the perceptions of intelligence and academic success measures. Therefore, further analysis of gender, parenting status, and age on perceptions of responsibility is warranted to form accurate conclusions. In order to accomplish this comparison, the subsequent study should combine the independent variables from Pilot Study 1 and Pilot Study 2 (i.e., gender and parenting status) with the addition of age as a new independent variable, resulting in a 2x2x2 between-subjects experimental design.

The subsequent study should also seek to reduce Type I Error by combining similar dependent measures (i.e., perceptions of intelligence and academic success, perceptions of personality) to improve the efficiency of statistical calculations. Therefore, data should be analyzed using the factorial Multivariate Analysis of Variance (MANOVA) framework.

### OVERVIEW OF THE CURRENT STUDY

The purpose of the current study was to analyze the effects of gender, age, and parenting status on perceptions of intelligence and academic success, and personality traits. Additionally, this study sought to analyze the effects of gender and age on perceptions of parental involvement. Furthermore, to improve the efficiency of statistical calculations, data for this study was analyzed using the factorial Multivariate Analysis of Variance (MANOVA) framework.

The current study was designed to replicate and further extend the findings from Pilot Studies 1 and 2. Using a 2 x 2 x 2 between-subjects design, with age (24-years-old or 34-years-old), gender (man or woman), and parenting status (parent or nonparent) as the independent variables and perceptions of intelligence and academic success, perceptions of personality, and perceptions of parental involvement as the dependent variables, the current study was conducted to test the following five hypotheses:

 $H_1$  – A main effect of gender on perceptions of intelligence and academic success measures, such that the woman targets will be perceived to be more intelligent than the man targets. Although this hypothesis is in direct contrast to previous research regarding women's self-perceptions (Reilly et al., 2022), results from Pilot Study 1 (i.e., the woman targets were perceived to be more intelligent than the man targets overall) and Pilot Study 2 (i.e., the woman targets were perceived to be more diligent in maintaining their GPA then the man targets) were used as rationale for the formation of this hypothesis.

 $H_2$  – A significant interaction between gender and parenting status on perceptions of academic success, such that the woman parent-student targets would be perceived to work harder to maintain their ascribed GPA and potentially choose more difficult academic majors as compared to all other targets. Results from Pilot Study 2 were used as the main rationale to support this hypothesis, in that previous results indicated significant main effects for gender and parenthood status on perceptions of GPA maintenance difficulty. Specifically, Pilot Study 2 found that the parent targets and woman targets were perceived to work harder than all other targets to maintain their previously predicted GPA. Additionally, results from Pilot Study 2 also indicated a marginal effect for gender on perceptions of academic major difficulty, such that the woman targets were perceived to choose more difficult academic majors than the man targets.

 $H_3$  - A significant interaction between gender and parenting status on perceptions of personality, such that the man parent-student targets would be perceived as the most agreeable out of all target conditions. The rationale for this hypothesis was formed using findings from Pilot Studies 1 & 2. Previous research has indicated that women are perceived to be more agreeable, or friendly, than men overall, and findings from the previous pilot studies further emphasized these perceptions (Chapman et al., 2007; Costa et al, 2001; Weisberg et al., 2011). Although the results from Pilot Study 1 offered no

main effect for gender on perceived agreeableness, a main effect was observed for parenthood status, such that the parent targets were perceived to be more agreeable than the nonparent targets. Furthermore, a marginal interaction was observed with the man target receiving higher ratings in perceptions of trait agreeableness when they became a father, as compared to the woman target who became a mother, who only received a small increase in perceptions of trait agreeableness. Additionally, the results of Pilot Study 2 added to the findings observed in Pilot Study 1, in that two significant main effects were observed for parenting status and gender, as well as a significant interaction between the independent variables on perceptions of trait agreeableness. In other words, the man target was perceived as more friendly when they were revealed to be a parent compared to all other targets. Therefore, it was hypothesized that the results from Pilot Study 1 and Pilot Study 2 would be further reinforced by similar findings in the current study.

 $H_4$  – A significant interaction between gender and age on perceptions of personality, such that the older woman target condition would be perceived to be the most agreeable out of all other target conditions. Rationale for this hypothesis was similar to  $H_3$ , in that the observed significant main effect of gender on perceptions of trait agreeableness for Pilot Study 2 was combined with previous research indicating that trait agreeableness remains constant throughout women's lifespan's (Chapman et al., 2007).

H<sub>5</sub> - A main effect of gender on perceptions of parental involvement, such that women would be perceived to be more involved than men in the academic and home activities of their child. Because this dependent variable was not explored in previous pilot studies, rationale for this hypothesis direction was derived from previous literature (García-Mendoza, 2022).

## Method

# **Participants**

Participants were recruited for an online study at a public university in East Texas. The demographic composition of the sample was similar to Pilot Studies 1 and 2 (i.e., mostly White, non-Hispanic women participants without children of their own). Prior to conducting the study, it was expected that roughly 270 - 300 participants, prior to attrition, would be required for a medium effect. However, after excluding participants for reasons similar to Pilot Studies 1 and 2, 212 participants were included in the final sample.

The final study sample demographics included 136 (79.9%) female participants, 45 (22.6%) male participants, and one (0.5%) participant who declined to respond. The participants were also 158 (74.5%) women, 45 (21.2%) men, one (0.5%) trans woman, one (0.5%) trans man, five (2.4%) non-binary/third gender, and two (0.9%) that declined to answer. The participants were 66.0% White, 12.7% African American/Black, 4.2%

Indigenous American, 1.9% Asian, 8.5% more than one race, and 15.2% other/prefer not to say. Additionally, 70.8% of participants ethnically identified as Not Hispanic.

Furthermore, the current study demographics included measures assessing religious affiliation and political ideology. Regarding religious demographics, the final study sample included 135 Christian (68.9%), two Muslim (1%), one Buddhist (< 1%), 26 Agnostic/Spiritual (13.3%), 32 Other/Not sure (16.3%), and no Jewish (0%) participants. Regarding political demographics, the final study included 62 Liberal/Democrat participants (29.4%), 44 Moderate/Independent participants (20.9%), 39 Conservative/Republican participants (18.5%), and 66 participants that answered Other/None of the above (31.3%).

#### Materials

#### Vignette Manipulation

A total of eight vignettes were created to manipulate the gender (man or woman student), parenting status (parent or nonparent), and age (24 years of age or 34 years of age) of an ostensible student, Taylor (See Appendix I). Additionally, the targets in the parent conditions were disclosed as having a 6-year-old child. The gender of the child was not disclosed. After consenting to participate in the study (See Appendix H), participants were randomly assigned to view one vignette to use as a reference for the following dependent measures.

### Manipulation Check Question

Three single-item manipulation checks were included in the study and were included before the perceived intelligence measures. The questions read "Thinking back on what you read about Taylor, do you remember how old Taylor was?" and "Thinking back on what you read about Taylor, is Taylor a man or a woman?" and "Thinking back on what you read about Taylor, do you remember if Taylor had a child?" The correct answer to the questions depended on the condition to which participants were randomly assigned.

### **Perceptions of Intelligence and Academic Success Measures**

Participants were asked to assess Taylor's perceived intelligence and academic success using measures identical to those in Pilot Study 2 (See Appendix F). A single item was used to assess perceived intelligence on a 5-point Likert-type scale, with higher scores representing greater perceived intelligence of the target, Taylor. Perceived academic success was measured using one qualitative and three quantitative items. After indicating the perceived major in a qualitative item, the perceived difficulty level of that major was measured on a 5-point Likert-type scale with higher scores representing greater perceived difficulty. Participants also estimated the target's GPA on a 4.0 scale. After indicating the GPA of the target, participants indicated how hard the target had to work to maintain their GPA. Difficulty maintaining their GPA was measured on a 5-point Likert-type items, where higher scores were associated with greater effort and work to

maintain the GPA reported by the participant. Finally, a single item was used to assess for perceptions of general target responsibility level on a 5-point Likert-type scale, with higher scores indicating greater perceptions of target responsibility.

#### Perceived Parent Involvement in School and Home Activities Scale

A modified version of the Parent Involvement in School and Home Activities Scale (Walker et al., 2004) was used to assess participants' perceptions of the parenttarget's potential involvement in both the school and home environment of the child. A sample question read as follows: "How often do you think Taylor reads with their child?" Anchors ranged from 1 (*Never*) to 6 (*All of the time*) with higher scores indicating greater levels of perceived parental involvement within the child's daily activities. Additionally, another question was added to assess perceptions of time spent by the child using technology unsupervised within the home to modernize the scale. The question read as follows: "When the child is home, how often do you think they use technology without adult supervision?" Anchors ranged from 1 (Never) to 6 (All of the time) with higher scores indicating greater levels of perceived unsupervised technology use by the child, or lower levels of parental involvement. This item was reverse-coded and combined with the previous questions to collectively serve as another dependent variable. It should be noted that only participants randomly assigned to a parent-target condition answered these questions (See Appendix J).

### **Personality Scale**

As in Pilot Study 2, all participants were asked to assess Taylor's perceived personality using the TIPI to assess for the specific traits of extraversion, openness to new experiences, neuroticism, conscientiousness, and agreeableness, (TIPI; Gosling et al., 2003). The scale was identical to the TIPI used in Pilot Study 1 with the exception of the target name being changed from Sam to Taylor (See Appendix D).

## **Attention Check Questions**

Two single-item, attention-check questions were included in the study. The first was embedded within the perceptions of intelligence and academic success measures and read as follows: "Because paying attention is important, please select the answer choice for 'somewhat hard.'" The second was embedded within the TIPI and read as follows: "How do we know you're paying attention? Please select answer choice five if you are." To be included in final analysis, participants needed to answer at least one of these two attention check items correctly.

## Demographic Questionnaire

Participants completed a demographic survey identical to Pilot Study 2 with the addition of two questions asking about each participant's religious and political affiliations (See Appendix K).

### **Compensation Questionnaires**

Participants completed an additional questionnaire (See Appendix M) after being debriefed (See Appendix L) to assess an appropriate method of compensation for their participation. Participants were asked to disclose which of three compensation criteria fit them best and were redirected accordingly.

Participants who participated for R-points were redirected to SONA Systems and received one R-point that counted toward partial course credit. Participants who participated for credit in another SFASU course were redirected to a separate Qualtrics survey that asked for participants to disclose their name and participating course. Disclosed names of participants were disconnected and anonymized from previous survey responses. After data collection, a list of participant names was compiled for and delivered to each participating instructor. Participants who were not an SFASU student or did not participate for SFASU course credit were redirected to a separate Qualtrics survey where they were asked to disclose their name, email, and institution of current enrollment. Disclosed names of participants were anonymized from previous survey responses. After data collection, a list of participant names was compiled to randomly select a participant to win a \$20 Amazon gift card. The selected participant was contacted via the email provided and given 10 days to respond to receive their compensation (See Appendix M).

### Procedure

Students were recruited online via social media platforms and SONA systems, and then redirected to Qualtrics for completion of the survey. Participants asked two prescreening questions prior to beginning the study to assess eligibility based on age and enrollment in an institution of higher education (i.e., junior college, university, trade school, or technical program). Only students 18 years of age or older and with current enrollment in an institution of higher education were allowed to continue. Eligible participants were then informed that the purpose of the study was to gauge perceptions of other college students. Next, participants were asked to give their consent to participate in the study. After consent was given, in this 2 (parenting status) x 2 (gender) x 2 (age) between-subjects experimental design, participants were randomly assigned to view one of the eight vignettes about a target, Taylor. Taylor's characteristics were systematically manipulated by parenting status (parent or nonparent), age (24-years-old or 34-years-old), and gender (man or woman; See Appendix I). Next, participants answered the questions regarding their perceptions of Taylor's intelligence, college major, ascribed major difficulty, GPA, GPA maintenance difficulty, and personality. Participants randomly assigned to the parent-target condition also answered measures assessing for perceptions of the target's involvement with child home and school activities. Afterward, participants were asked to complete a demographics questionnaire. Upon completion of the demographics, participants were thanked, debriefed, and redirected to the compensation questionnaire to determine the appropriate method of compensation for participation.

#### Results

#### **Final Sample**

A total of 325 participant responses were collected for the study. Prior to conducting final analyses, 113 participants were excluded due to factors such as incompletion of the survey (n = 71), overall response time that deviated significantly from the calculated average (+/- 13,570 seconds, n = 3), disclosure of participant's own status as a parent (n = 33), and failure to correctly answer at least one out of the two attention-check questions correctly (n = 5). Post application of exclusion criteria, the sample included 212 total participants included in data analysis.

## **Manipulation Check**

A series of manipulation checks were done to ensure that participants were alert and aware of the details in their assigned vignette. Each vignette manipulated the age, gender, and parenting status of the person portrayed. To ensure that participants were cognizant of the age, gender, and parenting status of the vignette that they were randomly assigned to read, a serious of questions asked participants to verify their accurate recollection of these variables. Three independent-samples *t*-tests were conducted to confirm the effective manipulation of the independent variables (i.e., age, gender, and parenting status) by observing the accuracy of participants' recall of the independent variables manipulated in the vignette. All three tests yielded significant results regarding age [t(146.53) = -17.133, p < 0.001], gender [t(128.30) = -32.823, p < 0.001], and parenting status [t(209) = -29.132, p < 0.001], confirming successful manipulation of each independent variable.

## **Overview of Analyses**

Two 2 x 2 x 2 between-groups multivariate analyses of variance (MANOVAs) were conducted to determine the effects of gender (man or woman), age (24 or 34 years old), and parenting status (parent or nonparent) of an individual portrayed in the vignette on two combined dependent measures. One MANOVA combined several measures of perceived intelligence and academic success, and included five dependent variables: the individual's perceived overall level of intelligence, the individual's predicted GPA, the level of effort required to maintain their GPA, the perceived difficulty of their chosen major, and perceived overall level of responsibility. The second 2 x 2 x 2 MANOVA examined the effects of age, gender, and parenting status on combined dependent variable of personality, which contained the perception of five personality constructs, including: extraversion, openness to new experiences, agreeableness, neuroticism, and conscientiousness.

When examining ratings of perceived parental involvement, only a subset of data was included; only those scenarios depicting the student as a parent were included in the analysis. Thus, those scenarios with no reference to the student being a parent systematically were excluded from the following analysis. A two-way analysis of variance (ANOVA) was conducted to assess the effects of the age (24-years-old or 34-

years-old) and gender (man or woman) of the student parent on their perceived parental involvement.

### **Combined Intelligence/Academic Difficulty Measures**

The first three-way MANOVA was conducted to determine the effects of gender, age, and parenting status on the dependent variable that included the following measures of perceived intelligence and academic success: perceptions of intelligence and academic success (i.e., intelligence, academic major difficulty, perceived GPA, GPA maintenance difficulty, and perceived overall level of responsibility). MANOVA results found a significant interaction between age and parenting status [Wilk's  $\Lambda = .917$ , F(5,198) = 3.59, p = .004,  $\eta_p^2 = .08$ ]. Thus, age and parenting status significantly affected the combined DV of perceptions of intelligence and academic success. The main effects for parenting status, age, and gender were not significant (see Table 1). Additionally, no other significant interaction effects were noted. For all significant findings, follow-up univariate testing was conducted.

#### Follow-up Univariate Testing

Follow-up univariate testing was conducted on the significant main effects for Age x Parenting Status. The interaction between age and parenting status was further analyzed using a series of ANOVAs for each dependent measure that was assessed within the combined construct of perceived intelligence and academic success. Across the dependent variables examined, a significant Age x Parenting Status interaction was found for perceptions of academic major difficulty, where 34-year-old nonparents (M = 3.49, SD = 0.76) were perceived to choose significantly more difficult academic major as compared to 34-year-old parents (M = 3.11, SD = 0.82), followed by 24-year-old parents (M = 3.26, SD = 0.59), and 24-year-old nonparents (M = 3.11, SD = 0.61); F(1,202) = 7.90, p = .005,  $\eta_p^2 = .04$  (See Figure 1). Additionally, across the dependent variables examined, age and parenting status of the student was found to marginally affect perceptions of GPA maintenance difficulty, where 24-year-old parents (M = 4.13, SD = 0.73) were perceived to put forth significantly more effort to maintain their ascribed GPA as compared to 24-year-old nonparents (M = 3.66, SD = 0.81), followed by 34-year-old parents (M = 3.98, SD = 0.95), and 34-year-old nonparents (M = 3.96, SD = 0.80); F(1,202) = 3.78, p = .053,  $\eta_p^2 = .02$  (See Figure 2).

There were no other significant Age x Parenting Status interactions observed for all other dependent variables examined, including perceived overall level of intelligence,  $F(1,202) = 1.19, p = .277, \eta_p^2 = .01$ ; predicted GPA,  $F(1,202) = 2.64, p = .106, \eta_p^2 = .01$ ; and perceived overall level of responsibility,  $F(1,202) = 0.27, p = .601, \eta_p^2 = .001$ .

## **Combined Personality Perception Measures**

A three-way MANOVA was conducted to determine the effect of gender, age, and parenting status on the combined dependent variable of perceptions of personality containing measures of extraversion, neuroticism, agreeableness, openness to new experiences, and conscientiousness. The MANOVA findings indicated a main effect for parenting status on the combined personality measure, [Wilk's  $\Lambda = .913$ , F(5, 198) = 3.76, p = .003,  $\eta_p^2 = .09$ ]. Additionally, a main effect for gender was found to be marginally significant (p = .084) for ratings of perceived personality characteristics [Wilk's  $\Lambda = .953$ , F(5, 198) = 1.97, p = .084,  $\eta_p^2 = .05$ ]. The main effect for age was not significant; no significant interactions were found (see Table 2). For all significant findings, follow-up univariate testing was conducted.

### Follow-up Univariate Testing

Follow-up ANOVAs revealed that parenting status of the student portrayed in the vignette significantly affected ratings of the trait agreeableness. When evaluating a student who was portrayed as a parent (M = 4.96, SD = 0.96), they were perceived to be significantly more friendly, or agreeable, than those who were nonparents (M = 4.51, SD = 0.91); F(1,202) = 11.30, p < .001,  $\eta_p^2 = .05$  (See Figure 3). Although the main effect was only marginally significant at the MANOVA level (p = .083), follow-up ANOVAs were examined for gender. Thus, any statistically significant findings and conclusions about the effects of gender on personality characteristics must be done with caution. An ANOVA revealed that the gender of the student portrayed in the vignette significantly affected ratings of the trait agreeableness, such that female students (M = 4.89, SD = 0.95); F(1,202) = 6.28, p = .013,  $\eta_p^2 = .03$  (See Figure 4).

There were no other significant main effects for parenting status observed for all other dependent variables examined, such as perceived extraversion, F(1,202) = 1.17, p = .280,  $\eta_p^2 = .01$ ; perceived neuroticism, F(1,202) = 0.49, p = .486,  $\eta_p^2 = .002$ ; perceived openness to new experiences, F(1,202) = 0.86, p = .356,  $\eta_p^2 = .004$ ; and perceived conscientiousness, F(1,202) = 1.62, p = .205,  $\eta_p^2 = .01$ . Additionally, there were no other significant main effects for gender observed for all other dependent variables examined, such as perceived extraversion, F(1,202) = 0.10, p = .751,  $\eta_p^2 = .001$ ; perceived neuroticism, F(1,202) = 0.60, p = .441,  $\eta_p^2 = .003$ ; perceived openness to new experiences, F(1,202) = 1.20, p = .274,  $\eta_p^2 = .01$ ; and perceived conscientiousness, F(1,202) = 1.288, p = .258,  $\eta_p^2 = .01$ .

## **Perceptions of Parental Involvement**

As described above, the final data were separated into two groups based upon whether the student portrayed in the vignette was a parent; data for those who read a vignette about a parent-student were retained to assess measures specific to parenting differences. A 2 x 2 ANOVA examined the effects of gender and age on perceived level of parental involvement. No significant main effects were found for either gender, F(1,103) = 0.32, p = .576, or age, F(1,103) = 0.03, p = .865. Furthermore, no significant interaction was observed, F(1,103) = 1.98, p = .162.

## Discussion

Previous studies have emphasized the effects of snap judgements, or thin slices, of other individuals on decision making and perceptions (Ambaday & Rosenthal, 1993; Ambaday & Rosenthal, 1992; Carney et al., 2007; Curhan & Pentland, 2007; Garb, 2013). This study sought to further analyze the effects of various factors (i.e., age, parenthood status, and gender) on specific perceptions of intelligence and academic success (i.e., intelligence level, academic major difficulty, GPA, GPA maintenance difficulty, and responsibility), perceptions of personality traits (i.e., extraversion, conscientiousness, neuroticism, openness, and agreeableness), and perceived level of parental involvement in home and school-related activities. Although previous literature has emphasized the differences in perceptions of intelligence and perceptions of personality across various factors, such as age and exposure time to target, no previous studies have focused on the aforementioned perceptions as effected by the combined factors of age, parenting status, and gender (Carney et al., 2007; Garb, 2013; Schmitt et al., 2016; Weisberg et al., 2011). Therefore, it was necessary to conduct two independent pilot studies to provide further rationale and direction for hypothesis formation. However, results from Pilot Studies 1 and 2 provided mixed results and some findings contradicted the previous research supporting the theoretical framework (e.g., main effect of gender on perceptions of intelligence level found in Pilot Study 1, and main effect of gender on perceptions of trait neuroticism found in Pilot Study 2; Reilly et al, 2022; Schmitt et al, 2016). Therefore, there were five main hypotheses for the current study that were

formulated using rationale from Pilot Studies 1 & 2, as well as evidence found in literature.

The first hypothesis  $(H_1)$  postulated that gender would influence the results of the perceptions of intelligence and academic success measures, specifically that the woman targets would be perceived to be more intelligent than the man targets overall. The results of the current study, however, failed to find support for  $H_1$ , due to lack of statistical significance.

The second hypothesis (H<sub>2</sub>) predicted a significant interaction between gender and parenting status on the perceptions of intelligence and academic success measures, such that the woman parent-student targets would be perceived to work harder to maintain their predicted GPA, and potentially choose more difficult academic majors compared to all other targets. The results for the current study partially supported H<sub>2</sub>. Although there were significant results observed for the interaction between age and parenting status on perceptions of GPA maintenance difficulty and academic major difficulty, there were no significant effects observed for gender in the perceptions of intelligence and academic success measures. However, the significant interaction between age and parenthood observed in the current study supports previous research , which found that parent students have higher GPAs than nonparent students (Institute for Women's Policy Research, 2019; McNeil et al., 2014). Therefore, the results of the current study suggest a

positive view of parent-students as held by their peers, in that their hard work and dedication do not go unnoticed or unrecognized by their college classmates.

The third hypothesis (H<sub>3</sub>) proposed for the current study predicted a significant interaction between gender and parenting status on perceptions of personality, such that the man parent-student targets would be perceived as the most agreeable out of all target conditions. However, the results of the current study only found partial support for H<sub>3</sub>. There were two observed main effects for gender and parenthood status on trait agreeableness, but no significant interaction. Furthermore, the findings of the current study supported previous results from Pilot Study 1, Pilot Study 2, and literature, in that women were perceived as friendlier, or more agreeable, than men overall (Chapman et al., 2007; Costa et al, 2001; Weisberg et al., 2011). The significant main effect for parenthood status in perceptions of trait agreeableness also lent support to more recent research, in that the parent targets were perceived to be more agreeable than the non-parent targets (Lenhausen, et al., 2022).

The fourth hypothesis (H<sub>4</sub>) postulated a significant interaction between gender and age on perceptions of personality, such that the older woman target condition would be perceived to be the most agreeable out of all other target conditions. The results of the current study found partial support for this hypothesis. Only a main effect for gender on perceptions of trait agreeableness was found, as previously mentioned in the findings for H<sub>3</sub>, supporting previous pilot study and research findings (Chapman et al., 2007; Costa et

al, 2001; Weisberg et al., 2011). However, there was no main effect observed for age on perceptions of personality (e.g., extraversion, conscientiousness, neuroticism, agreeableness, and openness).

The fifth hypothesis (H<sub>5</sub>) for the current study predicted a main effect of gender on perceptions of parental involvement, such that the woman targets would be perceived to be more involved than the man targets in the academic and home activities of their child. The results of the current study failed to support this hypothesis in that no significant findings were observed for gender on perceptions of parental involvement. These results contrast previous literature, which proposed that women are viewed as more involved in parenting than men (García-Mendoza et al., 2022). A possible explanation for this discrepancy is that perceptions of parental involvement could be reliant on the occupation of the parent rather than the gender. Therefore, further analysis is warranted in order to explain the conflicting results of H<sub>5</sub> and existing literature.

### **Limitations & Future Directions**

The current study is not without limitations. For example, participants were recruited via snowball and convenience sampling methods. Additionally, there was a coding error found in the Qualtrics study flow that prevented all nonstudent participants from being excluded from participation in the study. To compensate for this error, all parent-student participants were excluded from final analyses. Furthermore, because the survey was conducted in an online format, participants were free to complete the survey

at various locations, leading to many potential distractions. To compensate for this error, participants were excluded based on significant deviation from the average time to complete the study, failing attention check questions, and incompletion of the dependent measures altogether.

Because little research regarding peer perceptions of parent-students exists, there are many options available for future research. For example, future studies should seek to expand on the existing knowledge regarding effect of social support and inclusion in mediating the effects of stigmatization on adverse mental health outcomes, but specifically in parent-students (Dolson & Deemer, 2022; Harandi et al., 2017; Hefner & Eisenberg, 2009; Kondrat et al., 2018; Thoits, 1995; Wagstaff et al., 2014). Researchers should also consider further assessing the possible differences of perceptions across racial and ethnic demographics of parent-students, as over 50% of parent-students in higher education are also from a minoritized racial or ethnic group (Institute for Women's Policy Research, 2019). Additionally, in the future, researchers should re-analyze the parental involvement measures across parent-students, working-parents, and unemployed/homemaker parents to assess for variance across occupation. Finally, parentstudents' own self-perceptions across these measures should be studied, in addition to their perceived level of support that they receive at their current institution of higher education. The results of the current study could be contrasted to account for differences in societal perceptions versus the perceptions of the parent-students themselves.

# Implications

The findings of the thesis study have multiple important implications. Primarily, the results of this study add to the dearth of literature on the understanding of various social dynamics and attitudes faced by parent-students as held by their potential peers. As there is little previous research on the perceptions of college students regarding the capabilities and intelligence of their parent-student peers, the findings of this study illuminate both the advances and shortcomings of American culture regarding the social stereotypes of parents seeking higher education.

Secondly, the findings of this study serve as a reflection for offices of diversity, equity, and inclusion at colleges and universities across the U.S. These offices may be able to identify where their own institutional policies either succeed or fall short in supporting this minority demographic of the student population. Bringing awareness to the social challenges faced by parent-students (i.e., discrimination and stigmatization), regardless of age or gender, will likely lead to policy change and, in turn, increase accessibility for parents seeking to continue or further their education (Dolson & Deemer, 2022).

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# APPENDIX A

# Pilot Study 1 Vignettes

<u>Single-father vignette:</u> Sam is currently a student at his local university. He is a single father and lives alone with his child in an apartment. He also has a part-time job and works at night when he is not attending classes. Sam has found a good work-life balance.

<u>Single-mother vignette:</u> Sam is currently a student at her local university. She is a single mother and lives alone with her child in an apartment. She also has a part-time job and works at night when she is not attending classes. Sam has found a good work-life balance.

<u>Single man vignette:</u> Sam is currently a student at his local university. He is a single man and lives alone in an apartment. He also has a part-time job and works at night when he is not attending classes. Sam has found a good work-life balance.

<u>Single woman vignette:</u> Sam is currently a student at her local university. She is a single woman and lives alone in an apartment. She also has a part-time job and works at night when she is not attending classes. Sam has found a good work-life balance.
## APPENDIX B

Pilot Study 1 Perceptions of Intelligence and Academic Success Measures

- How intelligent do you think Sam is?
  - 1. Extremely below average
  - 2. Below average
  - 3. Average
  - 4. Above average
  - 5. Extremely above average
- Based on the previous vignette, what do you think Sam's major is?
- Based on the previous question, how difficult do you think this major is?
  - 1. Not difficult at all
  - 2. Somewhat difficult
  - 3. Average
  - 4. Moderately difficult
  - 5. Extremely difficult
- What do you think that Sam's grade point average (GPA) is on a 4.0 scale?
- Based on what you read, how hard do you think Sam works to maintain this GPA?
  - 1. Not hard at all
  - 2. Somewhat hard
  - 3. Average
  - 4. Moderately hard
  - 5. Extremely hard

## APPENDIX C

#### Pilot Study 1 Trait Self-Control Scale

Here are a number of statements about Sam. Please indicate the extent to which each of these statements is likely of Sam using the scale provided. Remember that there are no right or wrong answers here; you should report your initial or gut instincts when making these decisions about Sam.

- Sam is good at resisting temptation.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them
- Sam has a hard time breaking bad habits.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them
- Sam is lazy.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them
- Sam says inappropriate things
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them

- Sam does certain things that are bad for them, even if they are fun.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them
- Sam refuses things that are bad for them.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them
- Sam wishes they had more self-discipline.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them
- People would say that Sam has an "iron" self-discipline.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them
- Pleasure and fun sometimes keep Sam from getting work done.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them

- Sam has trouble concentrating.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them
- Sam is able to effectively work toward long-term goals.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them
- Sometimes Sam can't stop themselves from doing something, even if they know it's wrong.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them
- Sam often acts without thinking through all of the alternatives.
  - 1. Extremely unlike them
  - 2. Mostly unlike them
  - 3. Somewhat like them
  - 4. Mostly like them
  - 5. Extremely like them

### APPENDIX D

#### Pilot Study 1 Ten-Item Personality Inventory

Here are a number of personality traits that may or may not apply to Sam. Please indicate the degree to which you agree or disagree with that statement using the scale provided below. You should rate the extent to which the pair of traits applies to Sam, even if one characteristic applies to Sam more strongly. Remember that there are no right or wrong answers here; you should report your initial or gut instincts when making these decisions about Sam.

- Sam is extroverted, enthusiastic.
  - 1. Disagree strongly
  - 2. Disagree moderately
  - 3. Disagree a little
  - 4. Neither
  - 5. Agree a little
  - 6. Agree moderately
  - 7. Agree strongly
- Sam is critical, quarrelsome.
  - 1. Disagree strongly
  - 2. Disagree moderately
  - 3. Disagree a little
  - 4. Neither
  - 5. Agree a little
  - 6. Agree moderately
  - 7. Agree strongly
- Sam is dependable, self-disciplined.
  - 1. Disagree strongly
  - 2. Disagree moderately
  - 3. Disagree a little
  - 4. Neither
  - 5. Agree a little
  - 6. Agree moderately
  - 7. Agree strongly

- Sam is anxious, easily upset.
  - 1. Disagree strongly
  - 2. Disagree moderately
  - 3. Disagree a little
  - 4. Neither
  - 5. Agree a little
  - 6. Agree moderately
  - 7. Agree strongly
- Sam is open to new experiences, complex.
  - 1. Disagree strongly
  - 2. Disagree moderately
  - 3. Disagree a little
  - 4. Neither
  - 5. Agree a little
  - 6. Agree moderately
  - 7. Agree strongly
- Sam is reserved, quiet.
  - 1. Disagree strongly
  - 2. Disagree moderately
  - 3. Disagree a little
  - 4. Neither
  - 5. Agree a little
  - 6. Agree moderately
  - 7. Agree strongly
- Sam is sympathetic, warm.
  - 1. Disagree strongly
  - 2. Disagree moderately
  - 3. Disagree a little
  - 4. Neither
  - 5. Agree a little
  - 6. Agree moderately
  - 7. Agree strongly

- Sam is disorganized, careless.
  - 1. Disagree strongly
  - 2. Disagree moderately
  - 3. Disagree a little
  - 4. Neither
  - 5. Agree a little
  - 6. Agree moderately
  - 7. Agree strongly
- Sam is calm, emotionally stable.
  - 1. Disagree strongly
  - 2. Disagree moderately
  - 3. Disagree a little
  - 4. Neither
  - 5. Agree a little
  - 6. Agree moderately
  - 7. Agree strongly
- Sam is conventional, uncreative.
  - 1. Disagree strongly
  - 2. Disagree moderately
  - 3. Disagree a little
  - 4. Neither
  - 5. Agree a little
  - 6. Agree moderately
  - 7. Agree strongly

## APPENDIX E

#### Pilot Study 2 Vignettes

<u>Single father vignette:</u> Taylor is a currently a student at his local university. He is a 20year-old single father and lives alone with his 2-year-old child in an apartment. He also has a part-time job and works at night when he is not attending classes. Taylor has found a good work-life balance.

<u>Single mother vignette</u>: Taylor is a currently a student at her local university. She is a 20year-old single mother and lives alone with her 2-year-old child in an apartment. She also has a part-time job and works at night when she is not attending classes. Taylor has found a good work-life balance.

<u>Single man vignette:</u> Taylor is a currently a student at her local university. She is a 20year-old single woman and lives alone in an apartment. She also has a part-time job and works at night when she is not attending classes. Taylor has found a good work-life balance.

<u>Single woman vignette</u>: Taylor is a currently a student at his local university. He is a 20year-old single man and lives alone in an apartment. He also has a part-time job and works at night when he is not attending classes. Taylor has found a good work-life balance.

## APPENDIX F

Pilot Study 2 Perceptions of Intelligence and Academic Success Measures

- How intelligent do you think Taylor is?
  - 1. Extremely below average
  - 2. Below average
  - 3. Average
  - 4. Above average
  - 5. Extremely above average
- Based on the previous vignette, what do you think Taylor's major is?
- Based on the previous question, how difficult do you think this major is?
  - 1. Not difficult at all
  - 2. Somewhat difficult
  - 3. Average
  - 4. Moderately difficult
  - 5. Extremely difficult
- What do you think that Taylor's grade point average (GPA) is on a 4.0 scale?
- Based on what you read, how hard do you think Taylor works to maintain this GPA?
  - 1. Not hard at all
  - 2. Somewhat hard
  - 3. Average
  - 4. Moderately hard
  - 5. Extremely hard
- Based on what you read, how responsible do you think Taylor is?
  - 1. Not responsible at all
  - 2. Somewhat responsible
  - 3. Average
  - 4. Moderately responsible
  - 5. Extremely responsible

## APPENDIX G

# Pilot Study 2 Caregiver Status, Demographic Questionnaire

- What is your parenthood status?
  - 1. I am a parent.
  - 2. I am not a parent.
  - 3. I am a caregiver to other dependents. (Blank space to allow specification)
  - 4. Prefer not to answer.

## APPENDIX H

## Current Study Consent Form

Investigator's statement:

PURPOSE: We are interested in your perceptions of other people.

DURATION: The length of time you will be involved with this study is approximately 30 minutes.

PROCEDURES: If you agree to be in this study, we will ask you to do the following things: review a description of a person, answer questions about that person's traits, behaviors, and choices, and complete a demographics form about yourself. There are no right or wrong answers, and you can leave a question blank if you feel uncomfortable answering it.

RISKS: There are no known risks with this study. The benefits of participation are having your opinions and perspective included in this all-campus survey about perceptions of others.

CONFIDENTIALITY: The records of this study will be kept private. Your name will not be attached to answers you provide. The investigators will have access to the raw data. In any sort of report that is published or presentation that is given, we will not include any information that will make it possible to identify a participant. This number will not be tied to any type of identifying information about you. Once collected, all data will be kept in secured files, in accord with the standards SFASU, federal regulations, and the American Psychological Association. In addition, please remember that the researchers are not interested in any individual person's responses. We are interested in how people in general respond to the measures.

VOLUNTARY NATURE OF THE STUDY: Your participation in this study is voluntary. In addition, you may choose to not respond to individual items in the survey. Your decision whether or not to participate will not affect your current or future relations with SFASU nor any of its representatives. If you decide to participate in this study, you are free to withdraw from the study at any time without affecting those relationships.

CONTACTS AND QUESTIONS: Dr. Lauren Brewer and/or Alexandria Wall: brewerle@sfasu.edu or wallam@jacks.sfasu.edu, (936) 468-4402. If you have questions or concerns regarding this study and would like to speak with someone other than the researchers, you may contact The Office of Research and Sponsored Programs at (936) 468-6606.

BENEFITS: Students recruited from participating introductory psychology classes will receive 1 credit for every 30 minutes of research participation. This study is worth 1 research participant credit. Students from other classes will receive credit in that class in an amount that is considered appropriate by the course instructor (e.g., 5 points extra credit or 1-2% of the overall points possible in the class). Participants from outside of SFASU or not taking the survey for class credit at SFASU will be given the option to enter a drawing for a \$20 Amazon gift card.

STATEMENT OF CONSENT: The procedures of this study have been explained to me and my questions have been addressed. The information that I provide is confidential and will be used for research purposes only. I am 18 years of age and I understand that my participation is voluntary and that I may withdraw anytime without penalty. I have read the information in this consent form and I agree to be in the study.

## APPENDIX I

## Current Study Vignettes

<u>24-year-old/Man/Parent:</u> Taylor is currently a student at his local university. He is a 24-year-old man that has part-time job to support his 6-year-old child, and works at night when he is not attending classes. Taylor has found a good work-life balance.

<u>34-year-old/Man/Parent:</u> Taylor is currently a student at his local university. He is a 34-year-old man that has a part-time job to support his 6-year-old child, and works at night when he is not attending classes. Taylor has found a good work-life balance.

<u>24-year-old/Man/NP</u>: Taylor is currently a student at his local university. He is a 24-year-old man that has part-time job and works at night when he is not attending classes. Taylor has found a good work-life balance.

<u>34-year-old/Man/NP</u>: Taylor is currently a student at his local university. He is a 34-year-old man that has a part-time job and works at night when he is not attending classes. Taylor has found a good work-life balance.

<u>24-year-old/Woman/Parent</u>: Taylor is currently a student at her local university. She is a 24-year-old woman that has part-time job to support her 6-year-old child, and works at night when she is not attending classes. Taylor has found a good work-life balance.

<u>34-year-old/Woman/Parent:</u> Taylor is currently a student at her local university. She is a 34-year-old woman that has part-time job to support her 6-year-old child, and works at night when she is not attending classes. Taylor has found a good work-life balance.

<u>24-year-old/Woman/NP:</u> Taylor is currently a student at her local university. She is a 24-year-old woman that has part-time job and works at night when she is not attending classes. Taylor has found a good work-life balance.

<u>34-year-old/Woman/NP:</u> Taylor is currently a student at her local university. She is a 34-year-old woman that has part-time job and works at night when she is not attending classes. Taylor has found a good work-life balance.

## APPENDIX J

Current Study Perceived Parent Involvement in School and Home Activities Scale

- How often do you think Taylor talks with their child about their school day?
  - 1. Never
  - 2. Rarely
  - 3. Sometimes
  - 4. Often
  - 5. Most of the time
  - 6. All of the time
- How often do you think Taylor supervises their child's homework?
  - 1. Never
  - 2. Rarely
  - 3. Sometimes
  - 4. Often
  - 5. Most of the time
  - 6. All of the time
- How often do you think Taylor helps their child study for tests?
  - 1. Never
  - 2. Rarely
  - 3. Sometimes
  - 4. Often
  - 5. Most of the time
  - 6. All of the time
- How often do you think Taylor reads with their child?
  - 1. Never
  - 2. Rarely
  - 3. Sometimes
  - 4. Often
  - 5. Most of the time
  - 6. All of the time

- How often do you think Taylor helps out at their child's school when asked?
  - 1. Never
  - 2. Rarely
  - 3. Sometimes
  - 4. Often
  - 5. Most of the time
  - 6. All of the time
- How often do you think Taylor attends special events at their child's school? (e.g. plays, musicals, field day events, etc.)
  - 1. Never
  - 2. Rarely
  - 3. Sometimes
  - 4. Often
  - 5. Most of the time
  - 6. All of the time
- How often do you think Taylor attends Parent-Teacher Association meetings?
  - 1. Never
  - 2. Rarely
  - 3. Sometimes
  - 4. Often
  - 5. Most of the time
  - 6. All of the time
- When the child is home, how often do you think they use technology without adult supervision?
  - 1. Never
  - 2. Rarely
  - 3. Sometimes
  - 4. Often
  - 5. Most of the time
  - 6. All of the time

## APPENDIX K

#### **Current Study Demographics**

Thank you for answering questions about Taylor. Now, we would like to learn more about you. Please answer the following questions about YOURSELF.

- What is your sex assigned at birth?
  - 1. Male
  - 2. Female
  - 3. Other / Prefer not to answer
- What is your gender identity?
  - 1. Man
  - 2. Woman
  - 3. Trans man
  - 4. Trans woman
  - 5. Non-binary / Third gender
  - 6. Other: Please specify
  - 7. Prefer not to say
- What is your ethnicity?
  - 1. Not Hispanic
  - 2. Hispanic
  - 3. Prefer not to answer
- What is your race?
  - 1. African American / Black
  - 2. Asian
  - 3. Indigenous America / Alaskan Native
  - 4. Native Hawaiian or other Pacific Islander
  - 5. White
  - 6. More than one race
  - 7. Other / Prefer not to say
- How old are you (in years)?

- What is your parenthood status?
  - 1. I am a parent.
  - 2. I am not a parent.
  - 3. I am a caregiver to other dependents. Please specify
  - 4. Prefer not to answer
- How do you identify politically?
  - 1. Conservative
  - 2. Liberal
  - 3. Moderate
  - 4. Other: Please specify
  - 5. None of the above / Prefer not to say
- What is your religious affiliation?
  - 1. Christianity
  - 2. Islam
  - 3. Buddhism
  - 4. Hinduism
  - 5. Judaism
  - 6. Agnostic/Spiritual
  - 7. None of the above
  - 8. Other: please specify

#### APPENDIX L

#### Current Study Debriefing Form

Thank you for participating in this study. Today you read about Taylor and answered some questions about them. Some of you read that Taylor was a woman, whereas others of you read that Taylor was a man. Further, some of you read that Taylor was 24 years-old and some of you read that Taylor was 34 years-old. Additionally, some of you read that Taylor was a parent, and some of you did not read that Taylor was a parent. Afterwards, we asked you about whether you thought Taylor was smart, responsible, and their predicted personality. Participants who received a parent target were also asked to guess Taylor's level of parental involvement. The point of our study was to see whether people perceive parent-students more negatively than students who are not parents based on their gender and/or age. It is predicted that there will be a main effect of gender on perceptions of intelligence, such that the woman will be perceived to be more intelligent than the man. Additionally, it is predicted that there will be a main effect of gender on perceptions of parental involvement, such that the woman will be perceived as being more involved in the child's life than the man. It is also predicted that there will be repeated main effects of gender and parenthood status on perceived trait agreeableness, such that the man will be perceived significantly more agreeable as a parent than the woman. Furthermore, it is hypothesized that older men will be perceived to be more agreeable than targets in all other conditions. Therefore, it is predicted that there will be a significant interaction between gender (man or woman) and age (24 or 34 years-old) on trait agreeableness. Additionally, it is hypothesized that older women will be perceived to be more intelligent than targets in all other conditions. Therefore, it is also predicted that there will be a significant interaction between gender (man or woman) and age (24 or 34 years-old) on perceived level of intelligence.

Because our ability to test our hypotheses depends on our participants not knowing the hypothesis in advance, we ask that you do not discuss this study with your peers for at least one year.

If you felt distress or emotionally uneasy as a consequence of the questions in this study, please contact our campus counseling center at 936.468.2401 or counseling@sfasu.edu.

If you have further questions in the future, please feel free to contact: Dr. Lauren Brewer and/or Alexandria Wall: 936-468-4402, brewerle@sfasu.edu or

wallam@jacks.sfasu.edu. The Office of Research and Sponsored Programs can be reached at (936) 468-6606.

Please continue to the next page to receive compensation for your participation.

### APPENDIX M

Current Study Compensation Questionnaire and Subsequent Surveys

Thank you for your participation in this survey! Please select the option below that fits you best.

- A) I am an SFASU student participating for credit in a General Psychology course.
- B) I am an SFASU student participating for credit in a class other than General Psychology.
- C) I am not an SFASU student OR I am an SFASU student not participating for class credit.
- Selection of <u>Option A</u> resulted in an immediate redirection to SONA Systems for R-Point credit.
- Selection of <u>Option B</u> resulted in an immediate redirection to a separate Qualtrics survey that read as follows:

"Thank you for your participation! In the space below, please give your name, SFA email address, and your participating class for which you would live to receive credit for your participation. Your responses to the previous survey will remain completely confidential and will be used for course credit purposes only.

Ex: Sam Student, studentss@jacks.sfasu.edu, PSY 500 with Dr. XXX."

• Selection of <u>Option C</u> resulted in an immediate redirection to a separate Qualtrics survey that read as follows:

"Thank you for your participation! In the space below, please give your name, email address, and institution you are currently attending if you wish to be entered in a drawing for a \$20 Amazon gift card. Your responses to the previous survey will remain completely confidential and will only be used for contact purposes. Ex: Sam Johnson, johnsonsam@gmail.com, Johnson State University."

#### Age x Parenting Status on Perceptions of Academic Major Difficulty



*Note* – This figure illustrates the MANOVA results for the interaction between age and parenthood status on perceptions of intelligence and academic success measures (i.e., perceived chosen academic major difficulty) such that 34-year-old non-parent (M = 3.49, SD = 0.76) were perceived as choosing a more difficult academic major than either the 34-year-old parent (M = 3.11, SD = 0.82) or the 24-year-old non-parent (M = 3.11, SD = 0.61); however, the difficulty level of the major of 24-year-old parent (M = 3.26, SD = 0.59) did not differ significantly from the other conditions; F(1,202) = 7.90, p = .005,  $\eta_p^2 = .04$ .



Age x Parenting Status on Perceptions of GPA Maintenance Difficulty

*Note* – This figure illustrates the MANOVA results for the interaction between age and parenthood status on perceptions of intelligence and academic success measures (i.e., GPA maintenance difficulty) such that 24-year-old parents (M = 4.13, SD = 0.73) were perceived to put forth a higher level of effort then the 24-year-old non-parents (M = 3.66, SD = 0.81). Both parents and non-parents in the 34-year-old conditions did not differ in level of perceived effort to maintain their GPA from each other or the other conditions: 34-year-old parents (M = 3.98, SD = 0.95), 34-year-old non-parents (M = 3.96, SD = 0.80); F(1,202) = 3.78, p = .053,  $\eta_p^2 = .02$ .

#### Parenting Status on Perceptions of Agreeableness



*Note* – This figure illustrates the MANOVA results for the main effect of parenthood status on perceptions of personality (i.e., trait agreeableness) such that parents (M = 4.96, SD = 0.96) were perceived to be more friendly, or agreeable, than non-parents (M = 4.51, SD = 0.91); F(1,202) = 11.30, p < .001,  $\eta_p^2 = .05$ .

### Gender on Perceptions of Agreeableness



*Note* – This figure illustrates the MANOVA result for the main effect of parenthood gender on perceptions of personality (i.e., trait agreeableness) such that such that women (M = 4.89, SD = 0.95) were perceived to be more friendly, or agreeable, than men (M = 4.57, SD = 0.95); F(1,202) = 6.28, p = .013,  $\eta_p^2 = .03$ .

# TABLE 1

Independent Variables	Wilk's A	F(5,198)	Sig.	$\eta_{ m p}^2$
Age	.974	1.054	.387	.026
Gender	.972	1.124	.349	.028
Parenting Status	.959	1.680	.141	.041
Age*Gender	.964	1.461	.204	.036
Age*Parenting Status	.917	3.585	.004**	.083
Gender*Parenting Status	.988	.468	.799	.012
Age*Gender*Parenting	.988	.476	.794	.012

Table 1. MANOVA results for age, gender, and parenthood status across combined perceptions of intelligence and academic success measures.

\**p* < .05, \*\**p* < .01

## TABLE 2

Independent Variables	Wilk's A	F(5,198)	Sig.	$\eta_{\rm p}^2$
Age	.978	.876	.498	.022
Gender	.953	1.973	.084	.047
Parenting Status	.913	3.761	.003**	.087
Age*Gender	.976	.988	.426	.024
Age*Parenting Status	.973	1.088	.368	.027
Gender*Parenting Status	.987	.519	.762	.013
Age*Gender*Parenting	.990	.397	.850	.010

Table 2. *MANOVA results for age, gender, and parenthood status across combined perceptions of personality measures.* 

\**p* < .05, \*\**p* < .01

### VITA

In the spring of 2015, Alexandria Wall received her both high school diploma from Pineywoods Community Academy and her Associates of Arts degree from Angelina College in, Lufkin, Texas. In the fall of 2015, she enrolled in Stephen F. Austin State University in Nacogdoches, Texas. Alexandria received the degree of Bachelor of Science of psychology and a minor in biology from Stephen F. Austin State University in December of 2018. In August of 2021, she entered the Graduate School of Stephen F. Austin State University and received the degree of Master of Arts of psychology in May of 2023.

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APA 7<sup>th</sup> Edition

This thesis was typed by Alexandria M. Wall.