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Despite increased awareness of sexual violence against women (e.g., Basile, 2002) and associated legal reforms over the past few decades (e.g., McGregor, 2005), people commonly minimize women’s experiences of rape as “just sex” (Gavey, 2005). For example, Beres (2007) described a case in which a rape victim pleaded with an armed perpetrator to use a condom; the court perceived the victim’s attempt to protect her sexual health as consent to engage in sex. As this anecdote shows, observers often view victims as at least partly responsible for being raped (Weiss, 2009; Xenos & Smith, 2001). When making sense of rape scenarios, observers disproportionately focus on victim behaviors, including how victims were dressed (Farris, Treat, Viken, & McFall, 2008), whether they consumed alcohol (Abbey, 2002), and how strongly they resisted unwanted sexual advances (Ryckman, Kaczor, & Thornton, 1992).

This focus on victims can be explained by the fact that sexual consent among legal adults is presumed unless there is sufficient evidence to the contrary (Schulhofer, 1998). In other words, the default legal position is that sexual consent exists, a striking presumption “without analogy in law” (McGregor, 2005, p. 104). Accordingly, if a rape occurs in the absence of active resistance from the victim, observers commonly perceive that the victim agreed to or “wanted” the rape (Ryckman et al., 1992). Indeed, the definition of “forcible rape” used by the Federal Bureau of Investigation to collect statistics in their Uniform Crime Report mentions specifically the use of force by the perpetrator: “carnal knowledge of a female forcibly and against her will” (U.S. Department of Justice, 2009, para. 1). In contrast, other types of crime victims are not required to resist their assailants or be forcibly threatened (Schulhofer, 1998). For example, if a drunkenly incapacitated woman is unable to prevent someone from taking her wallet, it is likely that she will not be seen as having “consented.” Likewise, subsequent claims by the perpetrator that the wallet was a gift, a loan, or was freely given would presumably not seem credible. These examples indicate that violations of women’s property rights are viewed differently than violations of women’s sexual rights, including the right to refuse sex (Schulhofer, 1998).

Effects of Violation Type and Relationship Context on Perceptions of Crimes Against Women

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Abstract. Minimization of crimes against women may be influenced by many factors, such as type of violation and the victim’s relationship to the perpetrator. We examined undergraduates’ (N = 65) perceptions of 1 of 4 crime scenarios depicting a male perpetrator (a friend or a dating partner) and a female victim (of rape or theft). Dependent variables reflecting perceived minimization were perceived seriousness of the crime, perceived victim responsibility, and appropriate punishment for the perpetrator. As expected, participants perceived rape to be more serious than theft, although this effect did not differ across relationship contexts. Also as expected, participants perceived that the rapist deserved a longer prison sentence than the thief. Across both violations, participants rated the friend perpetrator as deserving a longer prison sentence than the partner perpetrator. Perceived responsibility did not differ by condition. We discuss relationship context and its role in minimization of crimes against women.
Curiously, when perceptions of sexual and property right violations are directly compared, the existing literature shows that observers do not minimize sexual violations. Kanekar, Pinto, and Mazumdar (1985) found that male rapists were perceived as deserving longer prison sentences than male thieves, which suggests that rape was perceived to be the more severe violation. In terms of responsibility, Brems and Wagner (1994) found that female victims of rape were perceived by observers as being less responsible for the crime than female victims of theft. These results may seem paradoxical given the literature documenting how sexual violations are often minimized. However, this apparent paradox could be due to the fact that Brems and Wagner (1994) and Kanekar et al. (1985) compared rape and theft committed by strangers to the victim.

The type of relationship between a victim and perpetrator may influence observers’ perceptions of crimes, especially those of a sexual nature. Most rapes are perpetrated by acquaintances rather than strangers (e.g., McGregor, 2005). Victim blaming and perceived responsibility for rape has been shown to be greater for rape by nonstrangers than for rape by strangers. Studies of observers’ rape perceptions consistently show that as the degree of intimacy between a female victim and male perpetrator increases, the perceived severity of rape decreases (Frese, Moya, & Megías, 2004). For example, observers perceived rape perpetrated by a spouse to be less serious than rape perpetrated by a stranger (Monson, Byrd, & Langhinrichsen-Rohling, 1996). Additionally, observers perceived men who perpetrated intimate partner rape as deserving less severe punishment than men who raped a neighbor (Ben-David & Schneider, 2005).

Sexual expectations for behavior within intimate relationships may explain minimization of rape within such relationships. That is, observers perceive that a woman involved in an intimate dating relationship is presumed to have a history of consensual sex with her partner (Ewoldt, Monson, & Langhinrichsen-Rohling, 2000), and some people may believe that previous consensual sex with a partner nullifies an individual’s future rights to refuse sex with that partner (Shotland & Goodstein, 1992). Accordingly, observers tend to minimize rape when the victim and the perpetrator are in an intimate relationship at the time of the violation (e.g., Ben-David & Schneider, 2005; Frese et al., 2004).

We designed the current research to extend previous research comparing perceptions of rape and theft (Brems & Wagner, 1994; Kanekar et al., 1985). Because past studies comparing these crimes have focused on perpetration by strangers only, we examined perceptions of rape and theft across different types of perpetrator-victim relationships. In the current research, crime minimization was defined in terms of the perceived seriousness of the crime, victim responsibility for the crime, and reasonable punishment or prison time for the perpetrator. A criminal act was minimized by observers who perceived that the crime was not serious, the victim was responsible for the event, and/or the perpetrator deserved little or minimal punishment.

We examined whether and to what degree two factors promoted observers’ minimization of crimes against women: violation type (rape versus theft) and victim-perpetrator relationship context (friend versus partner). First, we hypothesized that participants would perceive rape as a more serious crime than theft, but not when the perpetrator of rape was an intimate dating partner (Hypothesis 1). Although stranger rape was perceived as more serious than stranger theft (e.g., Brems & Wagner, 1994), the more intimate the relationship between perpetrator and victim, the less serious a rape was perceived to be (e.g., Ben-David & Schneider, 2005). Therefore, we expected a significant violation type by relationship context interaction such that subjects would perceive rape by a friend as more serious than either rape by a partner or any theft.

Similarly, we hypothesized that participants would perceive rape victims as less responsible for the crime than victims of theft, except when the crime was committed by an intimate partner (Hypothesis 2). Although victims of theft by strangers have been perceived as more responsible than victims of rape by strangers in past research (Brems & Wagner, 1994), victim responsibility for rape increases as a victim’s level of intimacy with a perpetrator increases (e.g., Frese, Moya, & Megías, 2004). As such, we expected to find a violation type by relationship context interaction; we predicted that victims of friend rape would be perceived as less responsible than victims of partner rape or victims of theft.

Finally, we hypothesized that participants would perceive perpetrators of rape as deserving longer prison sentences than perpetrators of theft, except when the perpetrator of rape was an intimate partner (Hypothesis 3). Kanekar et al. (1985) found that perpetrators who committed stranger rape were judged as deserving longer sentences than perpetrators who committed stranger theft. On
the other hand, Ben-David and Schneider (2005) found that perpetrators received less severe punishments for rape when they were in a more intimate relationship with the victim. Expanding on these past studies, we expected to find a violation type by relationship context interaction such that perpetrators of friend rape would be perceived as deserving a more severe punishment than either perpetrators of partner rape or perpetrators of theft.

**Method**

**Participants**

We collected data from 65 undergraduates (67.7% women; n = 44) at a small liberal arts college in Western New York. All participants were between the ages of 18 and 22 (M = 19.54, SD = 1.12). The majority of participants self-identified as White (78.5%, n = 51); other participants identified as Asian (10.8%, n = 7), Hispanic (7.7%, n = 5), or other (3.1%, n = 2). Students from all classes were represented, including freshmen (29.2%, n = 19), sophomores (40.0%, n = 26), juniors (15.4%, n = 10), and seniors (15.4%, n = 10).

**Materials**

The present study used scenario materials similar to the scenario used in Abrams, Viki, Masser, and Bohner (2003). In the Abrams et al. scenario, the female victim and male perpetrator met for the first time at a party, went to her house, kissed each other, and then the perpetrator forcibly raped the victim. In contrast, in the current study, the female victim and male perpetrator already knew each other and were studying in the victim’s room when the perpetrator committed the crime against the unwilling victim. Type of violation was manipulated by specifying that the perpetrator had sex with the victim (rape) or took her wallet (theft) despite the victim’s lack of consent. Type of relationship was manipulated such that the victim and perpetrator had either known each other for three months or had been dating for three months. In all other respects, the scenarios across conditions were identical (see Appendix).

Participants responded to questions about perceived seriousness of the crime, perceived victim responsibility for the crime, and perceptions of reasonable punishment (prison time). Additionally, participants responded to questions about the realism of the scenario and a manipulation check question. Participants also provided information regarding demographic variables, including their age, gender, race, and year in school. Lastly, they responded to questions about rape myth acceptance.

Perceived seriousness of the crime was assessed with an item from the Rape Responsibility Questionnaire (Deitz & Byrnes, 1981). This item was “How serious is this incident?” Possible responses to this item ranged from 1 (not at all) to 7 (extremely). Higher scores reflected greater perceived seriousness.

Perceptions of victim responsibility were assessed with an item from Mason, Riger, and Foley (2004). Participants were asked, “How responsible do you think each of these people is for the incident that occurred?” Although participants indicated how responsible both parties were for the incident, the focus for the current research was on perceived victim responsibility. Possible scores assigned to each party ranged from 0% to 100%, where the sum of responsibility scores for totaled 100%. Higher percentages assigned to the victim indicated greater perceived victim responsibility.

Perceptions of reasonable punishment (prison time) were assessed with a single item from Feather and Souter (2002). The item was “What would be an appropriate time for [the perpetrator] to spend in prison, if any?” Participants responded to this item on a nine-point scale (0 = none, 1 = 1 day, 2 = 14 days, 3 = 1 month, 4 = 2 months, 5 = 6 months, 6 = 1 year, 7 = 2 years, 8 = 3 years). Higher scores reflected a belief in the appropriateness of a longer prison sentence.

We evaluated scenario realism with three items from Katz, Moore, and Tkachuk (2007). The items included “How likely do you think it is that similar situations occur among college students generally?”, “How much does this scenario reflect situations that go on in the real world?”, and “How likely do you think it is that similar situations occur among female college students?” For each item, possible responses ranged from 1 (not at all) to 7 (extremely). Responses to each of the individual items were averaged to compute a composite variable of scenario realism. Higher scores reflected greater realism. Katz et al. found that this measure was reliable (Cronbach’s α = .86). In the present study, the estimate of internal consistency also was good (Cronbach’s α = .91).

One question served as a manipulation check for the relationship context manipulation. Specifically, participants were asked, “Before this incident, how close were Kathy and Jason?” Participants rated closeness on a 1 (not at all) to 7 (extremely) scale, with higher scores reflecting greater closeness. The manipulation check question was intended to assess whether study participants meaningfully differenti-
We assessed rape myth acceptance with the Illinois Rape Myth Acceptance Scale (IRMA; Payne, Lonsway, & Fitzgerald, 1999). This 45-item measure assesses seven components of rape myth acceptance, including how the perpetrator felt or acted (e.g., If he didn’t mean to, she wanted it; She lied; Rape is a trivial event; Rape is a deviant event). Each item was rated on a scale from 1 (not at all agree) to 7 (very much agree). Responses to each of the items were averaged to compute a composite variable of acceptance of rape myths. Higher scores reflected greater rape myth acceptance. Payne et al. (1999) reported evidence for the reliability and validity of this scale, including evidence for the reliability of the composite scale (Cronbach’s α = .93). The estimate of internal consistency also was good in the present sample (Cronbach’s α = .93).

**Procedure**

Undergraduates were recruited online from a voluntary human subject pool for a study of “Judgments of Heterosexual Conflict.” Data collection sessions were held in on-campus classrooms. Participants sat in columns with every other column of seats left empty to ensure privacy. Student researchers followed a script that introduced the study and discussed informed consent. Participants then provided written informed consent. Participants were randomly assigned to read one of four assignment to conditions and allowed for equivalent proportions of male and female participants assigned to each condition. Participants submitted completed surveys to a slotted box in the front of the room to ensure anonymity. Data collection sessions lasted no longer than 45 min. Participants were compensated with course credit. The participants received a full written debriefing.

**Results**

The study used a 2 x 2 factorial design with type of violation (rape or theft) and relationship context (friend or partner) as the between-subjects factors. The dependent variables were perceived seriousness of the crime, perceived victim responsibility for the crime, and perceptions of reasonable punishment for the perpetrator.

In terms of type of violation, 34 participants were randomly assigned to the rape condition, and 31 participants were assigned to the theft condition. Thirty-four participants were randomly assigned to the friend condition, and 31 participants were randomly assigned to the partner condition. A series of 2 x 2 ANOVAs indicated no differences between groups in terms of demographic variables or rape myth acceptance, which was low within the sample ($M = 2.28, SD = 0.75$, range 1.18 to 4.10). These results indicated that random assignment produced comparable groups. However, the groups did differ in terms of scenario realism. Specifically, there was a main effect of type of violation, $F(1, 61) = 7.63, p = .008, \eta^2 = .11$. Rape scenarios were perceived as significantly more realistic ($M = 5.56$) than were the theft scenarios ($M = 4.60$). There was also a main effect of relationship context, $F(1, 61) = 5.36, p = .02, \eta^2 = .08$, such that the partner scenarios were perceived as significantly more realistic ($M = 5.52$) than were the friend scenarios ($M = 4.72$). Realism did not differ as a function of the interaction of violation x context, $F(1, 61) = 0.94, p = .34$.

Due to significant between-groups differences in scenario realism, we conducted correlation analyses to determine whether realism might confound between-group differences in the study’s dependent variables. Results indicated that perceived realism scores were not significantly correlated with any dependent variable, except with prison time, $r(64) = .29, p = .02$, so we controlled for realism only in analyses testing the hypotheses about prison sentence.

To ensure that participants differentiated between the friend and partner conditions, a 2 (type of violation) x 2 (relationship context) ANOVA was conducted with perceived closeness as the dependent variable. As expected, a main effect of context emerged, $F(1, 61) = 7.75, p = .007, \eta^2 = .11$. Participants correctly differentiated between the conditions and perceived the victim to be significantly closer to her partner ($M = 4.84$) than to her friend ($M = 4.01$).

The first hypothesis was that participants would perceive the rape scenario as more serious than the theft scenario, but not when the perpetrator of the crime was an intimate partner (Hypothesis 1). To test this hypothesis, a 2 (type of violation) x 2
Effects of Violation Type and Relationship Context | Allen and Katz

An ANOVA was conducted with perceived seriousness as the dependent variable. Results of this analysis revealed partial support for this hypothesis. A main effect of type of violation was found, such that the rape scenarios were perceived as more serious ($M = 6.68$) than the theft scenarios ($M = 4.84$), $F(1, 61) = 31.37, p < .001, \eta^2_p = .34$. These means indicated that the participants found the situation to be at least relatively serious. However, there was no main effect of context, $F(1, 61) = 1.16, p = .29$, and no expected interaction effect, $F(1, 61) = 0.94, p = .34$. Participants did not perceive rape perpetrated by a friend as more serious than rape perpetrated by a partner.

In contrast, we found no support for the hypothesis that rape victims would be perceived as less responsible than victims of theft, except for when the crime was perpetrated by an intimate partner (Hypothesis 2). A 2 (type of violation) x 2 (relationship context) factorial ANOVA with perceived victim responsibility as the dependent variable revealed no main effect for type of violation, $F(1, 61) = 1.02, p = .32$. Therefore, there was no difference in how responsible participants perceived victims were for rape compared to theft. Additionally, there was neither a significant main effect of relationship context, $F(1, 61) = 1.02, p = .27$, nor the expected violation x context interaction effect, $F(1, 61) = 2.48, p = .12$. Victims of rape perpetrated by an intimate partner were not perceived to be significantly more responsible than victims of rape perpetrated by a friend. The overall sample mean for perceived victim responsibility for the incident was low ($M = 10.00, SD = 12.69$, range 0 to 50).

The last hypothesis was that perpetrators of rape would be perceived as deserving longer prison sentences than would perpetrators of theft, except when the perpetrator was an intimate partner (Hypothesis 3). To test this hypothesis, a 2 (type of violation) x 2 (relationship context) ANCOVA was conducted with length of prison time as the dependent variable and scenario realism as the covariate. Results of this analysis revealed that realism was not a significant covariate, $F(1, 59) = 2.27, p = .14$. As expected, there was a main effect of type of violation; the perpetrator of rape was perceived as deserving longer prison time ($M = 5.12$) than was the perpetrator of theft ($M = 2.19$), $F(1, 59) = 25.52, p < .001, \eta^2_p = .30$. A main effect for relationship context was also found, such that the friend perpetrator was perceived as deserving a longer prison sentence ($M = 4.38$) than was the partner perpetrator ($M = 2.93$), $F(1, 59) = 10.04, p = .04, \eta^2_p = .17$. In contrast, there was no significant violation x relationship context interaction, $F(1, 59) = 1.95, p = .17$. The means for the four conditions indicated relatively low lengths of prison time, given that a score of 3 represented one month of jail time and a score of 4 represented two months of jail time. Therefore, although participants viewed incidents as serious and responsibility was not attributed to the victim, participants did not perceive that the perpetrator deserved a long prison sentence.

**Discussion**

Our research extends the existing crime perception literature by examining observer minimization as a function of type of violation (rape or theft) and relationship of the victim to the perpetrator (friend or partner). Overall, crimes involving theft were minimized more than crimes involving rape. Specifically, participants perceived rape as more serious than theft and rapists as deserving a longer prison sentence than thieves. Relationship context was significantly related only to prison time; perpetrators who were a friend to the victim were perceived as deserving more prison time than the partner perpetrator, indicating greater minimization for either type of crime perpetrated by an intimate partner.

The current findings are consistent with previous literature comparing stranger rape and theft (e.g., Brems & Wagner, 1994; Kanekar et al., 1985) and extend these comparisons to crimes perpetrated by acquaintances. Rape may be seen as more serious than theft because, as proposed by Stylianou (2002), crimes that involve physical harm to the victim are perceived as more serious and there are potential physical health consequences of rape but not theft. Unexpectedly, the context of the victim-perpetrator relationship did not significantly influence perceived crime seriousness. As indicated by several studies (e.g., Ben-David & Schneider, 2005; Monson, Langhinrichsen-Rohlinc, & Binderup, 2000), when the intimacy of the relationship between the perpetrator and victim increased, rape was perceived as less serious. However, results from our study were not consistent with these past studies. Divergent findings might be due to the fact that we compared the behaviors of friends versus dating partners whereas past studies, such as Monson et al. (2000), have examined rape across more dissimilar relationships (e.g., strangers or neighbors vs. spouses). Alternatively, our null result may be due to the relatively high perceptions
for crime seriousness across the sample. This null result also could be the result of limited statistical power. Observed power estimates at an alpha level of $p = .05$ were low for the main effect of context (.19) and interaction effects (.16). A power level of .80 is considered to be ideal (Cohen, 1988).

Consistent with our hypothesis, and similar to past research (Kanekar et al., 1985), participants perceived the perpetrator of rape as deserving a longer prison sentence than the perpetrator of theft. Although not hypothesized, relationship context also significantly influenced perceptions of prison time such that participants perceived the friend perpetrator as deserving a longer prison sentence than the partner perpetrator. This result converges with previous research on rape (e.g., Ben-David & Schneider, 2005), which has found that perpetrators who were intimately involved with victims received less severe punishments than other perpetrators. The current research suggests that this minimization of crimes by intimate partners extends to property violations as well.

In our study, participants perceived increased closeness with partners as compared to friends. Therefore, participants may have perceived a greater acceptability for the partner perpetrator to act on his desires because of norms and expectations about women’s roles in heterosexual relationships, such as the traditional sex role belief that women should be subservient and put others above their desires and ambitions (Murnen & Byrne, 1991; Rodman Aronson & Schaler Buchholz, 2001). Unwanted sex and sexual coercion are more likely to occur in situations with long-term couples and couples with partners who are very familiar with each other (Jackson, Cram, & Seymour, 2000; Murnen, Perot, & Byrne, 1989). When examining variations in relationship context, Faulkner, Kolts, and Hicks (2008) reported that women participants were slower to end a simulated sexual coercion scenario when the perpetrator was considered a long-term relationship partner as opposed to a first date or a teaching assistant from their college classes. On the other hand, participants may have been more likely to view the friend as violating social norms for acceptable behavior within a relationship because he was not perceived to be as close to the victim.

Finally, our hypothesis regarding perceived victim responsibility yielded null results. Perceived victim responsibility did not differ either as a function of type of violation or relationship to the victim. The small sample size and the relative lack of variability on the single item responsibility variable both may have resulted in a lack of statistical power to support this hypothesis. Again, at an alpha level of $p = .05$, observed power estimates for both main (.17 for violation type and .20 for context) and interaction (.34) effects for victim responsibility were low. These figures are below the ideal power level of .80 (Cohen, 1988).

Although researchers have reported sex differences in participant responses to crime scenarios (Basile, 2002; Ewoldt et al., 2000), the literature provides conflicting data regarding sex differences in participant responses to rape and theft scenarios. Kanekar et al. (1985) reported sex differences in that women perceived that longer prison sentences were necessary for perpetrators than did men. In contrast, Brems and Wagner (1994) found no sex differences. In the current study, we did not find sex differences for perceptions of seriousness, victim responsibility, or reasonable punishment, either in main effects or interactions with type of violation or relationship context. Differences in perceptions of rape and crime scenarios as a function of participant sex bear further examination.

There were several limitations in the current research. First, as the sample was small and homogenous, results may not generalize to more diverse samples. Additionally, past research involving similar theft scenarios (Sanderson, Zanna, & Darley, 2000) manipulated the severity of theft to be high severity theft (i.e., $15,000) or low severity theft (i.e. $200). Therefore, the theft in the current study (i.e., wallet) involved a low-magnitude property violation. Furthermore, a more realistic scenario in which a theft occurs may be perceived differently by participants. Although it is difficult to conceive of a property violation that might be comparable to rape, future research may examine property violations of varying magnitudes, as in Sanderson et al. (2000), within the context of dating as compared to friendship relationships in order to determine if manipulation of the theft severity influenced the results.

Additionally, the current study’s results may also have been influenced by overall low rape myth acceptance scores across the sample. Past research (e.g., Xenos & Smith, 2001) has shown that individuals who were high in rape myth acceptance were more likely to minimize rape. Therefore, the greater minimization of theft across the sample may be due in part to overall low rape myth acceptance. Future research studies including participants with more diverse levels of rape myth acceptance are
needed. Furthermore, considering past research has found that experiences of participants influence their perceptions (Basile, 2002), future researchers may also consider asking participants about their experiences with crime (rape or theft) in addition to perceptions of crime minimization.

Despite the aforementioned limitations, our research adds to the literature by replicating and extending results of past research about perceptions of stranger rape (e.g., Brems & Wagner, 1994; Kanekar et al., 1985) to rape by intimate partners and friends. Additionally, the present study extends previous literature on perceptions of crime by documenting the relative minimization of theft in intimate victim-perpetrator relationships. Results indicated that the more intimate the victim-perpetrator relationship is, the shorter the prison sentence that is perceived as reasonable for the perpetrator. The current research highlights how crimes by partners in heterosexual relationships are minimized, perhaps reflecting a larger societal norm of accepting negative behavior from intimate partners that may not be accepted from others. Understanding this minimization is important to framing societal and legal responses to crimes and to shaping individual-level responses to abuse and sexual assault victims. It can often be difficult for victims to come forward if they fear that their experiences will be minimized or disbelieved (Sable, Danis, Mauzy, & Gallagher, 2006). Only by further examination of crime minimization can society begin to understand more about why minimization exists and how to ensure that all crime victims receive the support and justice that they deserve.

References
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APPENDIX

SCENARIO A (RAPE, FRIEND)

Jason and Kathy are both college juniors attending the same school. They have known each other for 3 months and now have a couple of classes together. One night, they decide to study for their chemistry exam in Kathy’s room and spend the night talking and laughing. Then, Jason tells Kathy that he can’t concentrate anymore because he is only thinking about Kathy. He asks Kathy to have sex with him, but Kathy says no, she needs to study. Jason insists, saying that they’ve known each other for a while and it’s really not a big deal. Jason reaches for her pants, and as he begins to open them, Kathy asks him to stop. Jason gets mad. He says that he will not take no for an answer. Although Kathy repeatedly says no, Jason has sex with her anyway.

SCENARIO B (RAPE, PARTNER)

Jason and Kathy are both college juniors attending the same school. They have been dating for 3 months and now have a couple of classes together. One night, they decide to study for their chemistry exam in Kathy’s room and spend the night talking and laughing. Then, Jason tells Kathy that he can’t concentrate anymore because he is only thinking about Kathy. He asks Kathy to have sex with him, but Kathy says no, she needs to study. Jason insists, saying that they’ve known each other for a while and it’s really not a big deal. Jason reaches for her pants, and as he begins to open them, Kathy asks him to stop. Jason gets mad. He says that he will not take no for an answer. Although Kathy repeatedly says no, Jason has sex with her anyway.

SCENARIO C (THEFT, FRIEND)

Jason and Kathy are both college juniors attending the same school. They have known each other for 3 months and now have a couple of classes together. One night, they decide to study for their chemistry exam in Kathy’s room and spend the night talking and laughing. Then, Jason tells Kathy that he can’t concentrate anymore because he is only thinking about food. He asks Kathy to give him money for food, but Kathy says no, she needs to study. Jason insists, saying that they’ve known each other for a while and it’s really not a big deal. Jason reaches for her purse, and as he begins to open it, Kathy asks him to stop. Jason gets mad. He says that he will not take no for an answer. Although Kathy repeatedly says no, Jason leaves with all her money anyway.

SCENARIO D (THEFT, PARTNER)

Jason and Kathy are both college juniors attending the same school. They have been dating for 3 months and now have a couple of classes together. One night, they decide to study for their chemistry exam in Kathy’s room and spend the night talking and laughing. Then, Jason tells Kathy that he can’t concentrate anymore because he is only thinking about food. He asks Kathy to give him money for food, but Kathy says no, she needs to study. Jason insists, saying that they’ve been dating for a while and it’s really not a big deal. Jason reaches for her purse, and as he begins to open it, Kathy asks him to stop. Jason gets mad. He says that he will not take no for an answer. Although Kathy repeatedly says no, Jason leaves with all her money anyway.

Christy Allen graduated summa cum laude from the State University of New York College at Geneseo in 2010 with a BA in psychology and sociology. While at Geneseo, Ms. Allen engaged in research in areas such as developmental psychology, sexual aggression, and Broadway icons. Following graduation, Ms. Allen combined her interest in research and social justice during a year as an AmeriCorps VISTA Fellow at the Siena College Research Institute as the Coordinator of Community Based Research. She is currently the project coordinator of a research study on a mindfulness intervention for veterans with PTSD symptoms at the Center for Integrated Healthcare in Syracuse, NY. Ms. Allen is a member of Phi Beta Kappa, Alpha Kappa Delta, Psi Chi, and Golden Key National Honor Society.
Facebook is an online social networking site through which people can interact with fellow users in the next room or across the world. In less than two years, the size of Facebook has increased twofold, doubling from over 250 million active users in July 2009 to over 500 million active users currently (Facebook, 2011). Facebook continues to gain dominance as one of the most influential social networking websites. Not only can users stay in touch with family members, friends, or acquaintances, but they can also connect with high-profile individuals, such as Lance Armstrong, Ashton Kutcher, President Barack Obama, and President Nicolas Sarkozy (Facebook, 2009).

Researchers have studied social networking websites extensively (Facebook in particular) and have reported substantial use of these websites. According to Raacke and Bonds-Raacke (2008), 90.1% of participants (undergraduate students) had a Facebook account. Other researchers have reported that 75%, 85%, and 94% of undergraduate students have a Facebook account (Acar, 2008; Fogel & Nehmad, 2009; Ross et al., 2009, respectively). Students with profiles on Facebook spend significant amounts of time each day on the website. For example, researchers have reported average times spent on Facebook ranging from 27.9 min to 38.9 min to 1 hr to 1.5 hr per day (Christofides, Muise, & Desmarais, 2009; Fogel & Nehmad, 2009; Pempek, Yermolayeva, & Calvert, 2009; Raacke & Bonds-Raacke, 2008).

Due to the pervasive presence of Facebook and the extent to which people use it, multiple researchers have studied aspects of Facebook beyond quantitative characterizations. Boon and Sinclair (2009) wrote specifically of a need for answers and a necessity for theories about online identity. This research is especially critical because

**ABSTRACT.** Multiple researchers have studied various aspects of the social networking website Facebook. Due to the relative lack of literature on Facebook and anxiety, the goal of this study was to determine if individuals with obsessive-compulsive personality characteristics use Facebook more than average and if these individuals use Facebook compulsively as a way to manage anxiety. Participants were 222 Facebook users invited to complete a survey about Facebook use and personality characteristics. The survey included the Leyton Obsessional Inventory short form (Cooper, 1970) and a Facebook questionnaire posted online through a survey tool, Psychdata. We found no relation among frequency or time spent on Facebook and obsessive-compulsive personality characteristics, but found significant relations among reasons for accessing Facebook and obsessive-compulsive personality characteristics. These findings suggest that individuals with obsessive-compulsive personality characteristics may engage in Facebook as a way to ease stress.
engaging in social networking sites has been the favorite online activity of students (Kim, LaRose, & Peng, 2009). One aspect of Facebook reported by Christofides et al. (2009) highlights the unique nature of Facebook. They found that participants were more likely to disclose personal information and personally identifying information on their Facebook profiles than they were in real-world situations. A need for further Facebook research that could lead to new information facilitating knowledge and understanding is underscored by these findings.

One specific area of study in the empirical literature is the correlation between Facebook use and specific personality characteristics or emotional states. One personality characteristic, shyness, is a trait relevant to Facebook due to the social yet removed aspect of online social networks. Orr et al. (2009) found that shy individuals spent significantly more time on Facebook than nonshy individuals, that shyness was positively correlated with positive attitudes about Facebook, and that shy individuals had significantly fewer friends linked to their Facebook profiles than nonshy individuals. Loneliness is an emotional state that researchers have studied with regard to social networking and Facebook usage. Lonely individuals are apt to develop compulsive Internet usage that is maladaptive rather than relieving of original problems (Kim et al., 2009). Excessive Internet use sets up a cycle that can lead to further loneliness (Kim et al., 2009). Furthermore, lonely children and adolescents communicate online about intimate topics significantly more than individuals who are not lonely (Bonetti, Campbell, & Gilmore, 2010). Acar (2008) showed that extroversion, another relevant personality characteristic due to the social aspect of Facebook, was positively correlated with social network size. Another study, however, indicated that extroversion and number of Facebook friends were not linked (Ross et al., 2009). Although many personality characteristics appear well researched with regard to Facebook usage, the link between anxiety and Facebook usage is relatively underrepresented in the empirical literature. Acar (2008) reported that anxiety in general is not significantly related to the amount of time spent on Facebook or to the size of one’s online social network. MacMillan (2008), however, in his editorial, considered the role anxiety plays in Facebook use. He stated that people reach out to online social networking sites to reduce stress and anxiety levels resulting from real-life situations, yet spending too much time online can add to the load of stress and anxiety. Farrell (2006) noted that students across the country access the Facebook pages of future or potential roommates to glean information about them, possibly increasing or decreasing their anxiety. Researchers need to conduct more empirical research in order to better understand the relations between anxiety and Facebook usage.

We attempted to analyze this possible relation between anxiety and Facebook usage, specifically the virtually unstudied relation between Facebook usage and obsessive-compulsive personality characteristics. Studies indicate that adolescents and college-age individuals suffering from Internet addictions are more likely to suffer from obsessive-compulsive symptoms than matched controls (Ha et al., 2007; Xiuqin et al., 2010). However, the relation between social networking usage, specifically Facebook, and obsessive-compulsive personality characteristics is unknown. We studied obsessive-compulsive personality characteristics as opposed to the disorder for two reasons: Participants were not diagnosed with obsessive-compulsive disorder (OCD), and we included individuals who displayed a range of obsessive-compulsive personality patterns. According to the DSM–IV (American Psychiatric Association, 2000), checking, repeating actions, and ordering are among the most common compulsions in individuals with OCD or OCD characteristics; one who is bogged down with excessive obsessions attempts to decrease the resultant anxiety by engaging in these compulsions. Also, 15% of individuals with OCD do not maintain adaptive social functioning (American Psychiatric Association, 2000). Therefore, we asked two specific questions in this study: Do individuals with obsessive-compulsive personality characteristics use Facebook more than average, and do individuals with obsessive-compulsive personality characteristics use Facebook compulsively as a way to decrease anxiety?

We predicted that individuals with obsessive-compulsive personality characteristics would fall in the extreme high end of Facebook usage. Regarding Facebook usage, Subrahmanyam, Reich, Waechter, and Espinoza (2008) reported that 2% of their sample had their Facebook profile open continuously. Fogel and Nehmad (2009) reported that, on average, participants visited others’ profiles 4.0 times per day, but the standard deviation was 5.8. We predicted that individuals with the highest levels of OCD characteristics would report significantly more frequent and intense Facebook usage.
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(Hypothesis 1) and those individuals would report compulsive use of Facebook in order to manage anxiety (Hypothesis 2).

Method

Participants
Participants were 222 individuals, 22% men and 78% women, 18 and older (M = 21.4, SD = 5.1), who were existing members of Facebook. We recruited participants through Introductory Psychology classes at an intermountain west university and the university's Psi Chi chapter Facebook page (snowball sampling). Participants marked their race/ethnicity using a “check all that apply” system. Ninety-five percent of participants checked non-Hispanic White, 2.3% checked Latino, 1.8% checked Black or African American, 2.7% checked Asian or Asian American, 0.9% checked Hawaiian or Pacific Islander, and 1.8% checked Native American or Alaska Native. Of the participants, 73.4% were never married, 19.8% married, 0.9% divorced, and 5.9% were in an unmarried, committed relationship. Participants also marked their educational background using a “check all that apply” system. Twenty-eight percent of the sample had completed high school, 55% had completed some college, 10% had completed a bachelor’s degree, and 7% had completed some advanced graduate education.

Materials

Demographic information and Facebook usage questionnaire. We first assessed biological sex, age, ethnicity, educational background, and relationship status through a series of demographic questions. We then administered a questionnaire created to assess frequency and specific use of Facebook by participants. The survey consisted of 45 multiple choice and Likert-scale questions. Thirty-three questions assessed patterns of Facebook usage, including frequency with which participants engaged in various Facebook activities (e.g., posting pictures, responding to friend requests, playing games, status updating). The remaining 12 items assessed a range of reasons for using Facebook. The questions had the stem “Respond to the following statements about the reasons you use Facebook,” which we created to capture a range of both anxious and nonanxious approaches to Facebook usage (e.g., reduce stress, stay connected with friends/family, satisfy impulses). We assessed items on a 5-point Likert scale (1 = Not at all true of me, 5 = Very true of me) and included Facebook behaviors and attitudes that might be linked to the checking, doubting, and repetitive aspects of obsessive-compulsive personality characteristics.

Leyton Obsessional Inventory, short form.
We used the Leyton Obsessional Inventory, short form (LOI; Cooper, 1970), to measure obsessive-compulsive personality characteristics. Using the original form, Stanley et al. (1993) showed convergent and divergent validity by comparing the LOI to the Symptoms Checklist-90-Revised (Derogatis, 1983) and to the Eysenck Personality Inventory (Eysenck & Eysenck, 1975). They established internal consistency using Cronbach’s alpha, which yielded scores of .75 to .90. They also found that the LOI could discriminate between patients with OCD and patients with other disorders (Stanley et al., 1993).

Unfortunately, scoring procedures for the LOI are not consistent across studies (e.g., unique scales for clinical versus nonclinical populations, Cooper & Kelleher, 1973; Murray, Cooper, & Smith, 1979). Researchers have used principle components analysis to yield different scale scoring procedures across different studies. For the current study, various scoring instructions gleaned from previous studies were incorporated, along with analysis of the face validity of items addressing the key constructs identified as relevant for this study, to select items representing the contamination fears, checking behaviors, and repetition/doubt aspects of obsessive compulsive characteristics. Following procedures observed in previous literature, we conducted a principle components factor analysis with the selected items to finalize the scoring strategy. The analysis yielded factors consistent with the constructs identified through exploring previous scoring strategies. The repeating doubts scale contained seven items (α = .67)—for example, “I frequently have nasty thoughts and have trouble getting rid of them,” “I usually have serious doubts about the simple, everyday things I do,” and “I do not worry if I bump into a person” (reverse scored). The checking scale contained five items (α = .73)—for example, “I do not check letters before mailing them” (negatively scored), “My major problem is repeated checking,” and “I spend a lot of time every day checking things over and over again.” The contamination scale included seven items (α = .63)—for example, “I avoid using the public telephone,” “I am not concerned with germs,” (reverse scored) and “I can use public toilets without hesitation” (reverse scored).
Procedure
Participants completed the surveys through the use of an online survey software package (Psychdata). We sent out the link to the surveys in recruitment letters that we distributed through the Psi Chi chapter Facebook group and to students taking Introduction to Psychology. We presented the letter of information to participants upon first entering the site. The letter stated that participants had to be 18 years or older to participate in this study. By clicking continue, participants gave informed consent that they were 18 years or older and agreed to the terms of the letter of information. Following the survey, we directed participants to a separate webpage where they had the option to give their e-mail address in order to be entered into a drawing for one of 15 gift certificates to Amazon.com worth $20 each and/or to receive course credit for Psychology 1010. Participant submission of contact information was voluntary and was not linked to survey results.

Results
Descriptive statistics of Facebook use for this sample appear in Table 1. The modal frequency of Facebook access was about two times a day. The modal amount of time participants spent on Facebook per session was between 11 and 30 min. Sample size varied slightly for accessing Facebook and time spent on Facebook due to missing data. Table 2 lists a sampling of ways participants used Facebook.

We performed a principal components factor analysis with Varimax rotation on the items concerning reasons for Facebook usage. We identified three factors that yielded eigenvalues greater than one. The three factors accounted for a significant percentage of the variance across the 12 items. Together, the items “reduce stress,” “calm down,” “distraction from problems,” and “decrease tension” accounted for 23.46% of the variance in reasons for Facebook use; we named this factor “stress relief.” The items “relieve intrusive thoughts,” “ease persistent ideas,” and “satisfy impulses” accounted for 15.77% of the variance in reasons for Facebook use; we named this factor “compulsion.” The items “hobby,” “stay in the loop,” “meet people,” “stay connected,” and “bored” accounted for 12.57% of the variance in reasons for Facebook use; we named this factor “social networking.” Table 3 presents eigenvalues, alphas, and item statistics for each factor derived from the factor analysis. We calculated scale scores by calculating a mean across all items loading on each factor. Scores ranged from 1 to 5. Analysis of intercorrelations among the three scales yielded significant moderate to strong correlations; stress relief and compulsion, \( r(222) = .62, p < .001 \); stress relief and social networking, \( r(222) = .48, p < .001 \); compulsion and social networking, \( r(222) = .42, p < .001 \).

LOI scores consisted of 0 or 1 (0 = false, 1 = true). Scale scores were calculated by summing the number of “true” responses for each scale. For each scale, the range of responses covered the full possible range of the scale. Means and standard deviations were \( M = 2.28 \) (SD = 2.10) for repeated-doubts, \( M = 1.16 \) (SD = 1.43) for checking, and \( M = 1.20 \) (SD = 1.42) for contamination. The low means reflect low OCD tendencies for this sample. We calculated Pearson correlation coefficients between Facebook questionnaire items and LOI scale scores. Thinking about Facebook when not on Facebook was associated with repeating doubts. Multiple status updates in a single session was associated with repeating doubts and checking. Search for friends was associated with repeating doubts, checking, and contamination. We found no signifi-
Compulsion was correlated with repeating doubts, checking, and contamination. Social networking was correlated with repeating doubts and checking.

**Discussion**

The purpose of this study was to examine the possible relations between obsessive-compulsive personality characteristics and Facebook usage. Participants used Facebook in a number of ways ranging from participants passively viewing other members’ profiles to actively posting photos, creating groups, playing games, and chatting with friends. Results indicated a broad range of Facebook activity in this sample. Participants reported accessing Facebook anywhere from once a month to several times a day, resembling a normal distribution. Likewise, as shown in Table 2, the amount that participants engaged in each activity on Facebook was distributed across the Likert scale. The range is similar to findings from other studies (Christofides et al., 2009; Fogel & Nehmad, 2009; Pempek et al., 2009; Raacke & Bonds-Raacke, 2008).

The results indicated no relation between frequency of use of Facebook or time spent on Facebook per session and obsessive-compulsive personality characteristics. These findings showed that individuals with OCD characteristics did not engage in the use of Facebook more than average, contrary to Hypothesis 1. However, some Facebook activities were associated with OCD characteristics. The items “thinking about Facebook when not on Facebook,” “multiple status updates,” and “searching for friends” were all associated with the repeating doubts scale of the LOI. The item “searching for friends” was associated with the checking scale. These correlations point to a possible link between OCD characteristics and Facebook usage. Given the range of reasons for which participants accessed Facebook, it is not surprising that simple measurement of time online was not associated with obsessive-compulsive personality characteristics.

Factor analysis of reasons for Facebook use resulted in three main categories of reasons participants engaged in Facebook: to relieve stress, act on compulsions, and network socially. We found all three reasons for Facebook usage to be associated with OCD characteristics, most strongly with repeating doubts and checking. These results provide support for Hypothesis 2. First, the factor analysis supported the notion of a coherent set of anxiety-related cognitions about Facebook usage. As might be expected, mean scores for the anxiety-related cognitions about Facebook usage.
related Facebook reasons (i.e., stress relief and compulsion) were lower than social networking reasons, but we observed the full range of both anxiety-related scales in this sample. Second, we found significant correlations between reasons for Facebook usage and LOI subscales. These data indicate the possibility that individuals with OCD characteristics were using Facebook as a way to manage anxiety, particularly to ease persistent thoughts and satisfy impulses. We emphasize that although correlations were statistically significant, they were fairly small. No correlation between reasons for Facebook usage and LOI subscales. These findings could have been affected by the low variance for reasons for Facebook usage was accounted for by obsessive-compulsive tendencies. Therefore only a small amount of variance for reasons for Facebook usage was exceeded .37. Therefore only a small amount of variance for reasons for Facebook usage was accounted for by obsessive-compulsive tendencies. This finding could have been affected by the low OCD tendencies of this sample. The data indicate that there were many other factors that influenced participants’ usage of Facebook.

Much of the research reviewed for this study was performed by researchers through universities at the undergraduate level. We targeted individuals across age ranges and across a wider demographic range, although the majority of participants were still affiliated with university settings. Due to the significant findings of this study, we can provide useful information to clinicians about nontraditional manifestations of OCD characteristics.

Manifestation of most or all clinical conditions is contextually and historically situated. As clinical assessment and intervention evolve to adapt to a society saturated with technology, clinicians will need to attend to online expressions of core features of clinical presentation, in this case obsessive-compulsive thoughts and behaviors as they pertain to social networking. Clinicians can, in turn, implement new therapeutic interventions into client aims.

This research was a preliminary study on OCD characteristics and Facebook usage. The limitations of this study include the use of the short form of the LOI and the disproportionate number of female participants in the sample. There is great variability across published studies with regard to the item content, reliability, and scoring procedures used for the LOI. Given the relatively low reliability obtained for the subscales in this study, reliable and valid assessment of obsessive-compulsive personality characteristics in nonclinical populations remains a challenge for researchers interested in understanding this phenomenon. The uneven gender distribution is consistent with other research using college student samples, despite our efforts to reach out to nonuniversity community members. Researchers need to conduct further research with other samples including adolescents and nonuniversity adults to substantiate these results. Furthermore, future researchers should attempt to substantiate results by using different measures of OCD. This understanding will be useful for clinical intervention in the current digital age.

### References


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Sarah Stevens graduated with her BS in psychology in the spring of 2011. During her tenure at Utah State University (USU), she initiated three independent research projects: two on eating disorders—emotion regulation and impulsivity—and a third on anxiety and social networking. Her work on emotion regulation constructs and eating disorder characteristics earned her and her colleagues the Student Research Award for outstanding empirical research at the annual Rocky Mountain Psychological Association research convention. Ms. Stevens served as a council member for 2 years on the board of USU’s Chapter of Psi Chi. She has also served students at USU through volunteer work at Counseling and Psychological Services on campus. Ms. Stevens is currently working full-time at a residential treatment center for women with eating disorders. She is in the process of applying to graduate school and hopes to earn her PhD in clinical psychology.
Humans have long been preoccupied with sex, nude images, and sexuality. Long before the invention of writing, there were cave drawings and primitive sculptures of sexual acts or reproductive body parts (Lo Duca, 1966). As technology advanced, so did the ways to create pornography. Greek artists began to focus on the nude human body. As soon as the camera was invented, there were pictures taken of naked men and women engaging in sexual acts. The human fascination with erotica has not changed. More recently, the term sex was the most frequently searched word on the Internet (“Sex’ is the most searched term on the web,” 2002). However, society’s opinion on the acceptability of viewing pornography has changed over time. Some extreme examples of society’s change in opinion are the licentious days of the Greeks and Romans and the prudish days of the Victorian Period. Recently, it appears that the extremes of sexual experimentation and strict regulation of sexual practices exist at the same time, especially in America.

In many ways, American society is sexually restrictive and narrow-minded. The prude stigma of America exists because there are strict laws regulating promiscuity in America and sexually reserved cultural practices. For example, nude beaches are rare and have age limits, much of the media must comply with censorship rules, and abstinence is still a widely used form of sexual education. Viewing America as sexually restrictive is ironic because America is the number one producer of pornographic videos and websites (Ropelato, 2011). Also, an estimated 40 million Americans view pornography on a regular basis (Ropelato, 2011). It seems that America as a community is divided in its beliefs about the acceptability of pornography.

ABSTRACT. There is a persistent belief that viewing pornography has a wide range of negative consequences, but recent research has also indicated positive effects. The purpose of this experiment was to study the immediate effect of pornography on relationship satisfaction. The experimenters randomly assigned participants (N = 98) to one of three groups: Group 1 viewed neutral images of people, Group 2 viewed pornographic images, and Group 3 viewed images of scenery. Immediately after viewing the images, participants answered questions about their relationship and sexual satisfaction. In general, results indicated that participant responses did not differ among the three groups for either relationship or sexual satisfaction; however, an interaction existed in the sexual satisfaction subscales between gender and group assignment. Men and women indicated sexual dissatisfaction on different subscales depending on their group assignment. The results also indicated gender differences among pornography viewing and sexual satisfaction responses.
Defining Pornography
The Attorney General’s Commission on Pornography defined pornography as “material predominantly sexually explicit and intended for purposes of sexual arousal” (1986, pp. 228-229). The Attorney General’s definition is not often used in research because it lacks clarity. For example, it is arguable that many advertisements are aimed at sexual arousal by using provocative images to sell products; however, sexually appealing advertisements are generally not considered pornography.

Because of the ambiguity of the definition provided by the Attorney General’s Commission, most experimenters individually define pornography. The variety of definitions has left a divide among researchers. Although one researcher may allow participants to construct their own definitions of pornography (Benjamin & Thusten, 2010), another researcher may strictly define the difference between erotic images and pornography (Senn & Desmarais, 2004).

The definition of pornography is often skewed by the predicted outcome of the research. For example, Senn and Desmarais (2004) distinguished between nonviolent degrading pornography and violent degrading pornography. Narrowing the definition of pornography in this manner restricted pornography to degrading versions and did not include the nondegrading pornography options. “Degradation” is often used as a criterion to distinguish differences among types of pornography. Degradation describes belittling or humiliating behavior during a sexual act, such as name-calling or domination of the sexual partner. Senn and Demaris’s findings indicated that all pornography is harmful. The narrow definition of pornography used by these researchers may explain why they found all pornography to be harmful.

Conversely, some researchers avoid defining pornography explicitly and instead use questionnaires that ask about specific behaviors (e.g., how often the participant has seen oral sex on the Internet; Morrison, Harriman, Morrison, Bearden, & Ellis, 2004). The definition of pornography used in the current study was images containing nudity (i.e., exposing a breast or visible genitalia of either men or women). The definition applied only to images chosen for the pornographic image group.

Negative Influence of Pornography
One of the many problems associated with studying pornography’s effects is eliminating confounding variables. Commonly discussed variables are the amount of degradation and aggression associated with pornography. Although attitudes supporting rape and other sexually aggressive behavior are associated with pornography, they are equally associated with degrading material that does not include nudity (Golde, Strassberg, Turner, & Lowe, 2000). Therefore, it is necessary to determine the extent to which pornography and aggression/degradation occur together in the environment. Bridges, Wosnitzer, Scharrer, Sun, and Liberman (2010) examined 304 scenes from popular explicit adult videos. Results indicated that 88% of the scenes contained physical aggression. The most common forms of aggression were spanking, gagging, and slapping. In addition, 49% of the scenes contained verbal aggression, mainly name-calling. The frequent co-occurrence of pornography and aggression/degrading material may explain why previous researchers have focused on the negative consequences of pornography viewing.

One such negative consequence frequently cited is the link between pornography use and participants’ aggressive attitudes (Golde et al., 2000; Malamuth, Addison, & Koss, 2000) and actions (Simmons, Lehmann, & Collier-Tension, 2008). Researchers found an increase in sexually aggressive attitudes and behaviors followed pornography exposure. The more violent the pornography, the more negative attitudes participants exhibited. Similarly, the more pornography individuals reported viewing, the higher their sexual aggression levels were (Malamuth et al., 2000). After degrading pornography exposure, men reported beliefs that sex with women creates masculine domination and female submission (Golde et al., 2000). The previous research shows a strong link between aggressive beliefs and pornography, but not necessarily aggressive actions.

Simmons et al. (2008) found links between pornography and aggressive behaviors through questionnaires completed by women from interpersonal violence shelters. Their results indicated that the degree of controlling behavior demonstrated by the batterer correlated positively with the amount of pornography used. Although this research indicates aggressive behavior may be linked with pornography, it is not clear if there is a third variable mediating the connection, such as personality. Individual differences, such as low intelligence and high aggressive antisocial tendencies, may account for a personal preference of violent pornography (Bogaert, 2001).

Aggressive beliefs and behaviors are not the
only negative side effects associated with pornography viewing. Hald and Malamuth (2008) found that participants reported pornography use affected different types of self-esteem. Male and female participants believed that their pornography consumption negatively impacted their sexual knowledge, attitudes toward sex, perceptions of the opposite sex, general quality of life, and sex life. Also, men's satisfaction with their penis and sexual esteem (i.e., how valuable they rated themselves as a sex partner) was inversely correlated with the amount of pornography they had viewed (Morrison, Ellis, Morrison, Bearden, & Harriman, 2006).

Similarly, many individuals report that pornography use affects their relationship satisfaction. Partners frequently discuss pornography use with a therapist during couples’ counseling (Ayres & Haddock, 2009). Additionally, compulsive cybersex users, individuals who seek sexual gratification through Internet experience (i.e., pornography, chat rooms), reported relationships as the number one area in their life that was affected by pornography (Cooper, Delmonico, & Burg, 2000). Because compulsive cybersex users are frequently single, it is unclear if they are single because of their addiction or because they chose to be single.

Pornography viewing also affected the interactions between men and women who were not in a relationship (Mulac, Jansma, & Linz, 2002). Male participants who viewed pornographic videos, both degrading and nondegrading, demonstrated more dominant and anxious behaviors, such as more often ignoring their partner’s contributions, touching their partner for longer periods of time, and averting their partner’s gaze more often compared to the men who watched the nonsexual films (Mulac et al., 2002). Although this research showed a clear connection between pornography and negative partner interactions, it does not necessarily indicate that pornography exposure will negatively affect interactions within a relationship. Therefore, the field of research that examines the cause and effects of pornography on relationships remains insufficient.

**Positive Influences of Pornography**

Some of the same research that found negative influences of pornography also showed positive effects. For example, in addition to the link between pornography and aggressive beliefs, exposure to nudity alone significantly decreased reported aggression levels (Malamuth et al., 2000). In fact, even the highest levels of pornography exposure are not associated with high levels of sexual aggression in the majority of American men (Malamuth et al., 2000). This finding may not be positive, but it does suggest that pornography does not necessarily have a negative impact on its viewers.

Likewise, exposure to pornography was positively correlated with sexual esteem for both male and female participants (Morrison et al., 2004). Both sexes also reported levels of pornography exposure that were inversely correlated with sexual anxiety, indicating that the more pornography viewed, the less anxiety the participant reported experiencing during sexual activity (Morrison et al., 2004). Findings indicating positive effects of pornography are in stark contrast to the previously mentioned findings of negative effects on self-esteem.

*Playboy* readers also indicated positive effects of pornography (Beggan & Allison, 2003; Beggan, Gagne, & Allison, 2000). Male readers concluded that continual exposure to *Playboy* served as a source of information about sex and helped develop sexual self-concepts (Beggan & Allison, 2003). An analysis of *Playboy* indicated a lack of stereotyping women and correct information about women, sex, and relationships (Beggan et al., 2000), suggesting that pornography accompanied by correct information can be educational.

There is little evidence of the positive influence of pornography in research. This finding may be due to a lack of researchers who are looking for positive effects, a deficit of research in this field in general, the possibility that there are few benefits from viewing pornography, or some other mediating factor. However, one preliminary study by Benjamin and Tlusten (2010) indicated a positive impact of partners viewing pornography together. Participants reported a neutral attitude to viewing pornography and said that their partner’s use did not impact their satisfaction within the relationship. When participants reported viewing pornography with their partner, they claimed that the practice enhanced learning more about satisfying their partner and themselves sexually and the practice enhanced passion for sexual activity (Benjamin & Tlusten, 2010). The results of this study are intriguing and warrant further research of the positive effects of pornography on a relationship.

**Problems Associated With Pornography Research**

The threat of a volunteer bias for experiments involving pornography is high (Gaither & Sellbom,
Pornography’s Effect on Relationship Satisfaction | Butler, Ferraro, and Holm

2003). One study found that men and women differed in the types of studies in which they would volunteer to participate. Men were more likely to volunteer for heterosexual sexual activity content studies than women, and inversely, women were more likely to volunteer for studies that contained male nudity. Additionally, volunteers reported greater self-monitoring and general sensation seeking compared to nonvolunteers (Gaither & Sellbom, 2003), suggesting that even well-constructed experiments may be flawed and use samples that are not representative of the population.

Current Study
The current study addressed the large gap in research concerning pornography’s effect on relationships. Because the research suggests mixed effects of pornography, the hypothesis was that pornography exposure would affect relationships but did not indicate the direction of the effect. Specifically, viewing pornography compared to neutral images of people and neutral scenery would affect the participants’ responses to surveys addressing both relationship and sexual satisfaction. A second hypothesis was that there would be differences between men and women’s responses. Men were expected to have more pornography exposure than women, which might affect their responses to different measures. Therefore, we separated sexes for the analysis of all data.

Method
Participants
The participants in this study were students (N=98) from the University of North Dakota; the experimenters excluded two participants from analysis for not being in a committed relationship. Participants ranged in age from 18 to 31 (M = 19.99, SD = 2.49). Both male (n = 55) and female (n = 41) participants were required to be in a committed relationship. Participants indicated their level of commitment as exclusive/committed (i.e., boyfriend or girlfriend; 70%), promised (i.e., “pinned” or wearing a promise ring; 9%), living together (10%), engaged (7%), or married (3%). The length of relationship was specified as 0 to 2 months (8%), 2 to 6 months (19%), 6 months to 1 year (26%), 1 to 3 years (38%), and more than 3 years (9%). With respect to sexual activity with current partner, 76% (n = 73) of participants reported having intercourse. All participants reported being in a heterosexual relationship.

The majority of participants reported their ethnicity as Caucasian/White (92%). Others reported Black (1%), Hispanic (3%), Native American (3%), or Mixed (1%) ethnicity. Participants’ year in school varied: 42% indicated freshman, 23% sophomore, 26% junior, 7% senior, and 2% graduate student status.

Materials
Slideshows. We used the International Affective Picture System (IAPS; Lang, Bradley, & Cuthbert, 1999) to create three slideshows. Lang et al. developed the IAPS for experimental investigations in order to provide a set of normative emotional stimuli. Each slideshow used pictures exclusively from IAPS and contained 30 pictures on 30 separate slides. The neutral images of people slideshow contained images of people smiling or showing affection to others. The pornographic images slideshow consisted of erotic images of men and women, either alone or together. The images of solitary individuals contained nudity and sensual poses; for example, one image was of a naked woman facing the beach, her legs separated and her head turned toward the camera. Her position exposed her buttocks and part of her left breast. When two individuals were together in an image, it was always one man and one woman. All of the images showed the couple engaging in sexual contact, such as having oral sex, intercourse, or caressing each other while naked. The images were equally split between male and female domination; for every picture where a man was in a dominant position (such as on top), there was a photograph of a woman in the same position. Likewise, for every photograph of a woman performing oral sex, there was a picture of a man performing oral sex. None of the pictures contained violence or degradation; all of the actions in the photographs appeared to be consensual. Finally, the neutral scenery group was comprised of neutral images, such as inanimate objects or scenery. Each slideshow had 10 random slides with a 4-digit code placed in an obvious position on the picture to ensure that participants looked at each picture.

Image content questionnaire. The image content questionnaire consisted of 10 blank spaces where the participant recorded the 4-digit codes found in the slideshow.

Demographic. Participants indicated their sex, age, ethnicity, year in school, sex of partner, and the length of their relationship. Participants assessed their commitment to the relationship as exclusive/committed, promised, living together,
engaged, or married. Finally, the participants indicated their sexual activity with their current partner as none, kissing, seen each other naked, manual manipulation of partner’s genitalia, oral sex, and/or intercourse.

**Beck Depression Inventory–II (BDI–II; Beck, Steer, & Brown, 1996).** The BDI–II is a 21-item questionnaire used to assess symptoms of depression. Each item is accompanied by four statements scored 0–3: Higher scores indicated an increase in symptom severity. Participants chose one of the four statements that best explained the way they had been feeling during the past two weeks. Many studies have found that the BDI–II has sufficient validity and reliability for both psychiatric and nonpsychiatric populations (Dozois & Covin, 2004; Joiner, Walker, Pettit, Perez, & Cukrowicz, 2005).

**Couples Satisfaction Index (CSI-32).** The CSI-32 is a 32-item questionnaire used to assess the level of satisfaction one has with his/her relationship (Funk & Rogge, 2007). The first question indicated the general degree of happiness in the relationship. Participants rated happiness from 0 (extremely unhappy) to 6 (perfect). Other items indicated the level of satisfaction for particular aspects of a relationship, such as time spent together, romantic connection to partner, and how interesting the relationship is. The scale changed according to the question, for instance, rating “I feel a strong connection with my partner” on a scale from 0 (not at all true) to 5 (completely true). All other questions beside the first were on a scale from 0 to 5. Summing the items’ scores determined the total score, with higher scores indicating an elevated level of satisfaction with the relationship.

The CSI-32 was developed from a variety of items collected from different measures. The aggregated CSI-32 scores discriminate between a distressed and nondistressed relationship and correlate highly with other relationship satisfaction measures (Funk & Rogge, 2007). It has moderately high reliability; however, the recent development of this measure allowed for only preliminary data (Graham, Diebels, & Barnow, 2011).

**Sexual Satisfaction Questionnaire (SSQ).** The experimenters developed this 16-item survey to determine the level of sexual satisfaction within a relationship. We created the SSQ because the CSI-32 lacked an analysis of the sexual dimension within a relationship. Items included statements such as “I wish that my partner would be more experimental/adventurous during sexual activity.” Responses ranged from 1 (totally agree/very satisfied) to 5 (totally disagree/very unsatisfied). Some items included a not applicable option. Total scores were a sum of the items based on a point scale; higher scores indicated enhanced levels of sexual satisfaction (see Appendix A).

**Overall Sexual Satisfaction.** The participant’s answer to the first item of the SSQ determined this subscale’s value.

**Sexual Fantasy Subscale.** The experimenters assessed sexual fantasies by condensing items 7, 8, and 9. High scores indicated many fantasies about partner and few fantasies about others. Chronbach’s alpha indicated high reliability (α = .62).

**Desire Different Subscale.** The experimenters used items 6, 11, and 12 to assess the degree to which participants wished their partner acted differently during sexual activity. Low scores suggested that they wished their partner exhibited different behavior during sexual activity. Chronbach’s alpha indicated high reliability (α = .81).

**General Sexual Satisfaction Subscale.** Items 2, 3, 4, 5, 10, 13, 14, 15, and 16 indicated a variety of partner-related issues associated with sexual satisfaction. High scores indicated high sexual satisfaction within his/her relationship. Chronbach’s alpha suggested dependable reliability (α = .71).

**Pornography Viewing Questionnaire (PVQ).** The PVQ contained five items that questioned participants about their current and past exposure to pornography. The items inquired about the participants’ age when they first viewed pornography and how many times they viewed pornography for more than 30 min total and in the last year. The final two items were checklists for types of pornography viewed and the intentions behind viewing pornography. The questions used in this survey were taken from a larger measure (Sabina, Wolak, & Finkelhor, 2008).

**Procedures**

We recruited participants through the University of North Dakota’s Department of Psychology’s research participation system online. If an individual chose to participate, he/she met one of research assistants in a room with a computer and no windows. Before the participant arrived, the research assistant checked the spreadsheet that randomly assigned participants to a group. The research assistant prepared the slideshow so that the first slide was the only thing visible on the screen when the participant arrived.

Once the participant arrived, the research assistant prepared the slideshow so that the participant arrived.
assistant presented the consent form and highlighted important information. After the participant signed the consent form, the research assistant then explained the experiment and that the participant would be left alone in the room. During the time alone, the participant would first look at the pictures on the computer. The research assistant stressed importance of only going forward through the pictures and looking at each picture. The experimenter then explained how to complete the Image Content Questionnaire. The research assistant instructed participants to complete the rest of the questionnaire packet after viewing the images. After ensuring that the participant had a firm grasp of the experiment, the experimenter left the room, filed the consent form, and waited in a specified location.

After the participant finished and exited the area, the research assistant checked the slideshow for any tampering such as stopping in the middle of the slideshow or exiting the slideshow and viewing other things on the computer. None of the research assistants reported that they suspected a participant had tampered with the slideshow. The entire process took approximately 30 min.

Results

Gender Differences on the Pornography Viewing Questionnaire

The most common type of pornography viewed by men and women was “sexual activity among two or more people” (men, 73%; women, 47%). Three women reported never having viewed pornography. The percentages for the indicated reasons why participants viewed pornography appear in Table 1. Men most frequently indicated viewing pornography because they “wanted the sexual excitement” (78%), whereas women indicated “never viewing pornography on purpose” (32%). However, the next most frequently indicated reason for viewing pornography by women was “wanted the sexual excitement” (29%).

We conducted a one-way ANOVA to evaluate the impact of sex on the responses to three of the items from the PVQ: age that the participants first viewed pornography, total number of times respondents had viewed pornography for more than 30 min, and the number of times individuals had viewed pornography in the last month. Results indicated that there was a significant effect for the participant’s gender on the age he/she first viewed porn, $F(1, 90) = 40.10, p < .001$. Male participants indicated viewing pornography at an earlier age ($M = 12.64$, $SD = 2.32$) compared to female participants ($M = 15.63$, $SD = 2.12$). Likewise, the participant’s gender had a significant effect on the total number of times a participant indicated viewing pornography, $F(1, 94) = 30.39, p < .001$. Male participants indicated viewing more pornography in total ($M = 1.85$, $SD = 1.16$) compared to female participants ($M = 0.61$, $SD = 1.00$). Finally, a significant gender effect was seen on the number of times a participant indicated viewing pornography in the last month, $F(1, 94) = 12.96, p < .01$. Male participants indicated viewing more pornography in the last month ($M = 1.25$, $SD = 1.16$) compared to female participants ($M = 0.46$, $SD = 0.92$). Significant results indicated that male participants tended to view pornography at a younger age, more often overall, and more often within the last month compared to female participants.

Couples Satisfaction Inventory Results

We conducted a $2 \times 3$ (Gender × Group assignment) ANOVA on participants’ CSI scores in order to evaluate the impact of group assignment and gender on responses. Results were nonsignificant for group effect, gender effect, and interaction (all $Fs < 1$), suggesting there were no differences in the participants’ responses, no matter the type of images they viewed.

A one-sample $t$ test was conducted on the CSI scores to evaluate whether the current study’s means were significantly different from Funk and Rogge’s (2007) findings ($M = 121$, $SD = 32$). The sample mean of 134.47 ($SD = 12.68$) was significantly different, $t(95) = 6.64, p < .001, d = 0.68$. On average, the participants in this sample rated their relationships as more satisfying than the average participant from Funk and Rogge’s (2007) research.

<table>
<thead>
<tr>
<th>Participants’ Reasons for Viewing Pornography</th>
<th>Male ($n = 55$)</th>
<th>Female ($n = 41$)</th>
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<tr>
<td>Reason for Viewing Pornography</td>
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<tr>
<td>Wanted the sexual excitement</td>
<td>78</td>
<td>29</td>
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<tr>
<td>Curious about different things people do sexually</td>
<td>53</td>
<td>22</td>
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<tr>
<td>Wanted information about sex</td>
<td>31</td>
<td>5</td>
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<tr>
<td>With friends who wanted to do it</td>
<td>9</td>
<td>22</td>
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<tr>
<td>Never looked for pornography on purpose</td>
<td>4</td>
<td>32</td>
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<tr>
<td>Other</td>
<td>9</td>
<td>7</td>
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</tbody>
</table>
Sexual Satisfaction Questionnaire Results

We assessed the SSQ and found good reliability, \( \alpha = .78 \). A univariate ANOVA was conducted to determine if group assignment or sex affected the participants’ scores on the SSQ. Results were not significant for differences due to group assignment, \( F(2, 90) = 1.57, ns; \) gender, \( F(1, 90) = 1.73, ns \); or the interaction, \( F < 1 \), indicating participants were not affected by image content or sex.

In order to compare participants’ responses on the SSQ to the mean of the scale, 3, we conducted a one-sample \( t \) test. Results were significant, \( t(95) = 6.85, p < .001, d = 0.70 \), indicating that participants generally expressed a high level of sexual satisfaction.

We conducted four \( 2 \times 3 \) (Participant gender × Group assignment) ANOVAs on the SSQ subscales in order to determine if participants’ responses differed according to group assignment or sex. Results for the overall sexual satisfaction item indicated a marginally significant gender effect, \( F(1, 90) = 3.03, p < .09, \eta^2 = .03 \), qualified by a significant interaction, \( F(2, 90) = 3.26, p < .05, \eta^2 = .07 \). Effects analysis of groups at each level of gender yielded marginal significance for women only, \( F(2, 90) = 2.67, p < .08, \eta^2 = .06 \). Women’s responses within the neutral images of people group (\( M = 4.67, SD = 0.65 \)) were higher than those in the pornographic images group (\( M = 3.38, SD = 1.71 \)). There were no significant differences between the neutral images of scenery and either neutral images of people or pornographic images groups.

The \( 2 \times 3 \) ANOVA conducted on the sexual fantasy subscale yielded a significant gender effect, \( F(1, 90) = 6.13, p < .05, \eta^2 = .06 \). Female participants indicated more fantasies of their current partner and fewer fantasies of other individuals (\( M = 4.20, SD = 1.10 \)) compared to male participants (\( M = 3.63, SD = 1.10 \)).

The \( 2 \times 3 \) ANOVA conducted on the desire different subscale yielded a marginally significant main effect for gender, \( F(1, 90) = 3.38, p < .07, \eta^2 = .04 \). This main effect was qualified by a marginally significant interaction with group assignment, \( F(1, 90) = 2.80, p < .07, \eta^2 = .06 \). Effects analysis of group at each level of gender yielded significance only for men, \( F(2, 90) = 3.69, p < .05, \eta^2 = .08 \). Male participants indicated desiring more from their partner when in the pornographic images group (\( M = 2.33, SD = 1.25 \)) compared to the neutral images of people group (\( M = 3.45, SD = 1.20 \)). There was no significant difference between neutral images of scenery and either neutral images of people or pornographic images groups.

The final \( 2 \times 3 \) ANOVA conducted on the general sexual satisfaction subscale did not yield significance for a main effect of group, \( F(2, 90) = 2.02, ns; \) gender, \( F < 1 \); or interaction, \( F < 1 \), indicating image content and sex did not affect participants’ general sexual satisfaction.

Discussion

Differences Between Sexes

Confirming our hypothesis, male participants indicated a younger age of first exposure to pornography, higher total number of times pornography was viewed, and more frequently viewing pornography within the last year compared to female participants. Although men viewed more pornography more frequently than women, both male and female participants reported similar reasons for viewing pornography. “Wanted the sexual excitement” was frequently indicated as a reason for viewing pornography. However, a higher percentage of women reported “never looking for pornography on purpose” than did men. The difference between “wanted the sexual excitement” and “never looking at pornography on purpose” was only 3%, suggesting that there is great discrepancy within reasons for viewing pornography among female participants. The discrepancy suggests that there is not a “typical” relation between women and pornography. Researchers should investigate the differences among women who view pornography for the sexual excitement and women who do not seek out pornography.

The trends found in this study were similar to those found by Sabina et al. (2008). Women also indicated lower rates of viewing pornography compared to men in the original study. Similar to the current study (32%), the most frequent reason indicated by women for why they viewed pornography in the Sabina et al. study was “never looked for pornography on purpose” (42%). In the current study, “wanted the sexual excitement” was the second most frequent reason women indicated for viewing pornography (29%). Sabina et al. found only 17% of female participants indicated viewing pornography for sexual excitement. The discrepancy may be explained by the fact that in the Sabina et al. study participants who did not view pornography before the age of 18 were excluded from analysis.

Couple and Sexual Satisfaction

The nonsignificance found suggested that image...
content did not affect participants’ couple or sexual satisfaction. However, the one-sample t-test that compared the current study’s CSI scores to Funk and Rogge’s (2007) study may suggest self-monitoring among the current study’s participants. The participants reported significantly higher CSI scores than Funk and Rogge’s study. The difference may be because the current study’s participants viewed images before taking the CSI or because of differing participant populations. Viewing images of people who appeared to be in loving, happy relationships or as sexually satisfied may have affected how the participants in the neutral images of people group responded to questions about their relationship. Also, the current study had fewer married individuals (4%) compared to Funk and Rogge’s study (24%). The difference in commitment level may explain the difference between the current study’s participants and Funk and Rogge’s.

Like CSI responses, SSQ responses were not significantly affected by either sex or group assignment. Unlike the CSI scores, gender effects were seen in SSQ subscales. Women reported higher sexual satisfaction on overall satisfaction, fantasy, and desire different subscales compared to men. Therefore, men may generally perceive themselves as less sexually satisfied than women. Female participants’ responses to the overall satisfaction item indicated a group effect. Women rated their sexual activity less satisfying when in the pornography group compared to the neutral images of people group. Male participants’ responses on the desire different subscale indicated the same finding, suggesting that perhaps men and women express sexual satisfaction (or lack of) through different questions. Women expressed more general dissatisfaction, whereas men expressed dissatisfaction by admitting to desiring more or different behavior from their partner. Future researchers should look further into assessing women and men’s sexual satisfaction differently.

Overall, pornographic images seemed to produce the same effect that pictures of scenery produced. The nonsignificant difference may suggest that pornography does not affect an individual’s relationship any more than scenery; however, the lack of difference could also suggest that there was a confounding variable in the current study, such as unpleasant images of scenery or unappealing images of pornography. Also, the pornographic images were not violent or degrading, which may be why the harmful effects of pornography that previous research has found were not seen in this study.

Limitations
One of the limitations to this study was the pornographic images seemed outdated, perhaps because Lang et al. created the IAPS in 1999. A few of the participants commented on the grainy pictures and outdated hairstyles. It may be beneficial for this study to be replicated with recent photographs. Another limitation may be the type of people who volunteered to participate. Overall, the current study’s CSI scores were significantly higher than the scores reported in Funk and Rogge’s research (2007). Recruitment was specific for individuals in a committed relationship. The “commitment” criterion may have excluded individuals who believed their relationship was not satisfying or not committed, which may have affected the types of participants that volunteered. Biased volunteering may limit the degree to which this study can be generalized. In addition, the current study lacked evidence for long-term effects of pornography.

Conclusion
We found little evidence that pornography has a positive or negative effect on relationship or sexual satisfaction. Also, the results indicated gender differences in sexual satisfaction. Our results suggest sex should continue with further review gender differences in sexual satisfaction. Also, the results indicated gender differences in pornography viewing habits and responses to surveys. The gender differences found in the participants’ responses may affect research because participants indicated different dissatisfaction in different areas of their sexual activity with their current partner. Future research should further review gender differences in sexual satisfaction. Our results suggest sex should continue to be a variable when researching pornography. Researchers should consider assessing sexual satisfaction differently between men and women.

References


‘Sex’ is the most searched term on the web. (2002). *Cyber India Online Limited*. Retrieved from www.ciol.com


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Mary Butler graduated from the University of North Dakota (UND) in 2011 as a scholar in the Honors Program with a BS in psychology and a minor in biology. She is now a first-year PhD student in the clinical psychology program at UND. As an undergraduate, she received two research scholarships: the Advanced Undergraduate Research Award that funded research of frontal lobe functioning in unmanned aviation pilots and the Research Experience for UND Undergraduates Scholarship that funded research of the role of neurogenesis in depression and memory. For her senior honor’s thesis, Ms. Butler worked with Drs. F. Richard Ferraro and Jeffrey Holm researching the effects of pornography on relationships. During her thesis research, Ms. Butler participated in the unique experience of developing her own measure for her experiment in the field of human sexuality.
APPENDIX A

Sexual Satisfaction Questionnaire

Circle the answer that best fits. Sexual activity can be defined as anything from kissing to sexual intercourse.

(1) Very Satisfied
(2) Somewhat Satisfied
(3) Neither Satisfied or Unsatisfied
(4) Somewhat Unsatisfied
(5) Very Unsatisfied

1. How satisfied are you with the amount of sexual activity you have with your partner?

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2. How satisfied are you with the quality of the sexual activity you have with your partner?

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3. How satisfied are you with the physical appearance of your partner?

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4. I have engaged in sexual activity with other partners that has been more sexually satisfying than sexual activity with my current partner.

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5. I wish that my partner would change some things about his/her physical appearance.

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6. I wish that my partner would be more experimental/adventurous during sexual activity.

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7. I often fantasize about sexual activity with my partner.

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8. I often have fantasies about sexual activity with people other than my partner.

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9. I have had fantasies about people other than my partner while engaging in sexual activity with my partner.

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10. I sometimes fulfill my own sexual desires (i.e., masturbate) because my partner is unwilling or unable to.

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11. I wish that my partner were more assertive during sexual activity.

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12. I wish that my partner initiated sexual activity more often.

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13. Sexual activity with my current partner is more satisfying than sexual activity with any other partner I have had.

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14. My partner and I watch pornography together.

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15. Sexual satisfaction is a very important part of my relationship with my current partner.

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16. It is important to be sexually satisfied in your relationships.

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Self-Referential Memory for the Big-Five Personality Traits
Iiona D. Scully and Christopher P. Terry*
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ABSTRACT. A classic finding in the study of episodic memory, known as the self-reference effect, suggests that people who relate information to themselves typically show greater recall for that information compared to information processed in other ways. To our knowledge, researchers have not examined this effect using a set of trait adjectives based on the dimensions of the Big Five Personality Inventory (BFI). We aimed to (a) demonstrate a self-reference effect for trait adjectives, (b) indicate whether recall is enhanced for endorsed words (“yes–no” effect), and (c) determine if recall is better for words associated with one’s personality profile (trait effect). Results supported previous findings indicating that self-referential encoding promotes better recall than semantic encoding. However, the presence of a “yes–no” effect depended on the type of judgment being made (i.e., semantic versus self-referent), and we observed only a marginal trait effect.

The concept of the self has played an important role in the study of human memory. In a landmark study, Rogers, Kuiper, and Kirker (1977) uncovered a phenomenon now known as the self-reference effect. The self-reference effect is defined as the process of encoding information related to the self that causes better recall of that information compared to other forms of processing. In their classic study, Rogers et al. demonstrated that, when compared to structural, phonemic, and semantic forms of encoding, if participants related adjectives to themselves during an incidental learning phase, they were more likely to remember the adjectives during a surprise free recall test. Furthermore, within the self-reference condition, words that participants endorsed were more likely to be recalled than words that participants did not endorse (“yes–no” effect), although this effect may have been due to a high rate of “yes” responses. Regardless, Rogers et al. viewed the self as a high-rank schema that helps organize a person’s experiences and thought that the self-reference effect was a direct result of linking information to this robust “self” schema.

Since this study, the self-reference effect has been investigated numerous times, and research has shown that a variety of factors can influence the presence and magnitude of the effect (see Symons & Johnson, 1997, for a meta-analysis). Some important factors include whether memory is tested using recognition or free recall (Symons & Johnson, 1997) and whether the participant is highly self-conscious (Hull, Van Treuren, Ashford, Propsom, & Andrus, 1988) or clinically depressed (Davis, 1979; Derry & Kuiper, 1981). Other researchers focused on examining the underlying processes behind the self-reference effect, including the role of elaboration versus organization (Einstein & Hunt, 1980; Klein & Kihlstrom, 1986; Klein & Loftus, 1988).

Although researchers have studied many
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factors that influence the self-reference effect, one concept not examined in detail is the role of personality in one’s tendency to remember particular items. Some research closest to this aim involved studying the self-reference effect in participants who were clinically diagnosed with depression (Davis, 1979; Derry & Kuiper, 1981; Hull et al., 1988). For example, Davis (1979) asked both clinically depressed participants and nondepressed participants to make judgments about whether a list of “normal,” nondepression-related adjectives described themselves. Davis found that the nondepressed participants’ recall was enhanced due to the self-reference effect, but that the depressed individuals’ recall was not. Other research has demonstrated the presence of the self-reference effect among depressed participants, but only for depression-related words (Derry & Kuiper, 1981).

Another way to study this concept in a general population is by relating self-referent processing to one’s personality profile. We examined whether memory would be better for items related to pronounced personality traits as measured by the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991; John, Naumann, & Soto, 2008). The BFI is a shorter version of the NEO-PI-R (Revised Neuroticism-Extraversion-Openness Personality Inventory; Costa & McCrae, 1992) created to measure personality across five main factors: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. Based on Rogers et al.’s (1977) original findings and a robust body of literature demonstrating the self-reference effect across a variety of contexts (Symons & Johnson, 1997), we expected that self-referent encoding would be superior to a semantic encoding condition, where each condition involved thinking about a set of common trait adjectives related to the BFI. However, based on Rogers et al.’s (1977) tentative finding regarding a “yes–no” effect related to item endorsement during self-referent encoding and a small body of evidence suggesting that factors such as depression can influence self-referential processing, we also hypothesized that participants would be better at recalling both endorsed trait words and trait words associated with one’s BFI profile.

Therefore, we designed this experiment to (a) demonstrate that self-referent encoding enhances recall for trait adjectives compared to a semantic encoding task, (b) determine whether recall is enhanced for trait items that are endorsed with “yes” when asked if they describe the participant (yes–no condition), and (c) determine if trait words that are associated with a participant’s BFI profile are recalled better than unassociated trait words. We hypothesized that self-referent encoding would produce greater recall than semantic encoding, that a “yes–no” endorsement effect would emerge during self-referent encoding, and that participants would demonstrate greater recall for trait words associated with one’s most pronounced personality traits as measured by the five dimensions of the BFI.

Method

Participants

A total of 98 college undergraduate students between the ages of 18 and 23 ($M = 18.90$, $SD = 1.00$) participated in this experiment, including 76 women and 22 men. Students participated in exchange for extra credit in one of their psychology classes. Participation was voluntary, and all participants completed an informed consent statement before beginning the experiment. The protocol was approved by the Human Research Review Board.

Materials

Each condition involved presenting participants with a list of 40 trait adjectives. Factor loadings on each of the five traits that comprise the BFI contributed to our choice of experimental words (John & Srivastava, 1999). All the words chosen for this experiment had a factor loading of at least 0.59 on one of the Big Five traits (i.e., openness, extraversion, agreeableness, consciousness, and neuroticism). Eight adjectives were included for each of the five traits. We used Thesaurus.com to choose an additional 40 words as synonyms or antonyms for the semantic encoding condition. The order of the words used in the experiment was randomized using an online random number generator (Random.org).

This experiment also used the 44-item BFI (John et al., 1991; John et al., 2008; John & Srivastava, 1999). The BFI contains five subscales, one for each main factor: openness (10 items), conscientiousness (9 items), extraversion (8 items), agreeableness (9 items), and neuroticism (8 items; Worrell & Cross, 2004). For each statement, participants rate their opinion from 1 (disagree strongly) to 5 (agree strongly). This brief personality inventory has both high reliability and validity (Gosling, Rentfrow, & Swann, 2003). John and Srivastava (1999) reported alpha reliabilities from .75 to .80 for subscales of the BFI and 3-month test–retest reliabilities from .80 to .90.
Procedure
The experiment took approximately 30 min to complete. In all conditions, participants first completed an informed consent document followed by the 44-item BFI questionnaire. We randomly assigned participants to one of three conditions: an incidental semantic encoding condition, an incidental self-referential encoding condition, and an intentional encoding condition. All participants viewed the 40 trait words, one at a time on PowerPoint slides, for 10 s each. After participants viewed all words, they recalled as many of the target words as possible during a 5 min free recall period.

In the incidental semantic encoding condition, we showed participants trait words paired with 40 antonym/synonym words. Each slide had the phrase “Does this word mean the same thing as _____?” The blank contained the synonym/antonym, and the target word appeared underneath in large, bold font. In the incidental self-referential encoding condition, the phrase “Does this word describe you?” appeared above the target word on each slide. In both conditions, we instructed participants to check “yes” or “no” on an answer sheet in response to each slide. Participants were not aware that a free recall test would follow. Contrary to the other conditions, participants in the intentional encoding condition were told to memorize the words in preparation for a memory test. However, we did not instruct participants to use any specific encoding strategy.

Results
To test the hypothesis that there was a significant difference between recall for self-referentially encoded words and semantically encoded words, a one-way ANOVA was performed, with number of words recalled as the dependent variable and experimental group as the independent variable. The overall ANOVA was significant, $F(2, 95) = 43.73, p < .0001, \eta^2 = .48$. A Tukey HSD test was done to examine differences between groups. Both the incidental self-referential encoding score, $M = 14.76, SD = 4.24, p < .0001$, and the intentional recall score, $M = 13.20, SD = 3.71, p < .0001$, were significantly higher than the incidental semantic encoding score, $M = 7.06, SD = 2.61$. However, there was no significant difference between the incidental self-referential encoding condition and the intentional encoding condition ($p = .19$), suggesting that self-referential encoding was just as effective as intentional encoding.

Before testing the hypothesis that there was a significant difference between recall of endorsed words compared to unendorsed words (“yes–no” effect), an independent-samples $t$ test was first performed to test for differences in the number of words endorsed by each group (self-reference versus semantic encoding). The self-reference encoding group ($M = 28.62, SD = 4.08$) endorsed significantly more words than the semantic encoding group ($M = 16.32, SD = 4.33$), $t(66) = 12.05, p < .0001, r^2 = .69$. Therefore, because the total number of endorsed words differed across conditions, we examined the proportion of endorsed versus unendorsed words recalled in each condition.

A 2 (endorsement) × 2 (encoding group) mixed factorial ANOVA was conducted to determine whether a “yes–no” effect emerged in either the semantic encoding or self-reference condition. There was an interaction between encoding condition and endorsement, $F(1, 66) = 4.95, p = .03, \eta^2 = .07$, such that participants performing self-referential encoding recalled a higher proportion of endorsed versus unendorsed words, although the opposite pattern emerged for the semantic encoding group, such that they recalled more unendorsed versus endorsed words (see Figure 1). The main effect of group was also significant, $F(1, 66) = 63.45, p < .0001, \eta^2 = .49$, indicating that the self-reference group ($M = 0.36, SD = 0.10$) recalled a significantly higher proportion of words than the semantic group ($M = 0.17, SD = 0.10$). However, the main effect of endorsement was not significant, $F(1, 66) = .03, p = .90, \eta^2 = .00$, indicating that the proportion of endorsed words recalled ($M = 0.27, SD = 0.08$) was not different than the proportion of unendorsed words recalled ($M = 0.27, SD = 0.09$).

To test the hypothesis that trait words associated with a participant’s BFI profile were more likely to be recalled than trait words not related to their profile, we examined scores across each trait to determine each participant’s “highest” and “lowest” traits. We examined the proportion of words recalled related to each participant’s highest and lowest traits, rather than the raw scores, because some participants scored equally high or low on two of the five subscales from the BFI. A 2 (high vs. low trait) × 3 (encoding group) mixed factorial ANOVA was conducted to examine the proportion of words recalled that corresponded with each participant’s highest and lowest traits. The main effect of trait was marginal, but not significant at the accepted alpha level, $F(1, 95) = 3.13, p = .08, \eta^2 = .03$. This
finding reflected a slightly higher proportion of “high” trait words recalled ($M = 0.33$, $SD = 0.08$) compared to the proportion of “low” trait words recalled ($M = 0.27$, $SD = 0.08$). The main effect of group, however, was significant, $F(1, 95) = 32.48$, $p < .0001$, $\eta^2_p = .41$, indicating that the self-reference group ($M = 0.36$, $SD = 0.10$, $p < .0001$) and the intentional encoding group ($M = 0.33$, $SD = 0.10$, $p < .0001$) recalled a significantly higher proportion of trait words than the semantic group ($M = 0.17$, $SD = 0.10$). There was no difference between the self-reference encoding group and the intentional encoding group ($p = .24$), and there was no interaction between encoding group and the type of trait word being recalled (high vs. low), $F(1, 95) = 0.25$, $p = .78$, $\eta^2_p = .01$.

**Discussion**

As hypothesized, the findings of this study support previous findings indicating that self-referential encoding promotes better recall than semantic encoding when given a surprise memory test (e.g., Davis, 1979; Derry & Kuiper, 1981; Einstein & Hunt, 1980; Hull et al., 1988; Klein & Khilstrom, 1986; Klein & Loftus, 1988; Nieznański, 2009; Symons & Johnson, 1997). These data extend Rogers et al.’s (1977) classic finding by also showing that, in some cases, incidental self-referential encoding can be equally effective as deliberate encoding when no particular strategy guidance is provided. Furthermore, results indicated that the presence of a “yes–no” effect may depend on the type of judgment being made (i.e., semantic vs. self-referent), with a positive endorsement effect being more likely during self-referential encoding. Lastly, these effects were demonstrated using a set of trait adjectives specifically associated with the BFI, which to our knowledge has not been previously examined in this context. We defined a trait effect as when trait words associated with a participant’s highest trait(s), as measured by the 44-item BFI, were recalled more easily than trait words associated with a participant’s lowest trait(s). We found only a marginal trait effect in the present study.

There are several ways that the self-reference effect can be explained (see Symons & Johnson, 1997 for a review and meta-analysis). Rogers et al. (1977) explained the effect as the result of one’s ability to access a personal schema that is structured in a hierarchy. This hierarchy allows for individuals to rate traits within themselves as important, and having to think about whether a trait adjective describes oneself makes the trait more salient. Rogers and colleagues argued that this process accounts for the benefit of self-referential encoding, even over semantic encoding, where one still needs to access the meaning of the word. Semantic encoding does not bring up this “self” schema and therefore may not trigger as rich a set of cues for recalling the information later.

The results involving the yes–no effect may be driven by two separate processes. Participants in the self-reference condition recalled a greater proportion of endorsed words, although participants in the semantic encoding condition recalled a greater proportion of unendorsed words. We expected the greater proportion of endorsed words recalled in the self-reference condition because these words were explicitly endorsed as being more self-referent during encoding. However, one reason why more unendorsed words may have been recalled in the semantic encoding condition is that the unendorsed words caused participants to spend more time thinking about the target word in order to decide that it was not a synonym of its comparison word. This idea may be reflected by the difficulty of making the semantic judgments, and, in fact, participants were less likely than expected to indicate that words were synonyms (50% of the target words were paired with synonyms, but only approximately 40% were endorsed as synonyms by participants). This finding suggests that participants may have
had to think more carefully about the unendorsed words, which may have promoted deeper encoding.

The role of personality in people’s natural tendency to remember self-referent information is still unclear, as we found only a marginal trait effect. This result suggests that if such a tendency to recall information related to people’s most pronounced traits does emerge in this context, it may be of rather small practical significance. One challenge to detecting such effects may lie in the fact that even information related to one’s least pronounced personality trait(s) may still be highly self-referent and personally meaningful. For example, scoring low on extraversion may be just as important to an individual’s “self” schema as scoring high on neuroticism, and words related to the concept of extraversion may remain highly salient for that individual.

Therefore, the hypothesis that trait-based remembering should be more pronounced for “high” personality traits should be tested in other contexts using different stimuli and procedures as well as other personality measures. In particular, future studies examining measures of reaction time during item encoding (e.g., speed of “yes–no” responses) or during tests of recognition memory may provide additional, more sensitive measures of self-referential processing than free recall alone. Nieznański (2009) found that recognition tasks did not show the self-reference effect; however, other recognition tasks have demonstrated a self-reference effect (see Symons & Johnson, 1997). Recognition tasks could be more sensitive for detecting a trait effect because more stimuli can be used, and reaction times can be measured during testing.

Further elucidating the relationship between memory and personality may have important implications in people’s daily lives. Determining whether memory performance in real-world contexts is likely to be biased by personal characteristics, such as one’s most pronounced personality traits, may affect the way in which both students and educators approach the learning process. In particular, this study showed that, among three groups of college students, incidental self-referent encoding was just as effective as intentional encoding that was not guided by any particular mnemonic strategy; however, both of these methods were more effective than incidental semantic encoding. This finding suggests that reflecting on the personal relevance of new information may lead students to learn this information more quickly and reliably compared to focusing purely on the meaning of new information. Future research should examine whether the benefits of self-referent encoding can be enhanced in intentional encoding contexts where this approach is combined with other encoding strategies based on techniques such as imagery or organization. Furthermore, if further research demonstrates clear links between personality characteristics and memory performance, it opens up a variety of alternative means for assessing personality, both in research settings (e.g., measuring implicit attitudes) and in real-world contexts (e.g., screening job candidates).

In summary, the self-reference effect was pronounced in this experiment and the yes–no effect was present during self-referent encoding, although a trait effect was only marginally evident. The self-reference effect is obviously an important encoding device, and, in this experiment, was just as effective as intentional encoding among participants without any specific strategy training. Future research on this topic should examine the relation between one’s BFI profile and “naturally occurring” propensities for better encoding and recall of words that are associated with the personal characteristics assessed by this measure.

References


Iiona D. Scully, originally from Phoenicia, NY, graduated summa cum laude in psychology from Elmira College in 2011. As an undergraduate, she presented at several poster sessions including presenting the research in this paper at EPA in Cambridge, MA, in 2011. Ms. Scully was also vice-president of the Elmira College Chapter of Psi Chi as well as a APSSC (Association for Psychological Science Student Caucus) representative. Her research interests include the study human memory, specifically elements that effect episodic memory, and how memory can be mathematically modeled. Ms. Scully is currently a first-year doctoral student in experimental psychology at Syracuse University in Dr. Amy Criss’ Memory Modeling lab.

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Gender Differences in the Psychological Impact of the Dual-Income Lifestyle
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ABSTRACT. The purpose of this study was to explore gender differences in role overload, stress, and marital satisfaction in dual-income couples and to measure how these differences change over time. We expected that wives would report lower marital satisfaction and higher role overload and stress than husbands. Further, we expected that age would contribute to differences in marital satisfaction, with older adults being more satisfied than young or middle-aged adults. Married, employed men and women (N = 314) completed our survey. Women reported higher role overload and stress than men. Participants in later adulthood were more satisfied in their marriages than early or middle adults. Our study updates the literature on the examined variables and communicates the importance of egalitarianism in marriage.

Since the 1960s, more women have pursued careers outside the home. These women sought to enjoy the freedom, power, and self-fulfillment that come from vocational achievement that had previously been accessible to only men. Today, millions of women are able to call themselves career women, many of them in dual-income couples (United States Department of Labor, Bureau of Labor and Statistics, 2011). These women have made efforts to empower themselves and challenge the boundaries left behind by traditional gender role beliefs. However, many wives are still unequal to their working husbands because the traces of traditional household expectations are evident in the division of their household labor. Wives often perform the majority of household chores—including cooking, cleaning, and childcare—in addition to completing all job-related activities (Frisco & Williams, 2003; Home, 1998; Sayer, England, Bittman, & Bianchi, 2009).

These multiple demands make it difficult for women to fulfill the requirements of each role (Sayer et al., 2009; Wilkie, Ferree, & Ratcliff, 1998). Husbands tend to not have the same difficulties meeting the needs of their worker and husband roles (Almeida, Maggs, & Galambos, 1993). The extra work put on women in these unequal relationships can contribute to role overload and stress in the dual-income wife (Coverman, 1989; Viers & Prouty, 2001). Several factors, including the egalitarian division of labor, are important for wives’ marital satisfaction (Frisco & Williams, 2003; Meier, McNaughton-Cassill, & Lynch, 2006; Wilkie et al., 1998). The purpose of our study was to explore gender differences in role overload, stress, and marital satisfaction in dual-income couples and to measure how these experiences may differ among age groups.

Role Overload
Since women entered the workforce, there has been little adjustment in the household duties performed by both spouses (Coverman, 1989; Sayer et al., 2009). Women are still the primary caregivers for their families despite having other demands on their time (Home, 1998; Sayer et al., 2009). Women still spend up to twice as many hours devoted to house and family work as men (Meier et al., 2006; Neault & Pickerell, 2005; Parasuraman & Simmons, 2001; Sayer et al., 2009). Even when wives spend long hours at work and have less time at home, husbands do not always increase the amount of
housework they do (Almeida et al., 1993; Meier et al., 2006).

When wives perform this proportion of household chores after performing tasks in the workplace, it can lead to role overload, which is defined as having several roles and too little time to fulfill the demands of each (Coverman, 1989). Women tend to experience much more role overload than men (Coverman, 1989; Higgins, Duxbury, & Lyons, 2010). When husbands take on more domestic responsibilities, it lowers the wives’ levels of role overload (Coverman, 1989; Frisco & Williams, 2003). If husbands and wives shared household duties more equally, time would not be as short for meeting demands, and role overload would decrease.

Stress
The multiple-role lifestyle of dual-income couples causes stress for husbands and wives (Higgins et al., 2010; Viers & Prouty, 2001). However, women in dual-income couples tend to report more stress than men (Coverman, 1989; Entricht, Hughes, & Tovey, 2007; Higgins et al., 2010; Viers & Prouty, 2001). Women may experience greater stress because role demands are higher for women than for men (Condie & Doan, 1978; Sayer et al., 2009). In their cross-sectional study of husbands and wives, Condie and Doan (1978) found that over several stages of the marital lifespan, more demands were placed upon women in each of their roles than on men. Because wives are still more responsible for performing household chores than their husbands, the stress resulting from this overload may be more prevalent among women than men (Sayer et al., 2009).

Coverman (1989) found a way to lessen the amount of stress felt by dual-income wives. She found that egalitarianism in the marital relationship is negatively associated with wives’ stress levels. When husbands and wives treat each other equally and both contribute to household duties, wives are less stressed. Also, it seems that each spouse’s perception of fairness of the division of household labor can influence stress more than the number of hours of work performed (e.g., Frisco & Williams, 2003; Meier et al., 2006).

Marital Satisfaction
Research has not established a consistent relation between the stressors of the dual-income lifestyle, such as role overload or unequal division of labor (Meier et al., 2006). However, gender differences have been easier to identify. Husbands tend to report greater marital satisfaction than wives (e.g., Fowers, 1991; Frisco & Williams, 2003).

Marital satisfaction can be affected by a number of factors. Women’s marital satisfaction is impacted by the perceived equity in labor division, perceived empathy from their husbands, and the opinions that each spouse holds on the wife’s employment status and involvement in household activities (Meier et al., 2006; Stevens, Kiger, & Riley, 2001; Wilkie et al., 1998). If women hold traditional beliefs about their responsibilities in the family, their marital satisfaction tends to increase from their greater number of household duties but decrease from the duties they have to their employment. If they prefer a more equal share of family responsibilities, their marital satisfaction tends to increase from their dedication to career-related activities and decrease from their responsibilities in the home.

In general, egalitarianism in the relationship increases wives’ marital satisfaction (e.g., Wilkie et al., 1998). When husbands and wives were able to share vocational and household responsibilities more equally, women were more satisfied with their marriages. Wives tend to have more of a preference for egalitarian roles than their husbands (Fowers, 1991; Stevens et al., 2001). The only aspect of gender role beliefs that influenced men’s marital satisfaction was their preference concerning labor division in the household (Wilkie et al., 1998). If they believe that domestic duties are mostly the wives’ domain, they should be fairly happy in their relationships because women maintain most household responsibilities.

Marital satisfaction is also subject to change over the course of a marriage. By middle adulthood, for example, couples may have less housework or chores, or they may have established coping strategies with which to address tension or conflict (Higgins et al., 2010; Santrock, 2007). It is adults in later adulthood, however, who have greater marital satisfaction than young or middle-aged adults (Santrock, 2007).

Purpose of the Study
The aims of this study were to (a) identify gender differences in the experience of role overload, stress, and marital satisfaction in dual-income couples; and (b) to determine whether these experiences are different among partners in early, middle, or late adulthood. We predicted that women in dual-income couples would experience...
more role overload and stress than men with a dual-income lifestyle. We also predicted that these women would report lower marital satisfaction than men in dual-income marriages. We expected marital satisfaction to change with age, with participants in later adulthood being more satisfied in their marriages than subjects in early or middle adulthood.

**Method**

**Participants**

Three hundred fourteen people completed our survey. The sample consisted of 132 men and 182 women, ranging in age from 21 to 74 years ($M = 44.93$, $SD = 10.43$). Eighty-two percent of our respondents reported their ethnicity as White, 14% African American, 2% Hispanic, 1% other races, < 1% Asian, and < 1% American Indian. The participants had been married for an average of 17 years, with marriage length ranging from less than 1 year to 42 years.

**Measures**

**Marital satisfaction.** The Enrich Martial Satisfaction Scale (EMS; Olson, Fournier, & Druckman, 1983) is a 25-item scale that includes the Idealistic Distortion and Marital Satisfaction subscales of the ENRICH Inventory. The 5 items from the Idealistic Disturbance subscale measure the likelihood that the marital relationship is viewed unrealistically positively. The score from this subscale is used to correct the score from the Marital Satisfaction subscale. Each of the 10 questions from the Marital Satisfaction subscale corresponds to an area of the marital relationship highlighted in the complete ENRICH Inventory. We used nine of these areas; we omitted the question regarding children because not all subjects had children. Participants recorded their responses on a Likert scale (1 = strongly disagree and 5 = strongly agree). Higher scores indicate compatibility and satisfaction with most areas in the couple’s marital relationship. A sample item is “I am not pleased with the personality characteristics and personal habits of my partner.” Fowers and Olson (1989) demonstrated validity for the scale by showing that it could be used to accurately distinguish stressed couples from nondistressed couples. Olson et al. (1989) demonstrated construct validity for the scale by finding a strong positive correlation between the EMS Scale and the Family Satisfaction Scale. Fowers and Olson reported an alpha coefficient of .86 for the EMS Scale. We found a reliability coefficient of .85.

**Role overload.** Duxbury, Higgins, and Lee (1994) developed a 5-item scale to measure role overload, which they defined as existing “when the total demands on time and energy associated with the prescribed activities of multiple roles are too great to perform the roles adequately or comfortably” (p. 450). Subjects responded on a Likert scale (1 = strongly disagree and 5 = strongly agree), with higher scores indicating more role overload. A sample item is “I feel I have more than I can comfortably handle.” Duxbury et al. established construct validity for the scale by finding that role overload correlated with work to family conflict and family to work conflict. They reported an alpha coefficient of .85 for the scale. We found an alpha of .74.

**Stress.** Cohen, Kamarck, and Mermelstein (1983) developed the Perceived Stress Scale (PSS), which is a 14-item scale that measures perceptions of stress. Participants indicated their responses on a Likert scale (1 = never and 5 = very often) with higher scores indicating more perceived stress. A sample item from the scale is “In the last month, how often have you been upset because of something that happened unexpectedly?” Cohen et al. demonstrated validity for the PSS by comparing it to a scale that measures depressive symptomatology known as the Center for Epidemiologic Studies Depressive Scale (Radloff, 1977) and finding that the PSS measured an independent predictive construct. Cohen et al. reported alpha coefficients ranging from .84 to .86 for the three samples they used. We found an alpha coefficient of .83.

**Procedure**

Research assistants utilized snowball sampling to mail paper surveys to 718 potential participants. One hundred thirty-two men and 182 women returned their surveys, which gave us a 44% response rate. We received completed surveys from 12 states. Eighty-one percent of surveys were completed by Georgians. The remaining 19% of surveys were returned from Ohio, New Jersey, Louisiana, Florida, Indiana, Illinois, Texas, Tennessee, California, Alabama, and Washington. In order to be eligible for our study, potential participants had to be married and employed full-time. We informed all respondents that their participation was voluntary.

**Results**

In order to test our first hypothesis, we used independent samples $t$ tests. We found that experience
of role overload varied by gender, $t(309) = -3.24$, $p = .001$, $d = .37$. Women ($M = 15.55$, $SD = 4.42$) felt more role overload than men ($M = 13.88$, $SD = 4.59$), which supports the first part of our hypothesis. We found that women ($M = 37.07$, $SD = 7.17$) also felt more stress than men ($M = 34.57$, $SD = 7.67$), $t(307) = 2.94$, $p < .01$, $d = .34$, which supports the second part of this hypothesis. We used an independent samples $t$ test to analyze gender differences in marital satisfaction, and our results neared significance, $t(304) = 1.95$, $p = .052$, $d = .22$. Husbands felt more marital satisfaction than wives, but the difference was not significant.

We used a one-way ANOVA to analyze the differences among age groups for role overload, stress, and marital satisfaction. We determined group boundaries by using Newman and Newman’s (2003) ages for identifying life stages (i.e., early adulthood as 24–34 years [$n = 56$], middle adulthood as 35–60 years [$n = 238$], and later adulthood as 61–75 years [$n = 16$]). There were no significant differences among age groups for role overload, $F(2, 305) = .06$, $p > .05$, or stress, $F(2, 302) = 1.48$, $p > .05$. There was, however, a significant difference in marital satisfaction among age groups, $F(2, 299) = 4.01$, $p < .05$. After performing a Tukey HSD post-hoc test, we discovered that adults in later adulthood ($M = 57.07$, $SD = 6.58$) reported being significantly more satisfied with their marriages than participants in middle adulthood ($M = 51.18$, $SD = 9.88$). There were no other significant differences.

### Discussion

We found that women in dual-income couples experienced significantly more role overload and stress than men in these couples, which supported our first hypothesis. Wives reported significantly higher home role reward than husbands, which supported the first part of our second hypothesis. Husbands reported higher marital satisfaction than wives; this difference approached significance. Later adults reported being more satisfied in their marriages than participants in middle adulthood.

Previous studies (e.g., Coverman, 1989; Entricht et al., 2007) examined connections between multiple role demands and psychological well-being in dual-income relationships and concluded that wives experienced more role overload and stress than husbands. Later adults also reported higher marital satisfaction than middle adults. Because our results were similar, we were able to replicate past results in a newer sample. This finding demonstrates generalizability of the past findings and updates the results.

As mentioned previously, equitable division of household labor, empathetic behaviors by the husband, and egalitarian beliefs about gender roles help women feel less role overload and stress and higher marital satisfaction (Coverman, 1989; Wilkie et al., 1998). If domestic labor were divided more equally or egalitarian partnership beliefs were shared by both spouses, perhaps women would experience less role overload and stress and be more satisfied with their marriages.

The fact that wives in our study reported more problems and marital dissatisfaction indicates that many of the precursors of women’s role overload, stress, and lower marital satisfaction that were established in previous studies are present in many marriages today. Because we have replicated these findings and demonstrated that these problems persist, couples should take steps to cope with the difficulties, such as seeking help from friends or family, scaling back on the number of tasks to perform, or restructuring work or family roles (Higgins et al., 2010).

A limitation of our study was that a large majority of our subjects were from the same ethnic group and geographic area. Because culture, socioeconomic class, and geographic region may influence people’s gender role beliefs and attitudes toward the dual-income lifestyle, it would be beneficial to recruit participants from a more geographically and ethnically heterogeneous sample. We would also like to gather data from a greater number of later adults in future studies in order to more fully explore the relationship qualities of this population and the ways the target variables can change over time.

It is important to note that our study does not account for the effects of extraneous variables, as is a danger of any correlational research. It is possible that there are other explanations for wives’ higher stress or lower marital satisfaction, rather than it being the direct result of being in a dual-income couple. For example, the presence or absence of children has a demonstrated effect on marital satisfaction (Meier et al., 2006; Stevens et al., 2001; Twenge, Campbell, & Foster, 2003). As we did not account for this factor in our survey, it could have had an unseen effect on our results. In the future, researchers should always include parental status when examining the difficulties of dual-income life.
References
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Conceptualizing Fatherhood: Maternal Perceptions of Responsible Fathering

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ABSTRACT. We investigated maternal perceptions of responsible fathering among pregnant and parenting teenage mothers by interviewing 10 adolescent mothers. Mothers responded to what being a responsible father means to them and described the degree of involvement by the father of their children. Five primary themes emerged as characteristics of responsible fathers: “being there” for the child, helping to take care of the child, loving and caring for the child, providing financial support, and playing with the child. Seven major themes developed in response to mothers’ perceptions of their children’s fathers’ involvement: does not help take care of child, irregular or no contact, does not play with child, incarceration, financial support, left mother and child, and loves and cares for child.

The literature on father involvement has been growing for more than 35 years (Lamb, 2010). Fatherhood is increasingly becoming a salient area of study in child health research (Coley, 2001; Hawkins et al., 2002; Hernandez & Coley, 2007). Researchers have defined positive father involvement as engagement (e.g., spending time with the child), accessibility (e.g., being available for the child, but not interacting directly with the child), and responsibility (e.g., monitoring and providing for the child; Lamb, Pleck, Charnov, & Levine, 1987). Father involvement is positively associated with increased academic success and learning outcomes, higher self-esteem and self-acceptance, healthier interpersonal relationships and sex-role development, and better overall psychological well-being for children (Hawkins & Palkovitz, 1999; Saracho & Spodek, 2008). Conversely, research on father involvement indicates that it is inversely related to children’s emotional and behavioral problems, including increased drug use, criminal behavior, and incarceration (Harper & McLanahan, 2004; Mandara & Murray, 2006; Townsend, 2003).

Although recent research has shown the importance of father involvement, the literature indicates that adolescent fathers are at increased risk for low levels of involvement with their children (see Bunting & McAuley, 2004, for a review). Similarly, unwed fathers are at a greater risk for low levels of involvement with their children (Cabrera et al., 2004). Given these findings, it is noteworthy that 86% of teenage mothers in the United States were unmarried in 2007 (Ventura, 2009).

Since 2002, the number of single mothers, at the time of their children’s birth, has increased in most racial and ethnic populations (Ventura, 2009). Hispanic/Latina women have the highest percentage of nonmarital births, followed by Black women, White women, and women of Asian or Pacific Islander descent (Ventura, 2009). Mothers’ perceptions of their children’s fathers have a significant impact on fathering behavior (Feinberg, 2003). Maternal attitudes toward, and expectations of, the fathers of their children are related to fathers’ levels of involvement with their children (Doherty, Kouneski, & Erickson, 1998; McBride & Rane, 1998; Summers, Boller, Schiffman, & Raikes, 2002).
Thus, maternal perceptions of responsible fathering are important to investigate. Despite the large majority of unmarried teenage mothers, few researchers have investigated mothers’ perceptions of the biological fathers’ roles in helping to raise their infant children (Dallas, Wilson, & Salgado, 2000).

To our knowledge, two studies have explored adolescent mothers’ perceptions of father involvement, qualitatively. Dallas et al. (2000) examined mothers’ expectations for paternal role behaviors using a focus group with seven African American and Mexican American pregnant and parenting adolescent mothers. Mothers expected that fathers would provide financially, be available emotionally for both the child and the mother, participate in childcare activities, and serve as an intermediary between the adolescent mothers and the children’s paternal grandmothers. Mothers cited “being there” and spending time with the child” as the most important paternal role. Mothers reported assuming a greater proportion of childcare activities compared to fathers. When asked what they hoped their children’s fathers would gain from teen parenting classes, mothers reported a desire for fathers to become “more involved” by spending more time with children and participating more in childcare activities. In another study, Spear (2004) interviewed eight African American and European American pregnant teenage mothers about their experiences with pregnancy. Regarding future expectations, the majority of mothers expected the fathers of their children to be actively involved in the child-rearing process. The authors suggested that mothers were expressing wishful thinking with that expectation.

The methodology of the present study drew from Summers et al. (2006). Using a sample of 575 low-income, young adult fathers with 24-month-old children, researchers asked participants the meaning of a “good father” in an open-ended interview. The participants reported that the most important roles of fathers are providing a stable source of financial and physical support in the child’s life (i.e., “being there”), serving as the child’s life mentor, taking care of the child, and being emotionally available and responsive to the child. Summers et al. (2006) compared the responses of the fathers to the framework of positive father involvement set forth by Lamb et al. (1987) and found that the fathers’ responses were represented by the framework’s three components: engagement, accessibility, and responsibility. Another study assessed adolescent fathers’ descriptions of a “good father” (Lemay, Cashman, Elfenbein, & Felice, 2010). Participants developed the following five themes: availability (i.e., “being there”), providing financial support, providing emotional support, teaching the child, and taking responsibility for the child. Given previous findings that mothers and fathers hold different expectations for fathering behavior (Bunting & McAuley, 2004; Dallas et al., 2000), we sought to further the qualitative research on adolescent parents by assessing teenage mothers’ perceptions of a “good father” in this exploratory study. Consistent with Summers et al. (2006), we compared mothers’ responses to the positive father involvement framework (Lamb et al., 1987). In addition, we assessed the mothers’ evaluations of the paternal roles exhibited by their children’s fathers.

**Purpose of the Study**

We assessed maternal conceptualizations of responsible fathering as perceived by pregnant and parenting teenage women, who were currently or who had previously been enrolled in a parenting education class sponsored by a community organization. Specifically, this study examined two questions:

1. How do pregnant and parenting teenage women perceive responsible fathering?
2. How do pregnant and parenting teenage women assess the father of their children against their maternal perceptions of responsible fathering?

Given the research that has shown that mothers and fathers emphasize different aspects of fatherhood (Bunting & McAuley, 2004; Dallas et al., 2000), we expected that adolescent mothers would develop unique themes surrounding the roles of a responsible father compared to those reported by adolescent fathers reported in a previous study (i.e., Lemay et al., 2010). Given the preponderance of previous research suggesting that unwed, adolescent fathers are irregularly involved in their children’s lives (Bunting & McAuley, 2004), we expected that the children’s fathers would not fulfill the roles of a “good father” as perceived by the mothers.

**Method**

**Participants**

The participants included 10 pregnant or parenting teenage women between the ages of 17 and 18 ($M = 17.80, SD = .42$). The sample included three
Hispanic, three European American, two African American, and two multiracial mothers. The mean age of the mothers at the time of conception was 16.60 (SD = 1.27), whereas the mean age of the fathers at the time of conception was 18.80 (SD = 1.55). Eighty percent of the women were single, and 20% were married. Of the women who were married, one was married to her child’s biological father, and the other was married to someone other than her child’s biological father. Of the women who were single, 20% were dating the fathers of their children. Most participants (80%) were already parenting, and 20% were pregnant with their first child. One participant, who was already parenting, was also pregnant. Most participants (70%) reported living with their parents, whereas 30% reported living with a sibling, the father of her child, or both the maternal parents and the father of her child.

Measures
Protocol. The semi-structured telephone interview addressed fatherhood by using the following questions: “What does being a ‘good father’ mean to you? (What does he do? How does he behave?”), and “What is the father of your child(ren) like? (How does he treat you now, previously, and during your pregnancy? How does he treat your child[ren]?)” We drew the first question from Summers et al. (2006). Our research group developed the second question as well as the probes for both questions for this study.

Demographic information. Each participant answered a demographic questionnaire that assessed her age, her race, and her partner’s age at the time of her first pregnancy. We also assessed her marital status; living arrangement; and the number, age, and sex of her child(ren). Each participant also provided additional information concerning her relationship with the child(ren)’s father and who is helping her take care of her child(ren).

Design
We used open-ended interviews as our methodology. We contacted participants on two occasions via telephone communication. The first occasion was to arrange a convenient time for a 1-hour interview. The actual interview took place during the second phone call.

Procedure
We conducted 10 semi-structured telephone interviews with pregnant and parenting teenage mothers, who were currently or had previously been enrolled in a teen parenting program in west central Florida. School social workers distributed recruitment flyers to the pregnant and parenting adolescent mothers and informed them of the study. Social workers relayed contact information for the mothers, who were interested in the study, to our research group. We explained the purpose of the study to the mothers and arranged to obtain written informed consent from participants 18 years of age and older. We obtained both informed consent from the guardians and assent from participants younger than 18 years old. We called each participant twice using the contact information provided by the social worker. During the first telephone contact, we further explained the purpose of the study and scheduled a time to conduct a 1-hr telephone interview about her understanding of the fatherhood role. With permission from the participants, we recorded the interviews. Of the 12 names provided by the program directors, 10 adolescent mothers agreed to participate. We conducted this study with the approval of the university’s institutional review board.

Data Analysis
Following the telephone interviews, we transcribed the recorded interviews verbatim and entered all responses from the interviews into the ATLAS.ti software package (Muhr, 1997) for coding and content analysis. This sophisticated software expedites the process of analyzing data and offers a more systematic method of data analysis by allowing for a consistent and thorough analysis. We developed a coding tree, a priori, in order to organize participant responses and to facilitate analysis. We used the coding tree solely for coding purposes; we did not ask participants questions based on the coding tree. Rather, we selected items for the coding tree that corresponded to each of the research questions. We used Atlas.ti in order to search for specific coded materials within the transcript and calculate their occurrences. This process was conducive to developing themes within our data. The research team developed the criterion of a 30% frequency rate of any response in order for researchers to consider the construct a major theme.

Results
The results of the interviews with pregnant and parenting teenage mothers produced a high degree of consistency across the respondents. This section
outlines major themes revealed in our analysis of the participants’ responses to “What does being a ‘good father’ mean to you?” and “What is the father of your child(ren) like?” Notably, mothers gave disparate responses to the two questions posed in the interviews. The themes developed around “What does being a ‘good father’ mean to you?” were more positive, whereas the themes developed around “What is the father of your child(ren) like?” were more negative. The subsequent section provides further examination of the major themes identified in our analysis.

“Good Father”
In response to the former question, five major themes emerged from the interviews: “being there” for the child, helping to take care of the child, loving and caring for the child, providing financial support, and playing with the child.

**Being there.** The most commonly reported criterion to being a “good father” reported by the women in this study was “being there.” Ninety percent of mothers reported that “being there” was an essential feature of a good father. Mothers expressed that spending time with the child was the most fundamental aspect of good fathering. It appears that, for the women in the study, having this basic role met held precedence over any further fatherhood duties. For example, one mother said, “I don’t know the definition of a good father except being in the baby’s life.” To the participants in the study, the role of “being there” should not be negotiated. One respondent described her thoughts about the uncompromising importance of fathers being available to their children,

They (fathers) should be there when it counts, and when it doesn’t count. When the baby’s sick, they should be there. When the baby’s not sick, they should be there. When I need his help, he should be here. When I don’t need his help, he should be here. He should be there as much as he can.

**Helping to take care of the child.** Eighty percent of mothers reported that responsible fathers help take care of children. Mothers identified feeding, changing, and bathing children as well as putting children to sleep as an important function of a “good father.” Women reported that two parents should be responsible for taking care of the baby and ensuring that the baby’s needs are met. One mother emphatically stated, “If you think you are grown enough to have sex, then if she gets pregnant, you need to be that grown-up and take care of your kid.” Mothers reported having been raised in households where the mother was the primary provider of childcare. Mothers in this study reported desiring a more egalitarian partnership with the father of their children.

**Loving and caring for the child.** Forty percent of mothers reported that loving and caring for their children is an essential characteristic of a “good father.” One mother described a father’s affection by stating,

I see now that he really loves me and our son, and that his son is his everything, and he shows like a lot more that he is caring, more affectionate, just everything really. He’s more positive toward everything.

Mothers also described the importance of their children knowing that their fathers care for them regardless of whether the mother and father were romantically involved.

**Providing financial support.** Forty percent of mothers reported financial support to be an important aspect of good fathering. Although the mothers agreed that it was important, two of the mothers specifically stated that providing financial support held less significance than establishing physical and emotional ties with the child. Mothers commonly reported the concept of loving the child in conjunction with providing financially for the child. As explained by one respondent,

You can’t just be like, ‘Oh well, here—I support you. I give you money; here you go. I buy you clothes and food,’ because anybody can do that, but you have to give them the love that you want them to have for you.

Another respondent reported that the importance mothers place on fathers’ financial involvement discourages fathers from being paternally involved:

It’s not about money, and it’s not about the things that they give, it’s about how they love their child, and are happy that they’re in their lives. Ya know, it’s not about child support and all that. It’s the least important thing. The most important thing is love. The financial stuff would help, it really would. It would help a lot, but a lot of girls focus on that more, and
that is what drives the guy away is that they only want money. They should really focus on other things.

Mothers spoke about the strained relationships they had with their fathers, who would purchase them items instead of being a consistent presence in their life, as an attempt to “buy my love.”

**Playing with the child.** Thirty percent of mothers reported that playing with the child is an important aspect of a good father. Playing with the child was described differently than “being there” in that mothers stated, “The fathers do not have to be doing anything, but just be there,” as opposed to actually interacting in a playful manner with the children. Mothers commonly combined “talking and playing with the child.” One mother described a good father in the following manner, “He treats the children very good. After work, he always takes time to play and talk with them.” Mothers appeared to consider both talking and playing with the child as mechanisms to facilitate bonding between the father and child.

**Mothers’ Perceptions of Father Involvement**
In response to mothers’ perceptions of father involvement, seven major themes were developed: does not help take care of the child, irregular or no contact, does not play with child, incarceration, financial support, left mother and child, and loves and cares for child. Themes developed in response to this question were often the opposite of themes developed in response to the initial question. Mothers perceived fathers who take care of the children in the role of a “good father,” whereas the majority of mothers in the sample perceived the fathers of their children as not taking care of their children. Similarly, mothers’ perceptions of a “good father” included the father playing with the child, whereas half of the sample reported that the fathers of their children did not play with the child. The same number of mothers, who reported that loving and caring for the child was essential to being a good father, also reported that the father of their children loved and cared for their children. Financial support was evenly split. Four mothers reported that they were receiving financial support from the fathers of their children, and four mothers reported that they were not. The mothers’ perceptions of whether providing financial support was an essential characteristic of a good father were also mixed.

**Does not help take care of child.** Eighty percent of mothers reported that the fathers of their children did not help them take care of their children. Mothers reported the unfairness they felt with one parent solely providing childcare duties. Women in this study cited a number of reasons that they were the primary provider of childcare duties, including incarceration of the father, the father having moved out-of-state, and decreased father involvement as a result of mothers and fathers no longer being romantically involved. In this study, the trend was for fathers to help take care of children more in infancy, which gradually waned as the children grew older. One mother described the conversation she had with the father of her child, “Like I told him, You are a part of it, so you should help take care of your son, not just one person,” but he does not see it that way.” Most mothers in this study reported that they were not receiving help from their children’s fathers.

**Irregular or no contact.** Seventy percent of mothers reported that the father of their child had either irregular (n = 2) or no (n = 5) contact with their child. Most mothers still desired for their children’s fathers to have contact with their children. One mother reported,

> We argue sometimes only because when I ask him to come by and see his son, he says he’s too busy, but he doesn’t have a job, and he’s not in school right now, so I don’t understand how he can be too busy to come and see him.

One mother would not allow the father of her child to have contact with the child due to his reported emotionally unstable behavior. However, most mothers, who had access to the fathers, reported continuing to plea with their children’s fathers to spend time with their children. As one mother reported,

> If he tells me he’s going to come get her, then he tells me he’s not, then most the time I just like flip out on him, and then he comes to get her after I like scream at him, but I shouldn’t have to. I shouldn’t have to yell at him for him to come and get his daughter.

Mothers’ reports of irregular or no contact is in stark contrast to their overwhelming response that “being there” is an attribute of a good father.

**Does not play with child.** Fifty percent of mothers reported that the father of their child no longer engaged in play behavior with the child. Mothers reported feeling sympathy for their children because they did not have their fathers to
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play with them. One mother reported,

He used to play with her all the time. They
would play like dogs or something. I don’t
know what they would be doing. He used
to growl at her, and now she growls. I miss
seeing them play like that, and I don’t feel
like he does it anymore.

Incarceration. Forty percent of mothers
reported that the father of their child was either in
jail or a detention center. Most mothers reported
maintaining irregular contact with the father dur­
ing his incarceration. Some mothers were hopeful
that when the father got out of jail, he would be
involved in his child’s life. One mother reported,
He’s always like, ‘When I get out, I’m going
to buy her everything she needs, and I’m
always going to be over there to help,’ and
he wants to learn how to do stuff, like
give her a bath and changing her diaper,
because he doesn’t know how to do any
of that stuff.

However, some mothers were less optimistic
about life after incarceration as evidenced by one
mother, “His mama go up there every day to see
him to tell him how I’m doing and stuff, and he
says he can’t wait to come home. But yeah, I don’t
believe that.”

Financial support. Forty percent of mothers
reported not receiving any financial support from
the fathers of their children. Mothers primar­
ily reported receiving financial help from their
parents or from the fathers’ parents. One mother
reported, “My parents were the ones that um
helped me with her mostly. They’re the ones that
supported me and the baby, cause he wouldn’t
really give them anything.” Conversely, 40% of
mothers reported that the fathers of their children
did provide some financial support to them and
their children. Referring to what the father of her
child is doing over summer break of college, one
mother reported, “He’s just working to get money
to help me and when he leaves, when he’s gone, to
give if the baby needs diapers and stuff.”

Left mother and child. Forty percent of moth­
ers reported that the fathers of their children
left them either during pregnancy or after the
birth of their children. Of these mothers, some
knew where the fathers were currently living, and
some had no idea. Mothers reported dismay that
the fathers of their children left them. A mother
pregnant with her and the father’s second child
together reported, “He left knowing he had a
daughter already and I was pregnant, and I guess
he did not really care. He didn’t even say he was
leaving, he just left.” Most mothers did not appear
to anticipate the occurrence of the fathers of their
children leaving; however, one mother added the
following caveat to young women:

I would tell other young girls who wanna
have babies that think they are ready, that
they are really not. And they think that the
dad is actually going to be around, and
most the time he is really not. I actually got
really lucky so, and that having a baby is
not going to save their relationship. Some
girls think that if they have a baby, that it
is gonna help. It is only going to make it
worse, and they should all know that.

Loves and cares for child. Forty percent of
mothers reported that they believed the father of
their child loved and cared for their child. All but
one of these mothers was still romantically involved
with the fathers of their children. One mother
reported, “The father of my child supports us. He
cares for us. He cares for us and wants the best. He
tries to spend as much time as possible with us.”
There was less agreement with this theme among
women who were no longer romantically involved
with the father of their child.

Discussion

This study investigated maternal perceptions of
responsible fatherhood among pregnant and
parenting teenage women. Five characteristics
emerged as dominant themes of responsible father­
hood: “being there” for the child, helping to take
care of the child, loving and caring for the child,
providing financial support, and playing with the
child. These themes are consistent with the Lamb
et al. (1987) framework of positive father involve­
ment, which suggested that father involvement
comprises three components: engagement (e.g.,
helping take care of the child and playing with
the child), accessibility (e.g., “being there” for the
child), and responsibility (e.g., providing financial
support). Interestingly, loving and caring for the
child did not fit neatly into any current component
of the father involvement framework described by
Lamb et al. (1987). This finding suggests that the
framework may benefit from modifications that
incorporate father’s affection toward the child.

The themes developed in the current study are
largely consistent with Lemay et al. (2010). Both
adolescent mothers and fathers reported “being
there” as the prominent feature of a “good father.” Mothers and fathers also agreed that providing financial and emotional support as well as taking care of the child (i.e., assuming responsibility of the child) are important characteristics of a responsible father. Interestingly, fathers did not cite playing with the child as an important component of a “good father,” whereas mothers did not cite teaching the child as an important aspect of a “good father.” This finding partially supports our expectation, and previous findings, that mothers and fathers would emphasize different components as being related to a “good father” (Bunting & McAuley, 2004; Dallas et al., 2000).

Findings of the present study also largely mirrored those of Dallas et al. (2000). Adolescent mothers in both studies agreed that “being there” for the child, taking care of the child, and providing financial and emotional support were desirable characteristics of a father. The current sample seems to have developed a unique theme, playing with the child. Similarly, Dallas et al. (2000) reported a unique theme of the father serving as an intermediary between the adolescent mother and the father’s mother. These unique themes suggest that researchers have not yet reached saturation in adolescent mothers’ perceptions of responsible fathering. Thus, more research in this area is warranted.

It is of interest that this study is the fourth one to report the theme of “being there” as the primary aspect of good paternal behavior (Dallas et al., 2000; Lemay et al., 2010; Summers et al., 2006). Mothers and fathers alike agree that spending time with the child is the most important behavior a father can exude. This essential characteristic appears to transcend both gender and age differences.

This study also asked adolescent mothers to evaluate the paternal behaviors of the fathers of their children. Seven themes (predominantly negative) emerged to describe the mothers’ experiences of fatherhood with the fathers of their children: does not help take care of child, irregular or no contact, does not play with child, incarceration, financial support, left mother and child, and loves and cares for child. The disparate themes, compared to those developed in response to a “good father,” suggest that the majority of teenage mothers who participated in this study did not perceive the fathers of their children to be meeting their perceptions of a “good father.” These results are consistent with previous findings of young adult mothers (Sano, Richards, & Zvonkovic, 2008), which found that the majority of mothers in their study reported that they received child support irregularly, and half of the sample reported that their children’s fathers had irregular contact with their children, with many either being incarcerated or banned from seeing the child. Additionally, most mothers expressed a desire for increased father-child interactions, much like in the current study. To our knowledge, the other themes have not been developed in the extant literature.

It is important to note that mothers who were in romantic relationships with their children’s fathers reported more positively about the behaviors those men were exerting with their children, compared to mothers who were not romantically involved with their children’s fathers. This finding is consistent with previous research (Herzog, Umaña-Taylor, Madden-Derdich, & Leonard, 2007), which found that adolescent mothers who were in romantic relationships with their children’s fathers at the time of the study reported being more satisfied with the fathers’ levels of involvement compared to mothers who were not romantically involved with their children’s fathers at the time of the study. This finding is also supported by research that suggests that fathers who are romantically involved with their children’s mothers are more involved with their children than fathers who are not in a romantic relationship with their children’s mothers (Carlson & McLanahan, 2010). These results suggest that the children of adolescent mothers in this study may not be exposed to behaviors associated with responsible fathering. The findings of this study are consistent with previous research that suggested that unwed, adolescent fathers are not likely to be highly involved with their children (Bunting & McAuley, 2004; Cabrera et al., 2004).

Although this exploratory study had many strengths, it also had several limitations. Foremost, we had both a small and heterogeneous convenience sample, which precludes the results of the study from being generalizable. Some women in our sample were pregnant for the first time, whereas other women were already parenting. It is plausible that mothers who are already parenting may hold different perceptions of responsible fathering compared to mothers who have not yet given birth. However, Dallas et al. (2000) reported that the most discrepant responses between expectant mothers and mothers who were already parenting was the expectation that...
fathers would continue to emotionally support mothers after having the child, whereas parenting mothers reported that the emotional support they received decreased after having the child. Our sample also varied on other demographic characteristics including race, marital status, romantic involvement with the child’s father, and the number of children mothers had.

Future studies concerning this topic should use larger sample sizes by recruiting from a variety of sources, including multiple teen parenting programs, schools, governmental agencies, and churches. Future research conducted on teenage mothers’ perceptions of fatherhood should recruit participants from a diverse population of teenagers including those from different ethnic/racial groups; mothers in preconception, gestation, and interconception stages; and mothers who are romantically involved or living with the father of their child as well as those who are not. Future research should compare these various groups’ responses, as it is reasonable to expect that different subpopulations of adolescent mothers would have a different definition of a “good father.” Although the small number of participants precluded the generality of this study, the findings suggest a discrepancy between the mothers’ perceptions of a “good father” and their perceptions of the paternal behaviors they are receiving from the father of their children.

This research informs social workers and couples therapists regarding the roles that teenage mothers perceive as being a “good father.” Programs could be more tailored to the needs of mothers and their perceptions of fatherhood. Knowing the expectations the mother has for the father of her child is a starting base for future interventions on how to effectively work with the father in order to achieve those expectations. Social workers and therapists should work with the mothers in improving all areas of their lives, including the relationship they have with the fathers of their children. Despite the limitations of the current study, this study is valuable in that it examined the perceptions of fatherhood among adolescent mothers. We found that adolescent mothers have clear perceptions of what makes a “good father,” and the majority of mothers did not perceive the fathers of their children to be measuring up to their expectations.

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Erica Elizabeth Coates joined Psi Chi in 2008 as an undergraduate student at the University of Central Missouri (UCM). She served as president of UCM’s Psi Chi chapter in 2009. As an undergraduate student, Ms. Coates conducted the present study as part of a research experience for undergraduates at the University of South Florida’s (USF) Louis de la Parte Florida Mental Health Institute. Drs. Catherine Batsche and Robert Lucio co mentored her for this study. She is currently a second-year clinical psychology doctoral student at USF, who is working under the guidance of Dr. Vicky Phares. She continues to conduct community-based research on the role of paternal involvement among low income and minority populations.
Although the American Psychological Association (APA) (Guidelines for the Undergraduate Major, 2007) recommends that students learn about the APA Ethics Code (Goal 2, Point 1, Subpoint e), most undergraduate programs do not offer a course in ethics (Stoloff et al., 2010), and only limited training, usually in the context of research methods or experimental psychology is provided. Most texts in these courses include a historical account of some of the most egregious ethical violations in human-subjects research, how these incidents spurred the development of legal regulations and ethical codes of conduct, and how research should be ethically conducted. Quite often, students may be directed to a web tutorial (e.g., www.citiprogram.org) for additional training, certification, and background information. In fact, student researchers must receive training in ethics if they are to be involved, in any capacity, in research. Although training in research ethics is extremely important and relevant, the APA’s Ethical Principles of Psychologists and Code of Conduct (hereafter referred to as the Ethics Code; APA, 2010) provides guidance for the broader set of professional activities of a psychologist. The purpose of this article is to look beyond regulatory guidelines and address the two ethical arenas that we consider more likely to affect undergraduate students, namely authorship and boundaries.

Applicability of the Ethics Code

As we proceed in identifying key ethical dilemmas that are likely to emerge in an undergraduate setting, we want to clarify who is affected by the Ethics Code. Members of the APA, doctoral-level psychologists are bound to uphold the code as members of the organization. Because the APA is the organization promulgating the Ethics Code for the discipline, all psychologists, regardless of professional affiliation, should adhere to the code published by the APA. In addition, when students join APA as affiliates, they also pledge to uphold the Ethics Code. So, both instructor and students should engage in research and educational practices that are ethical.

APA published the first version of the Ethics Code in 1953, and over the course of the last half-century the code was expanded to include both Ethical Principles and a Code of Conduct. The Ethics Code (APA, 2010) includes ten standards specifying rules of conduct across the discipline of psychology. The standards address the clinical practice of psychology, competence, education and training, research, and publication. Although there are only ten standards, the code contains very specific criteria for how psychologists, faculty, and students should behave across multiple contexts. These standards are enforceable, meaning that a violation of a standard can result in reprimand, censure, stipulated resignation, or expulsion from the association (APA, 2001); therefore, education, training, and the Ethics Code, are important in providing instructors and students with guidance in their practice as researchers, educators, and mentors.

In addition to the ten standards, the Ethics Code includes five general and aspirational principles that should guide the behavior of psychologists (APA, 2010). Although the Ethics Code provides specific, enforceable guidelines for the professional practice of psychology, ethical dilemmas are rarely clear-cut and require thoughtful analysis; therefore, these principles are designed to guide psychologists across all activities to be beneficent, responsible, just, respectful, and to act with integrity. These principles offer guidance through the broader ethical landscape of the professional. The principles, outlined below, are designed to guide the behavior of psychologists in all areas of practice.
for a host of issues, key among them are the dilemmas that sometimes emerge in undergraduate departments of psychology. The principles, although important as a guide for behavior, are not enforceable in the same way as the standards. We reference the standards, along with the principles, as they relate to each of the ethical issues that we address. More specifically, in this article we review the relevant portions of the Ethics Code related to authorship and multiple relationships in an undergraduate context. Scholarship and writing are an essential part of the undergraduate experience. Students also interact with faculty in complicated and sensitive ways. Because these two issues are likely to be experienced by faculty and students in an undergraduate program, and very limited guidance is available (McCarthy, in press), we focus on ethical issues related to authorship and relationships. Ethical issues pertaining to authorship and classroom relationships are two of the most common experiences that undergraduates may encounter. We provide an overview of responsibilities of instructor and students, and offer recommendations to students for navigating the complicated landscape of ethical challenges.

**Authorship**

Authorship and order of authorship are important and sometimes contentious issues for researchers. Authorship is already a high-stakes endeavor for instructors (Bartle, Fink, & Hayes, 2000; Fine & Kudek, 1995; Geelhoed, Phillips, Fischer, Shpungin, & Gong, 2007; Oberlander & Spencer, 2006; Sandler & Russell, 2005) and opportunities to obtain authorship early in one’s career are becoming increasingly important. Early career publishing can even begin when an aspiring professor is an undergraduate student. With the establishment of the Council on Undergraduate Research in 1978, the whole of undergraduate education, and psychology in particular, experienced an increased emphasis on involving students in undergraduate research (Anderson & Shore, 2008). Mentoring undergraduate students in research is a more frequent practice in most disciplines (Boyd & Wesemann, 2009). Although we believe that undergraduate psychology students are increasingly publishing articles as primary authors, the literature addressing ethical considerations in assessing publication credit focuses primarily on conflicts related to doctoral students; consequently, relatively few resources are available to guide the process of equitably addressing authorship at the undergraduate level (Anderson & Shore, 2008). Although authoring a manuscript is often important for a career, guidelines for determining authorship are even more important. This point is particularly salient because of the power imbalance between faculty and student is even more pronounced in the undergraduate context (Boyd & Weseman, 2005).

Standard 8 of the Ethics Code specifies that publication credit should be awarded only when an author makes a substantial contribution. This standard is important because minor contributions (e.g., collecting data or entering data) do not constitute a significant contribution to the writing of a manuscript. In addition to Standard 8, the principles (i.e., beneficence and nonmaleficence, fidelity and responsibility, justice, and integrity) offer additional guidance for determining authorship. Instructors must exercise particular adherence to these principles in ensuring that authorship is determined equitably and that appropriate boundaries are maintained. Because instructors are in a position of power, they need to be particularly attentive to the disparity that exists and they must work to ensure that students are treated impartially (Campbell, Vasquez, Behnke, & Kinscherff, 2009). Sometimes, issues of authorship are addressed before the research ever begins, so that misunderstandings do not arise—we recommend this approach. In other instances, authorship may not be addressed until a project is complete. Therefore, it is important to discuss authorship at the earliest possible point in the research process.

As an example, instructors may invite students to be a part of a research group. Sometimes, the research project is already well defined and students are invited to participate in the enterprise as apprentices. Activities may include assisting in a literature review, compiling items for an instrument, and collecting data from participants. For students, these activities may seem central to the research project (and they are), but they typically do not contribute to the intellectual advances of a theory or explain behavior. In fact, these activities are sometimes conducted by people who are employed to perform such tasks. Nevertheless, these research tasks do provide important experiences that help students learn about research. If students are involved in only these activities, and authorship will not be forthcoming, then this information should
be shared with the students during the first meeting of the research team. Similarly, students should not only be aware of the types of activities that warrant authorship, but they should seek clarification about their role as either a research assistant or author, early in the research experience. In essence, students should be provided with a type of informed consent (Fine & Kurdek, 1993), which allows them to decide early on in the project if they want to be a part of the experience.

In sum, a candid discussion of how authorship will be determined should take place early in the research process. Because an imbalance of power exists, it is incumbent upon the faculty member to initiate the discussion. Although the onus for clarifying authorship status should not be the responsibility of the student, students can benefit by being knowledgeable about the process, and advocating for themselves early on. One way of ensuring a clear and equitable discussion is for the faculty member to create a contract that can be used to clarify the authorship agreement (Fine & Kurdek, 1993; McCarthy, in press). Fine and Kurdek (1993) also suggested that changes in authorship may require additional discussion if relative contributions change. It may also be helpful to consult with other colleagues as a way of seeking an objective viewpoint.

**Boundaries in the Classroom**

An inherent challenge in undergraduate teaching is attempting to successfully balance developing a classroom rapport and alliance while maintaining professional boundaries. Recently, researchers (Wilson, Ryan, & Pugh, 2010) emphasized the correlation between positive student-instructor relationships and learning. These researchers highlight a number of immediacy behaviors (e.g., use of humor, respect for students, self-disclosure) that are associated with positive student attitudes, course grades, and motivation. In addition, the Ethics Code (APA, 2010) specifies standards that give boundaries to student-instructor relationships. These boundaries offer guidance to students and instructors in attempting to minimize misuse of the power that instructors are ascribed. In the following section, we identify some potential hazards related to student-instructor relationships, instructor and student responsibilities when confronted with an ethical dilemma, and specific tips for students in navigating this process.

The Ethics Code (APA, 2010) details how psychologists should conduct themselves when working with others. Specifically, there are principles that address discrimination, harassment, harm, multiple relationships, and exploitative relationships (see Section 3, Human Relations). These standards apply to all psychologists’ activities, but we consider how they can pose problems specific to the college classroom.

**Discrimination**

The first of these principles addresses unfair discrimination based on “age, gender, gender identity, race, ethnicity, national origin, religion, sexual orientation, disability, socioeconomic status, or any basis prescribed by law” (APA, 2010, standard 3.01, p.6). This principle should aid in keeping instructors mindful of bias in the classroom and in evaluating student work. In addition, it should serve to maintain objectivity in the teaching process. Instructors ought to treat all students fairly. This can become difficult as some students may perceive, accurately or inaccurately, that instructors have “favorites.” As a result of this perceived favoritism, many students may believe that they are not given a fair chance to excel. In addition, if instructors disclose information related to their own religious beliefs, political views, or other personal opinions, students whose views differ may feel marginalized and potentially discriminated against if they were to disclose those views.

In order to maintain a classroom that is free of discrimination, instructors must be aware of their own biases. When students become aware of possible discrimination, it should be brought to the professor’s awareness in a respectful and straightforward manner. An example of potential discrimination can occur when teaching Abnormal Psychology and discussing eating disorders. Comments by an instructor about how thinness is reinforced in “our” society can unintentionally marginalize some students. Such a comment delivered to a classroom full of predominantly White American students can unintentionally render students from other cultural or ethnic backgrounds invisible. It is important to create an environment where all students can respectfully disagree. If done in a respectful way, direct comments by students can allow instructors to acknowledge the narrowness of their thinking and the need to encourage alternative explanations from diverse viewpoints. Although this is a subtle form of discrimination, it is not unlike the experiences of many students when their views, rooted in other dimensions of diverse
life experiences, are not endorsed or recognized by instructor. Instructors can try to be aware of these pitfalls, but it is incumbent upon the student to approach the instructor in a respectful way to bring about awareness.

If a student does not feel comfortable speaking up during class about an uncomfortable situation, what are some alternative approaches? What about situations in which students may not initially feel discomfort, but upon further reflection they develop feelings of discomfort? The important theme here is to find a venue to express your reactions in a positive manner. A student might be more comfortable with a chat during office hours or emailing the instructor, rather than an in-class conversation. Perhaps expressing one’s concerns through a teaching assistant for the course via an online discussion board would suffice. Students need to remember that faculty members are not perfect, and these faculty members are driven to improve and minimize harm, as dictated by the ethical standards and principles. However, if students fail to speak up, or wait until the end-of-semester teaching evaluations to express their displeasure, then these harms (even if accidental) could continue unchecked longer than necessary.

**Sexual and Other Harassment**

A second principle addresses sexual harassment, and more broadly, behavior that is harassing or demeaning to students (APA, 2010, Sections 3.02 & 3.03). Although this principle may appear more obvious and therefore less likely to occur, there are several ways in which an instructor can create a hostile educational environment. When instructors use their power to coerce or make students uncomfortable in the classroom or during individual meetings, they are engaging in unethical behavior. Because of the inherent power differential, students are put in a difficult and vulnerable position when confronted with this behavior. They are likely to fear the consequences of bringing the behavior to the instructor’s attention.

An example that illustrates perceived demeaning behavior is when one group of students may feel they are being judged differently in the classroom. Perhaps a rumor begins that a certain instructor shows favoritism towards traditional students, and non-traditional students feel unfairly judged. This same scenario could occur in terms of gender, sexual orientation, and race, and if instructors are not aware of these perceptions, then students will continue to feel mistreated. Many students likely feel that instructors are demeaning towards them and this may have an effect on their participation and engagement in the class.

**Avoiding Harm**

A third principle addresses avoiding harm to students (APA, 2010, Section 3.04). Although we do not think most instructors deliberately inflict harm on their students, there are situations that are, indeed, harmful. For example, using deception in a classroom demonstration could result in unintended harm. Although these classroom demonstrations may help to engage students directly by making learning experiential, there are pitfalls to consider. For example, in an attempt to give first-hand experience with the flaws of eyewitness testimony, instructors sometimes ask the confederate to run into an introductory psychology class and steal a briefcase. Following the theft, the instructor gives a questionnaire to get a full description of the assailant. Student feedback following this demonstration tends to be positive overall, but some students may find it to be over the top, and even traumatic. Students may not share these concerns until the end of the term on course evaluations. Given this feedback, instructors ought to think about how much informed consent prior to the demonstration should students give if they are going to be deceived. Some of the discussions, video clips, or subject matter can be perceived as harmful by students as well. These are all concerns that instructors should consider before delving into potentially harmful topics. If students feel uncomfortable, they ought to be given the option to opt out. If students are not made aware that the demonstrations, videos, assignments have potential harmful effects, they need to inform the instructor immediately. This, again, can be difficult to navigate.

**Multiple Relationships and Exploitation**

A fourth and final principle addresses multiple and exploitative relationships (APA, 2010, standards 3.05 & 3.08). According to these principles, instructors should clearly define the professional relationship with students while doing their best to minimize any likelihood of maintaining or encouraging a personal relationship. In addition, instructors should refrain from entering into an instructor-student relationship with someone whom they already have a personal relationship. In some cases, this personal relationship may be indirect (e.g., a friend’s child) but should still be avoided.
if possible. These principles again emphasize the inherent power dynamic that can occur in an instructor-student relationship and how this can eventually end up harming the student. The language of this principle gives clear guidance to avoiding multiple relationships, but some situations warrant further discussion. For instance, if a student is a research assistant for an instructor, should the student avoid taking classes with the instructor? On the surface this would appear reasonable and perhaps show a level of student focus and interest. The concern would arise if the student is unable to meet obligations as a researcher or student and how this affects the ability of the instructor to objectively view their performance in either context.

Another example of multiple relationships is when students are actively involved in campus organizations for which an instructor is an advisor. For example, what if a student decided to step down in his role as an officer in a campus organization for which the instructor is the faculty advisor? The student would likely be concerned about how the instructor would view him should he enroll in future classes. With direct communication at the outset, the instructor and student can discuss the need for the instructor to be objective in the future course and address the student’s concerns in an attempt to keep those two relationships separate.

Social Networking
The plethora of social networking opportunities raises another issue about multiple relationships. Social networking sites can be used in the classroom to enhance instruction and specifically aid in creating an engaged classroom. If these sites are used to create a sense of professional community, then the benefits seem significant. If instructors and students also use these sites to communicate about personal relationships, a blurring of relationships could emerge. Imagine an instructor who shares personal views on politics and religion on social networking sites and how this could impact a student’s views of the instructor. Likewise, if instructors can see students’ profiles, friends, posts, and likes, this could create bias for or against some students. In addition, if a social networking site is required by an instructor, yet some students object, this puts students in a bind.

All of the aforementioned issues that revolve around multiple relationships are particularly difficult to address head-on. Students are in a vulnerable position and want to do as instructors say, but this obedience can cause significant problems with objectivity and potentially exploitation. First, instructors should be mindful of the pitfalls that are present when blurring these roles and need to be open to student feedback and concerns. Secondly, students need to bring concerns to the instructor quickly when they feel put in a position in which they could be exploited or their personal relationships may impact their ability to feel comfortable in the learning environment.

Recommendations for Students
Authorship
What process should a student follow to clarify an authorship role? Students are working within a relationship (i.e., instructor versus student) that contains an imbalance of power. Negotiating authorship and navigating relationships are difficult processes. As a student, it will be important to find ways to understand the nature of authorship and relationships, while at the same time working to achieve academic goals.

Negotiating authorship, from students’ perspective, is difficult and potentially risky. If we consider the perspective of students, it will be important to begin clarifying their role by examining their intentions. Will a student serve as an apprentice? Collecting and entering data and setting up equipment are important activities and provide great opportunities for learning about research; however, working in a lab does not entail conceptualizing hypotheses, analyzing data, or writing results. To use an analogy, nurses in a drug study may distribute medications and their role would be critical to the success of the research project, but not critical to the success of a specific publication; therefore simply assisting with the study does not qualify one for authorship. Nevertheless, working in a psychology laboratory is an excellent way to gain experience and may lead to additional opportunities to engage in research.

Students should evaluate their academic obligations and how much time they can devote to a research project along with identifying the reasons for being involved in the research project. For example, do they want to gain experience, demonstrate skills that might result in a letter of recommendation, or produce a manuscript that is worthy of publication?

If students plan to engage in research and want to earn authorship, then their investment and contributions will be more significant. Even so, there
are multiple levels of contribution that are typically present when people work together on a research project. For example, students may conduct a literature search; however, earning authorship will require more than merely searching and obtaining articles. If drafting a review of the literature, then authorship may be warranted. Quality of the draft is one consideration when evaluating relative contributions. Order of authors remains subject to relative contributions to the entire manuscript.

So, if students’ intent is to gain experience with writing and securing a publication, then they will want to clarify their intentions before seeking an opportunity to become involved in a research project. Students may want to specifically address what types of contributions to the research process will warrant authorship.

A third possibility is to develop a research proposal and conduct the study under the direction of the instructor as the principal investigator: sometimes this is called a senior thesis. The research proposal may emerge from an experimental psychology course, or it may emerge as a result of interest in a specific content area (e.g., cognition). In this case, students are guiding the study, and they are performing most of the intellectual work to develop a manuscript. In this instance, the student is the primary, and perhaps only, author. If the intent is to publish an article as the sole author, then it will be important to clarify intentions before seeking a research mentor. Be aware that there are a number of undergraduate grant programs at most universities, as well as Psi Chi grants (e.g., http://www.psichi.org/awards/undergraduate.aspx) to aid in funding this type of independent research.

After clarifying intentions (e.g., research apprentice, secondary author, or primary author), it is possible for students to seek the appropriate research experience to meet their needs. Regardless of the goal, it is always useful to engage in a discussion with a research mentor before entering into the research experience. We recommend that students do their homework prior to engaging in this conversation with a professor. In other words, do not approach a professor and ask them about what areas of research are they currently studying. Rather, conduct a PsycINFO search, read about previously published work, and then approach an instructor to ask about available opportunities to conduct research. A second useful question is to ask for an explanation of the expectations for the research experiences. This information can help students to decide if the opportunities are a match with their goals.

If students believe that instructors can offer a research experience that is consistent with their intentions, then a second step may be to share their goals with instructors. It is always helpful to be clear about goals before a research experience begins. It is much more difficult to clarify misunderstandings later in the research process. If students share their goals with the instructors, then it is possible that respective roles will be much easier to navigate throughout the process.

**Boundaries in the Classroom**

In addition to negotiating authorship, students will experience a number of interactions that may be difficult, or potentially awkward. As we indicated earlier, faculty usually strive to ensure that students are treated equitably and with respect; however, unintentional actions may cause them to feel uncomfortable. If students are members of an underrepresented group, a slight may feel particularly stinging. They need to communicate their discomfort if they would like instructors to learn from the experience. Professors may not be aware of their own biases or inadvertent actions towards students, and they can learn from students if feedback is communicated effectively.

If an instructor conducts a classroom activity that feels threatening, is demeaning towards students, or shows favoritism, how can students make their objections known? This is certainly a difficult process to navigate. Remember that most instructors want students to feel comfortable and accepted in their classroom, and hope to treat all students with respect. If approached from this vantage point without malicious intent, but instead from a place of bringing about awareness, most instructors will appreciate the honesty and reflection.

In addition, as students and potential leaders within the psychology department, it is likely that students will have the opportunity to engage in multiple roles with faculty members. As such, it is partly the student’s responsibility to keep these roles separate if at all possible. Be wary of providing services for faculty members that are outside the scope of the classroom or research lab. Clarifying these roles at the outset will reduce the likelihood of blurred boundaries.

Below are general recommendations for all students when confronted with uncomfortable situations in the classroom:
Be proactive rather than reactive. It is always more difficult to find ways to resolve a disagreement than to have clear expectations in advance. If a problem does arise, every school has some process for resolving conflict, and it may be necessary to engage the process, but this is not the best solution.

Engage in direct communication. Although all instructors may not be mindful of the power dynamic that is created in many of the aforementioned situations, we can expect that instructors are aware of some of the potential pitfalls. If students can approach instructors in a direct way, expressing concern over publication credit or blurred boundaries, a good outcome is possible. One of the basic tenets of the Ethics Code (APA, 2010) asserts that psychologists must attempt an informal resolution before involving others (see standard 1.04). Approaching a professor to address issues of concern is an excellent way to practice skills in conflict resolution. Certainly there are exceptions, particularly in the case of sexual harassment. But, in general, going over the head of an instructor by contacting the Department Chair or College Dean is unlikely to lead to an outcome that includes meaningful communication.

Assert your power. Students have power, too. They can assert this power by clarifying goals and articulating the issues with the instructor in a thoughtful way. If presented as a concern, without attacking and putting the instructor on the defense, they can expect that most instructors will engage in the conversation and likely will seek some form of remedy. If an instructor is not willing to engage in the conversation, then further resolution must be sought by going through the appropriate channels in the college or university.

In reality, ethics “training” never ends. Behaving ethically is a life-long professional commitment to being vigilant about one’s attitudes and behaviors. It also includes working to ensure that students receive the maximal benefits from their undergraduate education and experiences. When harm does occur, it means acting to minimize those harms—both in the present and for the future. This training extends to faculty members as well, and these uncomfortable experiences offer both students and instructors the opportunity to experience real world ethics.

References
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<tr>
<th>Name of Award or Grant</th>
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<tr>
<td>SuperLab Research Grants</td>
<td>October 1</td>
<td>SuperLab software</td>
<td>Two awards for conducting the best computer-based research.</td>
</tr>
<tr>
<td>Thelma Hunt Research Grants</td>
<td>October 1</td>
<td>Two grants $3,000 each</td>
<td>Enables members to complete empirical research on a question directly related to Psi Chi.</td>
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<td>Mamie Phipps Clark Research Grants</td>
<td>November 1 February 1</td>
<td>Up to $1,500 each (number varies)</td>
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<td>Regional Research Awards</td>
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<td>Society Annual Convention Research Awards</td>
<td>December 1</td>
<td>$300 each (number varies)</td>
<td>Up to 4 undergraduate awards presented for the best research papers submitted for APA/APS conventions.</td>
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<td>Regional Travel Grants</td>
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<td>FBI NCAVC Internship Grants</td>
<td>February 1 June 1</td>
<td>Two grants, up to $7,000 each</td>
<td>14-week unpaid FBI NCAVC internship to conduct research; grant covers living expenses.</td>
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<td>APS Summer Research Grants</td>
<td>March 1</td>
<td>Six $5,000 grants ($3,500/student + $1,500/sponsor)</td>
<td>Provides opportunities to conduct research during the summer with sponsors who are APS members.</td>
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<td>Summer Research Grants</td>
<td>March 1</td>
<td>Fourteen $5,000 grants ($3,500/student + $1,500/sponsor)</td>
<td>Provides opportunities to conduct research during the summer at recognized research institutions.</td>
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<td>Kay Wilson Leadership Award</td>
<td>April 1</td>
<td>One $500 award + Travel to APA + Plaque</td>
<td>Award to one chapter president who demonstrates excellence in the leadership of the local chapter.</td>
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<td>Allyn &amp; Bacon Psychology Awards</td>
<td>May 1</td>
<td>1st place—$1,000 2nd place—$650 3rd place—$350</td>
<td>Awards for the best overall empirical study submitted.</td>
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<td>Guilford Undergraduate Research Awards</td>
<td>May 1</td>
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<td>Awards for the overall best research papers submitted.</td>
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<td>July 1</td>
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<td>Awards for best Eye on Psi Chi articles published by student authors on diversity issues.</td>
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## Psi Chi Awards & Grants for Graduate Students

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<td>Graduate Research Grants</td>
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<td>Graduate Assistantship Grants</td>
<td>January 1</td>
<td>Eight $3,000 stipends</td>
<td>Provides a stipend to teach and/or conduct research during any semester.</td>
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<td>FBI NCAVC Internship Grants</td>
<td>February 1 to June 1</td>
<td>Two grants, up to $7,000 each</td>
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<td>Bandura Graduate Research Award</td>
<td>February 1</td>
<td>Travel expense to APS + Plaque + 3 year APS Membership</td>
<td>Student submitting best overall empirical study. Cosponsored by APS.</td>
</tr>
<tr>
<td>Newman Graduate Research Award</td>
<td>February 1</td>
<td>Travel expense to APA + Plaque + 3 year Journal subscription</td>
<td>Student submitting best overall empirical study. Cosponsored by APA.</td>
</tr>
<tr>
<td>Kay Wilson Leadership Award</td>
<td>April 1</td>
<td>One $500 award + Travel to APA + Plaque</td>
<td>Award to one chapter president who demonstrates excellence in the leadership of the local chapter.</td>
</tr>
<tr>
<td>APAGS</td>
<td>Psi Chi Junior Scientist Fellowships</td>
<td>June 30</td>
<td>Four $1,000 fellowships</td>
</tr>
<tr>
<td>Diversity Article Awards</td>
<td>July 1</td>
<td>Four $300 awards</td>
<td>Awards for best Eye on Psi Chi articles published by student authors on diversity issues.</td>
</tr>
</tbody>
</table>
## Psi Chi Awards & Grants for Chapters & Faculty Advisors

<table>
<thead>
<tr>
<th>Name of Award or Grant</th>
<th>Submission Deadline</th>
<th>Who Can Apply?</th>
<th>Award/Grant Amount</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thelma Hunt Research Grants</td>
<td>October 1</td>
<td>Faculty</td>
<td>Two grants $3,000 each</td>
<td>Enables members to complete empirical research on a question directly related to Psi Chi.</td>
</tr>
<tr>
<td>Undergraduate Psychology Research Conference Grants</td>
<td>October 1</td>
<td>Sponsor(s) of local and regional conference</td>
<td>Up to $1,000 each (number varies)</td>
<td>Funding to defray cost of sponsoring local/ regional undergraduate psychology conferences. Total grant money available is $15,000.</td>
</tr>
<tr>
<td>Mamie Phipps Clark Research Grants</td>
<td>November 1 - February 1</td>
<td>Faculty</td>
<td>Up to $1,500 each (number varies)</td>
<td>Funding to defray the cost of conducting a research project focusing on ethnic minorities. Total grant money available is $10,000.</td>
</tr>
<tr>
<td>Denmark Faculty Advisor Award</td>
<td>December 1</td>
<td>Faculty Advisor (chapter nomination)</td>
<td>Travel expense to APA + Plaque</td>
<td>To one outstanding faculty advisor who best achieves Psi Chi's purpose. Chapter nominates.</td>
</tr>
<tr>
<td>Kay Wilson Officer Team Leadership Award</td>
<td>December 1</td>
<td>Chapter</td>
<td>$2,000 ($1,000 for chapter, $1,000 for officers)</td>
<td>To award the best chapter officer team for exceptional leadership as a group.</td>
</tr>
<tr>
<td>Regional Chapter Awards</td>
<td>December 1</td>
<td>Chapter</td>
<td>Six $500 awards + Plaque</td>
<td>Presented to one chapter in each of six regions that best achieve Psi Chi's purpose.</td>
</tr>
<tr>
<td>Regional Faculty Advisor Awards</td>
<td>December 1</td>
<td>Faculty Advisor (chapter nomination)</td>
<td>Six $500 awards + Plaque</td>
<td>To six outstanding faculty advisors (one per region) who best achieve Psi Chi's purpose.</td>
</tr>
<tr>
<td>Collaboration Grants</td>
<td>January 20 - June 1</td>
<td>Chapter</td>
<td>Four $500 grants</td>
<td>Provides funds for a Psi Chi chapter and Psi Beta chapter to collaborate on a shared activity.</td>
</tr>
<tr>
<td>Cousins Chapter Award</td>
<td>February 1</td>
<td>Chapter</td>
<td>One $3,500 award + Travel to APA + Plaque</td>
<td>Presented to one chapter that best achieves Psi Chi's purpose.</td>
</tr>
<tr>
<td>Building Bonds Award</td>
<td>June 1</td>
<td>Chapter</td>
<td>$100 + plaque</td>
<td>To recognize an outstanding collaborative activity hosted jointly by a Psi Chi chapter and Psi Beta chapter.</td>
</tr>
<tr>
<td>Faculty Advisor Research Grants</td>
<td>June 1</td>
<td>Faculty Advisor</td>
<td>Twelve $2,000 grants</td>
<td>Awards for up to 12 faculty advisors to conduct empirical research.</td>
</tr>
<tr>
<td>STP Assessment Resource Grant (Psi Chi faculty member)</td>
<td>June 1</td>
<td>Faculty</td>
<td>Three $2,000 grants</td>
<td>Supports projects to develop assessment tests, instruments, and processes.</td>
</tr>
<tr>
<td>Model Chapter Awards</td>
<td>June 30</td>
<td>Chapter</td>
<td>$100 each chapter</td>
<td>All chapters meeting the five criteria will receive $100.</td>
</tr>
</tbody>
</table>