SOCIAL COGNITIVE PROSSESSES AND THE OBJECTIFICATION OF WOMEN:

PRECURSORS TO SEXUAL VIOLENCE

by

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Abstract

The current study investigates the cognitive underpinnings of objectification and implications for aggressive behaviors perpetrated against women. Past research has found that humans utilize different processing systems, depending on what is being perceived. Configural processing (global processing) is used when recognizing people, whereas analytical processing (local processing) is used when identifying objects. In the present study, we utilized a recognition task called the 'parts versus whole body recognition' paradigm, an indicator of cognitive processes. Previous research suggests that when perceiving men, people are more likely to use configural processing. When perceiving women, people are more likely to engage in analytical processing, indicating that on a cognitive level, women are objectified. We measured individual differences in their objectification of women with the parts versus whole body recognition paradigm. We examined whether sexually coercive men objectified women more than non-sexually coercive men. We examined the relationship between cognitive processing and risk factors of male sexual violence perpetration. Risk factors measured were attitudinal (belief in rape myth, hostility towards women, and conformity to masculine norms) and behavioral (frequency of pornographic use and sexual coercion). It was hypothesized that greater levels of objectification correlate with higher levels of these risk factors. Participants completed the recognition task, followed by questionnaires that assessed the previously stated risk factors. Results did not support the hypothesis; nevertheless, the attitudinal and behavioral risk factors were correlated with each other, with the exception of pornography usage. The implications of using both implicit and explicit measures of behavior could explain these results and are further discussed.

Keywords: objectification, sexual violence, sexual coercion, cognitive processing, person recognition

Social Cognitive Processes and the Objectification of Women: Precursors to Sexual Aggression and Violence

Well-established theoretical models of objectification suggest a strong and positive link between sexual objectification and sexual violence. Objectification occurs when a person's entire personhood is perceived as an object and on the basis of the usefulness and function of their parts. Examples of objectification can be seen throughout our society. An employer might objectify his employees by seeing them only for the labor they produce (Marx, 1964). A doctor might objectify their patient seeing them only for their sickness and symptoms (Foucault, 1989). A scientist might objectify their participants by seeing them as a single line in a dataset. These examples present a person in power perceiving another's entire personhood as the sum of what directly benefits them. They do not see the objectified person's whole being, personality, and the complexities that lie within. The present research explores the objectification of women in Western society and its implications.

Objectification theory proposes that women's bodies are reduced to their sexual body parts and how those parts might be used by someone else, often a man. Women are perceived in terms of their sexual body parts and the function of these parts (Fredrickson & Roberts, 1997). An important field in cognitive research explores how we perceive human beings and how it differs from our perception of objects. The cognitive underpinnings of human perception make the person a unique subject of examination. Recent research has revealed that women may not be processed similarly to men. This difference may be explained by objectification, meaning that women may be cognitively perceived as objects rather than people. Important advances have been made in the investigation of the cognitive underpinnings of sexual objectification (Bernard, Gervais, Allen, Campomzin, & Klein, 2012; Gervais, Vescio, Forster, Maass, & Suitner, 2012) and its implications for aggressive behaviors perpetrated against women.

Perceiving women as less human may permit committing inhuman actions towards them, which can lead to and justify violence (Gervais & Eagen, 2017). Objectified women are more likely to be victim-blamed and regarded with less empathy when they have been assaulted (Loughnan, Pina, Vasquez, & Puvia, 2013), because they are regarded as objects rather than people who do not deserve fair treatment. This ultimately explains why acceptance and preparation of sexual violence against women have been associated with objectification (Awasthi, 2017; Rudman & Mescher, 2012; Wright, P. J., & Tokunaga, R. S., 2016). Our study explores this connection between objectification, as defined and measured by cognitive means, and other risk factors of sexual violence.

Configural and Analytical Processing

Much research has been conducted on the different processing systems that are involved in face, body, and object recognition (Tanaka & Farah, 1993). Person (face and body) recognition requires a holistic encoding of stimuli. Holistic is a central component in Gestalt theory, which states that there is a fundamental difference in understanding something as a whole rather than its individual parts and components. As Wagemens explains wholes, "possess properties that cannot be derived from the properties of their constituent parts" (Wagemens, 2012). Therefore, recognition of isolated body or facial parts (e.g., a body part without the context of the rest of the body and a nose without the context of the rest of the face) is impaired. Recognition is also impaired when the body or face is inverted (upside-down) and therefore presented in an unfamiliar format (Yin, 1969; Reed, Stone, Bozova, & Tanaka, 2003). This processing system is called configural processing; it requires contextual and relational information meaning knowledge on how the parts relate to each other. Most research on human processing has been conducted on people's recognition of faces, but Seitz's (2002) study found that we encode bodies similarly to faces. Bodies provide a familiar standard of configuration among its parts (e.g., two arms attached to the opposite side of the torso, legs attached to the bottom of the torso, and one head attached to the top of the torso) that require understanding relational information.

When the stimuli presented are objects, such as houses, or distorted faces, such as inverted or scrambled faces, an individual cannot use relational information because these stimuli are unfamiliar and do not have a familiar standard of configuration. The individual must instead rely on featural information. This requires more local processing of the stimuli that do not require an understanding of the spatial relationship between the parts of the stimuli. Therefore, the recognition of isolated parts can occur without the context of the rest of the stimuli. A door, for example, can be recognized without the context of the house, but recognition of stimuli requiring relational information, such as faces and bodies, are impaired. This fragmented perspective of stimuli is called analytical processing. Configural and analytical processing are the systems used when encoding and recognizing persons and objects, respectively.

Cognitive Processing and Objectification

Studies have found a few exceptions for how we process certain classes of stimuli, primarily involving the level of experience a person has with that stimuli. We tend to use configural processing for stimuli that we are an expert at perceiving. Dog experts, for example, perceive and recognize dogs using configural information (Diamond & Carey, 1986). Humans are face experts, as we routinely engage in facial recognition. Most of the stimuli used in research about the cognitive processing of people were exclusively white men. Gervais, Vescio, Forster, Mass, and Suiter (2012) compared the processing of men and women and found that participants processed men and women differently, revealing differences in the way we perceive women in our society.

The whole-body recognition paradigm (Seitz, 2002; Tanaka & Farah, 1993) is an indicator of which processing system (i.e., configural or analytical) the perceiver is using when viewing stimuli. Using an altered version of this task, experimental research has found that women's sexual body parts were recognized similarly, whether presented within the context of her entire body or in isolation (Gervais et al., 2012). This indicates that people are using the same processing system (analytic processing) that is utilized when viewing objects. Men's sexual body parts are better recognized when given the context of the entire body. Results were consistent among both male and female participants. This suggests that people used configural processing, which corresponds to people's recognition, when perceiving men. If women were perceived with the processing system corresponding with people recognition, then they would require the context of their entire bodies to recognize sexual body parts. The lack of this effect indicates that, on a basic cognitive level, women are objectified. This bias is called the sexual body part recognition bias (Gervais et al., 2012).

The objectification of women can be a precursor to sexual violence perpetration (Awashi, 2017). There are several attitudinal and behavioral risk factors that predict sexual violence perpetration; objectification being an attitudinal factor. The attitudinal risk factors discussed are belief in rape myth, hostility towards women, and conformity to masculine norms. The behavioral risk factors are sexual coercion and pornographic usage. Our discussion begins with a look at pornography usage.

Pornography Usage

How a person perceives (whether they use configural or analytical processing) a class of stimuli can depend on their level of experience with that stimulus (Diamond & Carey, 1986). In Western society, men often experience women through pornography. Some studies have connected the use of pornography to the objectification of women (Paul & Tokunaga, 2016; Ferguson & Hartley, 2009). In pornography, women are often presented as an object whose only use is to bring pleasure to men. She is utterly defined by the desires of the male who views her. The prevalence of pornography cannot be ignored; in the United States, pornography industries are bigger businesses than professional football, basketball, and baseball combined, making $13 billion per year. Among young adult men (ages 18 to 26), 87% report that they view pornography with 50% viewing it weekly and 20% viewing it daily or every other day (Carroll, Padilla-Walker, Nelson, Olson, McNamara Barry, and Madsen, 2008). Pornography is often filled with portrayals of men who sexually and aggressively touch women without permission, engage in objectifying gazes at their breast and genital, and engage in forceful sex where women are often depicted crying and visibly suffering (Attwood, 2004). Social learning theory posits that people learn how to behave by copying the behavior they observe in others (Bandura, 1983). Therefore, men might learn an objectifying mindset and behaviors from the pornographic materials they consume (Check and Malamuth, 1986). Svedin, Akerman, and Priebe (2011) found that high-frequency viewers of pornography were more likely to both fantasize and preform acts they viewed in pornographic material. Another risk factor that is commonly associated with sexual violence is the belief in rape myths.

Belief in Rape Myth

Myths about rape are those that minimize, put down, and sometimes outright deny the experiences and stories of sexual assault victims while excusing the behaviors of perpetrators (Burt, 1980). They often involve sentiments that portray women as at fault for the violence perpetrated against them because they choose to dress a certain way or did not make their lack of consent clear. Examples include statements such as, "Women ask for it.", "Only sluty women get raped.", and "Men can’t help themselves if they have been sexually excited by women." (Burt, 1980). Both genders can share these attitudes, but men are more likely to endorse them than women (Suarez & Gadalla, 2010). Research has shown a connection between rape myth acceptance and sexual aggression. Hostility towards women can be reinforced when women are looked at as deceitful or at fault for their own victimization (Burt, 1980; Samji & Vasquez, 2019). These ideas can fuel a man's sense of sexual entitlement to use women solely to fill their own sexual needs while assuming that women always want sex and secretly desire to be raped (Polaschek & Ward, 2002).

A meta-analysis written by Suarez and Gadalla (2010) found that rape myth acceptance is correlated with many harmful factors. Rape myth acceptance has been correlated with harmful gender and sexuality attitudes such as adversarial sexual beliefs (Burt, 1980, Suarez & Gadalla, 2010), sexism (Suarez & Gadalla, 2010), acceptance of interpersonal violence (Burt, 1980, Suarez & Gadalla, 2010), and self-reported sexual objectification (Samji & Vasquez, 2019). Suarez and Gadalla (2010) also found rape myth acceptance to be correlated with self-reported sexual aggression and sexually coercive behaviors (Frydenborg, 1999; Locke & Mahalik, 2005). Belief if rape myth has also been correlated with hostility towards women (Samji & Vasquez, 2019, Suarez & Gadalla, 2010), another attitudinal variable predictive of sexual violence perpetration.

Hostility towards women

Hostility towards women is an attitude of distrust and hate directed at women and a sense of gratification at demeaning and dominating them. Hostility towards women was significantly related to sexual violence perpetration in over 25 studies using colligate and community samples of adults (e.g., Carr & VanDeusen, 2004; Dean, & Malamuth, 1997, DeGue, & DiLillo, 2004, Parkhill, & Abbey, 2008). Research has also reported that hostility towards women may be the strongest factor for predicting sexual violence when controlling for other attitudinal risk factors like rape myth acceptance, acceptance of violence, and sexist attitudes (Forbes, Adams-Curtis, White, 2004). Another risk factor of sexual violence is adherence to traditional gender roles.

Traditional gender role adherence

Traditional gender role adherence refers to beliefs that men and women should embrace masculine and feminine roles and traits, respectively. Male aggression against women can be explained through a sociocultural lens where sexual violence may be the product of adherence to masculine norms that normalize and promote the ideal dominant man and the passive, submissive woman (Baron & Straus, 1987; Martin, Vieraitis, & Britto, 2006; Gallagher and Parrott, 2011). Using this theory, we may explain male sexual violence perpetrators as men socialized to uphold a certain violent idea of masculinity, particularly hegemonic masculinity, which promotes male dominance over women (Connell, 2005). In Tharp, DeGue, Valle, Brookmeyer, Massetti, and Matjasko's (2012) meta-analysis on risk factors of sexual violence perpetration they found that traditional gender role adherence significantly predicted sexual violence in 19 of the 21 studies analyzed (e.g., Carr & VanDeusen, 2004; Forbes et al.,2004; Gage, 2008).

Sexual Coercion

Sexual coercion is defined as manipulative attempts to obtain unwanted sexual contact that does not involve direct force. This is contrasted with sexual aggression in which the use or threat of force is used to obtain unwanted sexual contact. Research investigating the differences between sexual coercion perpetrators and sexual aggression perpetrators is less prevalent than research about sexual aggression, which is seen as more severe in terms of legal and social standards. Researchers have suggested that sexual coercion may be a precursor to the more severe sexual violence (DeGue & DiLillo, 2005). DeGue, DiLillo, & Scalora's (2012) study compares both types of perpetrators on various risk factors and found that both groups shared several risk factors (e.g., empathy deficits, belief in rape myth, general aggression) sexual violence. Ultimately, hostility towards women was the only risk factor variable that could predict perpetrator group membership. Sexual coercion is also the more common type of sexual perpetration (DeGue & DiLillo, 2004); therefore, especially in a community sample, there would be more people who would report committing these behaviors. For the purposes of this study, sexual coercion will serve as a representation of sexual violence.

Present Study

Our understanding of the sexual body part recognition bias and the various risk factors of sexual violence perpetration leads us to the present study. Previous research has yet to look at individual differences in objectification of women on a cognitive level in relation to factors predictive of sexual violence. In this study, objectification was measured with the parts versus whole body recognition task. The task begins with an image of a woman. Then, for the recognition question, participants were either presented with: (a) the original image of the women; or, (b) the same woman with her sexual body parts (chest and waist) modified. Participants were asked to indicate which version of the woman they saw previously. Half of the trials measured whole body recognition, and half measured body part recognition. Recognition scores (correct responses within condition divided by the number of tests within the condition) of whole-body recognition and body part recognition indicate the type of processing system used when perceiving the women. In the current study, the difference between whole-body recognition scores and body part recognition scores were used as a measure of objectification. Lower differences mean higher levels of objectification.

Variables measured were attitudinal (belief in rape myth, hostility towards women, and conformity to masculine norms) and behavioral (frequency of pornographic use and sexual coercion). Social desirability bias was also controlled for. All variables except for objectification were measured with questionnaires. Relationships between these variables and cognitive objectification of women were investigated. Participants who self-report sexually coercive behaviors were placed into the sexually coercive group with remaining participants in the non-sexually coercive group. Differences in non-sexually coercive and sexually coercive in regard to objectification and the remaining attitudinal variables were examined.

Our first hypothesis was that the female bodies would be recognized similarly whether they were viewed with context (whole body recognition) or not (body part recognition). Our second and central hypothesis was that individual levels of objectification would correlate with the remaining attitudinal (belief in rape myth, hostility towards women, and conformity to masculine norms) and behavioral (frequency of pornographic use and sexual coercion) variables. Finally, the third hypothesis was that the non-sexually coercive group would differ significantly from the sexually coercive group in that they would show an increased level of the attitudinal and behavioral variables.

Methods

Participants

Participants were recruited with *Prolific Academic*, an online data crowdsourcing platform. Studies have found *Prolific* to be a reliable alternative to *Amazon Mechanical Turk* as participants are more naive (less knowledgeable about common survey practices) and more diverse in terms of geographic location and ethnicity (Palan & Schitter, 2018; Peer, Samat, Brandimarte, & Acquisti, 2017). The experimental task would only become available to potential participants who self-identified as male, were 18 to 25 years old, and lived in the United States. Most prior studies on the objectification of women have used a college-aged sample. For the study, we focused on one age group to reduce the effect of normative age-graded influences. For this reason, only people from the emerging adult age range were recruited.

Our sample included 499 participants; however, 73 participants were excluded for incorrectly answering a question that tested for attention. Another participant was excluded after indicating through an open-end feedback question that he did not understand the instructions. The resultant sample used for all data analyses included 425 participants. A review of demographic data confirmed that the remaining study sample ranged in age from 18 to 25 years old (M = 21.41, SD = 2.32). Participants self-identified as 51.8% Caucasian/White, 24% Asian/Pacific Islander, 14.4% Hispanic/Latino, 7.8% Black/African American, and 2.1% other races not specified. Approximately 47.1% reported some college or were current college students, 23.8% had a Bachelor's degree, 19.3% completed high school or have a GED or less, 7.3% had an Associate's degree, and 2.6% had a Master's degree or higher. Of the present sample, 88% identified as heterosexual, and 12% identified as other sexualities or preferred not the answer. The demographics table can be found in table 1.

Procedure

All phases of the study were conducted online, including the experimental task and the survey using *Qualtrics,* an online survey tool. Participants began the study by completing an informed consent form and then a 4-item demographic survey. The first questionnaire asked demographic questions and one item that measured the frequency of pornography usage. Participants were then directed to the Parts and Whole Body Recognition Task.

Upon completion of the recognition task, participants were directed back to *Qualtrics,* where they completed the remaining measures. These measures included: 1) belief in rape myths, 2) conformity to unhealthy masculine norms, 3) hostility towards women, 4) sexually coercive behavior, and 5) social desirability bias. The presentation order of the questionnaires was random, but the scale measuring conformity to unhealthy masculine norms was always placed at the end, as current research suggests that it may prime a man's sense of self or identity (Levant, Hall, Rankin, 2013). At the completion of the survey, participants were read a debriefing statement explaining the purpose of the study and providing links to mental health resources for the participant if needed. The entire study took no more than 20 minutes.

Experimental Task

Parts and Whole Body Recognition Task. This task was created with *Psychopy*, a programming tool used to make experimental designs. Participants began the recognition task adapted from Gervais, Vescio, Forster, and Maass's (2012) study. Gervais et al.'s (2012) task was derived from Tanak and Farah's (1993) and Seitz (2002) task's, which is used as a rigorous indicator of processing. Fourteen controlled images of Caucasian, college-aged women were used as stimuli in this task. The women are standing and shown from head to knee looking directly at the camera with a neutral expression. They are equal in size and attractiveness and were all wearing a white t-shirt and denim jeans.

In the parts and whole-body recognition task, for each trial, the participant was presented with an image of a woman. Then, for the recognition phase, they were presented with either the original image or an image of the same woman with a slightly modified sexual body part (chest and waist). The modification involved either enlargement or constriction of the breast or chest. All the images were presented in random order. Participants were asked to indicate, via a keypress, whether the image presented in the recognition phase was the same as the image initially presented. In these recognition trials, half of the trials presented an image of the entire body of the women, measuring whole body recognition. The other half of the trials measured body part recognition, and the image only showed a section of the women, that being her sexual body part. Each of the fourteen images was shown twice, once after three practice trials and another time after a brief encouragement message, which restated the instructions and told the participant they were doing well. In total, there were 31 trials, including the practice trials. Recognition performance and reaction time in milliseconds were recorded. Recognition scores were the number of correct trials for both whole-body recognition trials and body part recognition trials. The difference between whole-body recognition scores and body part recognition scores was used as a measure of objectification. Lower differences indicate higher levels of objectification.

Materials

Demographics. The first questionnaire asked five demographic items, including age, race/ethnicity, and educational attainment. The demographic questionnaire can be found in Appendix A.

Frequency of pornography usage. Participants were then asked to report, "How many days in the last 12 months have you viewed pornography?" on a Likert scale (1 = *none* to 6 = *every day or almost every day*) to measure their frequency of pornography usage. This item was included with the demographics questionnaire and, therefore, can be found in Appendix A.

Sexual Experiences Questionnaire. The Sexual Experiences Questionnaire (SEQ; Lisak and Roth, 1988) measured participants' history of self-reported sexually coercive behavior. This scale is a modified version of the Sexual Experiences Survey (SES; Kross & Gidycz, 1985), which has been used extensively to measure sexual violence perpetration. The entire scale contains 29 items. For this study, we only included items measuring sexual coercion, meaning various manipulative tactics used to gain sexual contact. These included items 20 to 24 of the SEQ; an example item is, "Have you ever obtained sexual intercourse with a woman by deliberately getting her too drunk to resist?" The items are placed on a Likert scale of (0 = *never*, 5 =*often*). The sum of the scores was used as a measure of sexual coercion. The sexually coercive tactics were severe enough that committing one was enough to be categorized as sexually coercive. Therefore, participants with a score of 1 or higher, meaning they reported using one or more sexually coercive tactics, were placed in the sexually coercive group. The scale has a reliability coefficient of $\alpha = .89$ for a sample of college men and $\alpha = .84$ for the current study. A copy of this measure can be found in Appendix B.

Illinois Rape Myth Acceptance Scale-Short Form. The Illinois Rape Myth Acceptance Scale-Short Form (IRMA-SF; Payne, Lonsway, & Fitzgerald, 1999) contains 15 items. The IRMA-SF measures cultural beliefs that support sexual violence by dismissing rape victims and giving excesses to rapists. Example items include "Many women secretly desire to get raped." and "When a man is very sexually aroused, he may not even realize that the women is resisting."

The items are placed on a Likert scale of (1= *strongly agree*, 7 = *strongly disagree*). Higher scores indicate a greater belief in rape myths. The scale has a reliability coefficient of $\alpha = .87$ and $\alpha = .93$ for the current study. A copy of this measure can be found in Appendix C.

Hostility Towards Women Scale. The Hostility Towards Women (HTW; Lonsway & Fitzgerald, 1995) contains ten items and measures negative attitudes towards women. The HTW was derived from a 30-item scale (Check, 1985). Example items are: "I think that most women lie just to get ahead." and "Women are responsible for most of my troubles.". The items are placed on a Likert scale of (1 = *strongly disagree*, 7 = *strongly agree*). Higher scores indicate higher hostility towards women. The scale has a reliability coefficient of $\alpha = .78$-.83 and $\alpha = .89$ for the current study. A copy of this measure can be found in Appendix D.

Male Role Norms Inventory-Short Form. The Male Role Norms Inventory-Short Form (MRNI-SF; Levant, Hall, Rankin, 2013) contains 21 items and measures an individual's belief that men should uphold to general traditional masculine roles specifically hegemonic masculinity, which perpetuates patriarchy. It measures seven domains, those being an avoidance of femininity, negativity toward sexual minorities, restrictive emotionality, self-reliance through mechanical skills, and the importance of sex, toughness, and dominance. Example items are: "Homosexuals should never kiss in public." (Negativity towards sexual minorities) and "A man should never admit when others hurt his feelings." (Restrictive emotionality) The domains were not examined individually in this study. The items are placed on a Likert scale of (1 = *strongly disagree*, 7 = *strongly agree*). Higher scores indicate greater adherence to masculine roles. The scale has a reliability coefficient of $\alpha = .93$ for the current study. A copy of this measure can be found in Appendix E.

Marlowe-Crowne Social Desirability Scale Short Form. The Marlowe-Crowne Social Desirability Scale Short Form (M-C SDS; Reynolds, 1982), which contains 13 true or false items, was added to measure how social desirability bias may affect results. This scale measures the extent to which a person wishes to present themselves favorably. Example items include, "I'm always willing to admit it when I make a mistake" and "I am always courteous, even to people who are disagreeable." Responses are scored as (0) socially desirable or not socially desirable (1), and the sum is the total score with higher scores indicating lower levels of social desirability. The scale has a reliability coefficient of .76. A copy of this measure can be found in Appendix F.

After all the questionnaires, participants were asked this open-ended question (Appendix G): "Do you have any thoughts, comments, or feedback that you would like to share with us?" Cronbach's alphas for the present study are presented in Table 2.

Results

To test for the use of analytical or configural cognitive processing, we conducted a series of t-tests, examining mean differences between whole recognition scores and part recognition scores. For the parts versus whole recognition paradigm, the number of correct answers and recognition scores of correct trials was analyzed. A trial was correct if the participant correctly identified if the images were the same or different. The results of this study supported the sexual body part hypothesis. A paired sample t-test revealed that participants had significantly higher part body recognition scores (M = 8.26, SD = 1.97) compared to whole-body recognition scores (M = 7.97, SD = 1.68, $t(424)$ = 3.05, p = 0.002, d = 0.15), meaning that participants utilized analytical processing when viewing the female stimuli. Objectification was operationalized with the difference between correct whole-body recognition scores and part body recognition scores.

Bivariate Pearson's correlations were conducted to measure the relationship between the rape myth acceptance, hostility towards women, conformity to masculine norms, frequency of pornography usage, and objectification. Results did not find a significant correlation between objectification scores (M = -.30, SD = 2.02) and frequency of pornography usage (M = 4.27, SD = 1.47, $r(423)$ = .02, p = 0.681), hostility towards women (M = 2.78, SD = 1.03, $r(423)$ = -.03, p = 0.472), conformity to masculine norms (M = 2.63, SD = 0.95, $r(423)$ = -.07, p = 0.124), and rape myth acceptance (M = 2.27, SD = 1.01, $r(423)$ = -.08 , p = 0.110). Descriptives for these variables can be found in Table 2. The various risk factors, with the exception of pornography usage which did not significantly correlate with anything other than social desirability, all had a significant positive correlation with each other as presented in Table 2.

Differences between the sexual violence risk factors and sexual coercion were examined by dividing the sample into two groups: non-sexually coercive and sexually coercive. People who self-reported sexually coercive behavior in the Sexual Experiences Questionnaire were classified as sexually coercive. In our sample, 378 (88.9%) of participants were classified as non-sexually coercive, and 47 (11.1%) of participants were classified as sexually coercive. Further demographics of both groups are provided in Table 3. An independent samples t-test was conducted to compare the variables between the two groups. Levels of objectification between the sexually coercive group (M = -0.28, SD = 2) was not significantly higher than the non-sexually coercive group (M = -0.49, SD = 2.2, $t(423)$ = 0.69, p = 0.494, d = 0.11), although the results are trending in the predicted direction. However, results found that the sexually coercive group scored significantly higher in the rape myth acceptance ($t(423)$ = -3.07, p = 0.002, d = -0.47) hostility towards women ($t(423)$ = -4.49, $p < .001$, d = -0.70), and conformity to masculine norms ($t(423)$ = -3.50, $p < .001$, d = -0.55) than the non-sexually coercive group. A significant difference between the frequency of porn usage (*t*(423) = -1.42, *p* = 0.157, *d* = -0.22) was also not found. Descriptives for these variables can be found in Table 3.

Discussion

This study examines objectification on a cognitive level and its connection to attitudinal and behavioral risk factors of sexual violence perpetration. Results replicated the findings of Gervais et al. (2012) study in that women were recognized better in isolation than with the context of their entire body, therefore implying the occurrence of analytical processing rather than configural processing generally used when perceiving people. These findings indicate that participants objectified the women on a cognitive level. Results found little association between individual objectification, as measured with the parts versus whole recognition task, and the attitudinal and behavior variables, therefore not providing sufficient evidence to confirm the main hypothesis. The relationships were, nevertheless, trending in the correct direction with belief in rape myth showing the strongest relationship with objectification. This is consistent with previous research that found that objectification predicted higher levels of belief in rape myth (Samji & Vasquez, 2019).

Analyses also revealed that sexually coercive men on average had higher levels of sexual violence perpetration risk factors, apart from pornography and objectification. When considering sexually coercion as a representative for sexual violence the results for belief in rape myth (Frydenborg, 1999; Locke & Mahalik, 2005, DeGue, et al., 2012), hostility towards women (Carr & VanDeusen, 2004; Dean, & Malamuth, 1997, DeGue, & DiLillo, 2004, Parkhill, & Abbey, 2008), male role norms adherence (Carr & VanDeusen, 2004; Forbes et al.,2004; Gage, 2008) was consistent with existing literature. Less research has looked at sexually coercive risk factors directly, but the connection between belief in rape myth and sexual coercive men was consistent, while the connect between hostility towards women and sexual coercive men was inconsistent with existing literature (DeGue, et al., 2012). Sexually coercive men only made up 11.1% of our sample, and therefore due to the unbalanced groups, these results should be interpreted with caution.

The results provide replication and additional support to the Gervais et al. study, by continuing to explore the cognitive underpinning of objectification and the reduction of women to their sexual body parts. Our participants recognized women's bodies similarly to how one would recognize objects. This contrasted sharply with previous full-body recognition studies that only measured the recognition of male bodies (Seitz, 2002; Tanaka & Farah, 1993). These studies, as well as Gervais et al.'s (2012), found that male whole-body recognition was more accurate than male body part recognition, indicating the utilization of configural processing. The present study found that female body part recognition was actually better than female whole-body recognition. The present study is the first to examine individual differences in the objectification of women on a cognitive level.

Limitations

The insufficient results supporting our main hypothesis may be explained by the difficulty in finding relationships between implicit and explicit measures of behavior. We used the parts versus whole recognition task, an implicit indicator of processing, as a measure of objectification and questionnaires, explicit and self-report, as measures of the various risk factors. An implicit task is meant to measure behavior in a way that does not allow the participant to consider their choices. An explicit measure allows participants to think more about their answers and behavior. Participants may be unwilling or unable to answer accurately because they are unwilling to admit or simply unaware of certain behaviors, attitudes, or feelings. Implicit measures are meant to reduce a person's ability to control their responses and make them less likely to ruminate about them. They provide the researcher with a more accurate depiction of behavior, but implicit and explicit measures may present different results that may not relate to one another. Future studies should examine if the implicit objectification measure would relate other implicit measures of risk factors of sexual violence.

By nature of being an entirely online study, the environment and situational variables could not be controlled, and we cannot know how focused a participant was while completing the study. Also, one participant indicated that he did not understand the instructions given in the parts versus the whole paradigm. It might have been helpful to ask participants to rank their understanding of the task, therefore allowing us to account for potential misunderstandings. We also encountered some issues with our risk factor variables those being: belief in rape myth, male gender roles adherence, hostility towards women, frequency of pornography usage, and sexual coercion. First and foremost, participants' desire to appear favorable, social desirability bias, strongly influenced their answers on the measures of hostilities towards women and sexually coercive behavior. Future analyses will account for social desirability or remove participants who were affected the most. Future studies might also choose scales where social desirability may be less influential or use implicit measures for behaviors that people may be less likely to admit.

In regard to one of our risk factor variables, masculine gender role adherence, research suggests that gender role stress and not specifically genders role adherence that may cause an increase in the risk of sexual violence perpetration (Gallagher & Parrott, 2011). When male masculinity is challenged, that may cause a great deal of stress, and aggression against women may be an unhealthy response to this stress. There is evidence that adherence to or endorsement of masculine roles only predicts aggression when paired with gender role stress (Jakupcak, Lisak, & Roemer, 2002). Therefore, when examining the complexities of the risk factors of sexually violence perpetration future research should measure both gender role stress and gender role adherence.

The literature surrounding the usage of pornography as a predictor of sexual violence perpetration is mixed. A colligate sample found no relationship between pornography and sexual violence (Warkentin & Gidycz, 2007). Malamuth and Petipitan's (2007) study suggests that certain individuals may experience a more negative effect of pornography when coupled with negative attitudes and schemas towards women, for example, hostility towards women. Future analysis will investigate how pornography usages interacts with hostility towards women in predicting sexual coercion. Our study also measures pornography usage with one question, which measures the amount of pornographic materials they consume. This tells us nothing about the type of pornography consumed.

Future Directions

Our study and most research on cognitive processing focus on the bodies and faces of white people. We should be cautious about claiming a behavior as universal when it's supported by research that only uses one race or gender as stimuli. Research has shown that minorities are often reduced to their parts similarly to how women were in this study (Anderson, Holland, Heldreth, & Hohnson, 2018). There may be a racial aspect in objectification in that minorities are objectified or an intersectional aspect in that women minorities are objectified more so than women Caucasians. Future research will explore the objectification of both men and women of minority ethnicities. Finally, future research should address the limitations addressed in this thesis.

References

Anderson, J. R., Holland, E., Heldreth, C., & Johnson, S. P. (2018). Revisiting the jezebel stereotype: The impact of target race on sexual objectification. *Psychology of Women Quarterly, 42*(4), 461-476. doi:http://ezproxy.purchase.edu:2111/10.1177/0361684318791543

Attwood, F. (2004). Pornography and objectification. *Feminist Media Studies*, *4*(1), 7–19. https://doi.org/10.1080/14680770410001674617

Awasthi, B. (2017). From attire to assault: Clothing, objectification, and de-humanization—A possible prelude to sexual violence? *Frontiers in Psychology, 8*, 9. Retrieved from http://ezproxy.purchase.edu:2048/login?url=https://ezproxy.purchase.edu:4131/docview/1925420075?accountid=14171

Bandura, A. (1983). Psychological mechanisms of aggression. In R. G. Geen & E. Donnerstein (Eds.), *Aggression: Theoretical and empirical reviews* (pp. 1–40). New York, NY: Academic Press.

Baron, L., & Straus, M. A. (1987). Four theories of rape: A macrosociological analysis. *Social Problems, 34*(5), 467-489. doi:http://ezproxy.purchase.edu:2111/10.1525/sp.1987.34.5.03a00060

Burt, M. R. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology*, *38*(2), 217-230. doi:http://dx.doi.org/10.1037/0022-3514.38.2.217

Carroll, J. S., Padilla-Walker, L., Nelson, L. J., Olson, C. D., Barry, C. M., & Madsen, S. D. (2008). Generation XXX: Pornography acceptance and use among emerging adults. *Journal of Adolescent Research, 23*(1), 6-30. doi:http://dx.doi.org/10.1177/0743558407306348

Carr, J., & VanDeusen, K. (2004). Risk factors for male sexual aggression on college campuses. *Journal of Family Violence*, 19, 279-289.

Check JV. The Hostility Toward Women scale. *Dissertation Abstracts International*. 1985; 45:3993

Check, J. V. P., & Malamuth, N. M. (1986). Pornography and sexual aggression: A social learning theory analysis. In M. L.

Connell, RW. Masculinities. 2nd ed. University of California Press; Los Angeles: 2005.

Diamond, R., & Carey, S. (1986). Why faces are and are not special: an effect of expertise. *Journal of Experimental Psychology: General*, 155, 107–117.

Dean, K, & Malamuth, N. (1997). Characteristics of men who aggress sexually and of men who imagine aggressing: Risk and modifying variables. *Journal of Personality and Social Psychology*, 72, 449-455

DeGue, S., & DiLillo, D. (2004). Understanding perpetrators of nonphysical sexual coercion: Characteristics of those who cross the line. *Violence and Victims*, 19, 673-688.

DeGue, S., & DiLillo, D. (2005). "You would if you loved me": Toward an improved conceptual and etiological understanding of nonphysical male sexual coercion. *Aggression and Violent Behavior, 10*(4), 513-532. doi:http://ezproxy.purchase.edu:2111/10.1016/j.avb.2004.09.001

Forbes GB, Adams-Curtis LE, White KB. (2004). First-and second-generation measures of sexism, rape myths, and related beliefs, and hostility toward women: Their interrelationships and association with college students' experiences with dating aggression and sexual coercion. *Violence Against Women*.10, 236–261.

Foucault, M. (1989). The birth of the clinic. London: Routledge.

Frydenborg, C. E. (1999). Possible predictors and effects of rape during the first semester of the first year of college. *(gender)* (Order No. AEH9930550). Available from PsycINFO. (619445848; 1999-95021-121).

Ferguson, C. J., & Hartley, R. D. (2009). The pleasure is momentary… the expense damnable? The influence of pornography on rape and sexual assault. *Aggression and Violent Behavior*, *14*, 323–329. doi:10.1016/j.avb.2009.04.008.

Gage, E. (2008). Gender attitudes and sexual behaviors. *Violence Against Women*, 14, 1014-1032

Gallagher, K. E., & Parrott, D. J. (2011). What accounts for men's hostile attitudes toward women? the influence of hegemonic male role norms and masculine gender role stress. *Violence Against Women*, *17*(5), 568-583. doi:http://ezproxy.purchase.edu:2111/10.1177/107780121140729

Gervais, S. J., & Eagan, S. (2017). Sexual objectification: The common thread connecting myriad forms of sexual violence against women. *American Journal of Orthopsychiatry*, 87, 226 –232. http://dx.doi.org/10 .1037/ort0000257

Gervais, S. J., Vescio, T. K., Förster, J., Maass, A., & Suitner, C. (2012). Seeing women as objects: The sexual body part recognition bias. *European Journal of Social Psychology*, *42*(6), 743–753. https://doi.org/10.1002/ejsp.1890

Jakupcak M, Lisak D, Roemer L. (2002) The role of masculine ideology and masculine gender role stress in men's perpetration of relationship violence. *Psychology of Men and Masculinity*. *3*:97–106.

Levant, R. F., Hall, R. J., & Rankin, T. J. (2013). Male role norms Inventory–Short form (MRNI-SF): Development, confirmatory factor analytic investigation of structure, and measurement invariance across gender. *Journal of Counseling Psychology, 60*(2), 228-238. doi:http://ezproxy.purchase.edu:2111/10.1037/a0031545

Lisak, D., & Roth, S. (1988). Motivational factors in nonincarcerated sexually aggressive men. *Journal of Personality and Social Psychology,* 55, 795–802.

Locke, B. D., & Mahalik, J. R. (2005). Examining masculinity norms, problem drinking, and athletic involvement as predictors of sexual aggression in college men. *Journal of Counseling Psychology, 52*(3), 279-283. doi:http://dx.doi.org/10.1037/0022-0167.52.3.279

Loughnan, S., Pina, A., Vasquez, E. A., & Puvia, E. (2013). Sexual objectification increases rape victim blame and decreases perceived suffering. *Psychology of Women Quarterly*, 37, 455– 461. http://dx.doi .org/10.1177/0361684313485718

Malamuth NM, Petipitan EV. 2007. The effects of pornography are moderated by men's sexual aggression risk. In: Guinn DE (ed). Pornography: Driving the Demand for International Sex Trafficking? Los Angeles: Captive Daughters Media, pp 125–143.

Martin K, Vieraitis LM, Britto S. Gender equality and women's absolute status: A test of the feminist models of rape. *Violence Against Women*. 2006; 12:321–339. [PubMed: 16567334]

Marx, K. (1964). Early writings (T. B. Bottomore, Trans.). New York: McGraw-Hill. (Original work published 1844).

McLaughlin (Ed.), Communication yearbook (Vol. 9, pp. 181–213). Beverly Hills, CA: Sage.

Palan, S., & Schitter, C. (2018) Prolific.ac—A subject pool for online experiments. *Journal of Behavioral and Experimental Finance,* 17, 22-27.

Parkhill, M. R., & Abbey, A. (2008). Does alcohol contribute to the confluence model of sexual assault perpetration? *Journal of Social and Clinical Psychology, 27*(6), 529-554. doi:http://dx.doi.org/10.1521/jscp.2008.27.6.529

Payne, D. L., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the illinois rape myth acceptance scale. *Journal of Research in Personality, 33*(1), 27-68. doi:http://ezproxy.purchase.edu:2111/10.1006/jrpe.1998.2238

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology, 70,* 153-163. doi:http://ezproxy.purchase.edu:2111/10.1016/j.jesp.2017.01.006

Polaschek, D. L., & Ward, T. (2002). The implicit theories of potential rapists: What our questionnaires tell us. *Aggression and Violent Behavior*, 7, 385–406. doi:10.1016/S1359-1789(01)00063-5

Reed, C. L., Stone, V. E., Bozova, S., & Tanaka, J. (2003). The body-inversion effect. *Psychological Science, 14*(4), 302-308. doi:http://ezproxy.purchase.edu:2111/10.1111/1467-9280.14431

Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe–Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 38, 119–125.

Rudman, L., and Mescher, K. (2012). Of animals and objects: men’s implicit dehumanization of women and likelihood of sexual aggression. Personal. *Soc. Psychol. Bull*. 38, 734–746. doi: 10.1177/0146167212436401

Samji, K., & Vasquez, E. A. (2019). The link between myths about sexual aggression and sexual objectification via hostile attitudes toward women. *Journal of Sexual Aggression*, doi:http://dx.doi.org/10.1080/13552600.2019.1676924

Suarez, E., & Gadalla, T. M. (2010). Stop blaming the victim: A meta-analysis on rape myths. *Journal of Interpersonal Violence, 25*(11), 2010-2035. doi:http://dx.doi.org/10.1177/0886260509354503

Svedin, C. G., Åkerman, I., & Priebe, G. (2011). Frequent users of pornography. A population based epidemiological study of Swedish male adolescents. *Journal of Adolescence, 34*(4), 779. doi:http://dx.doi.org/10.1016/j.adolescence.2010.04.010

Warkentin, J., & Gidycz, C. (2007). The use and acceptance of sexually aggressive tactics in college men. *Journal of Interpersonal Violence*, *22,* 839-850.

Wright, P. J., & Tokunaga, R. S. (2016). Men's objectifying media consumption, objectification of women, and attitudes supportive of violence against women. *Archives of Sexual Behavior,* 45, 955–964. http://dx.doi .org/10.1007/s10508-015-0644-8

Yin, R. K. (1969). Looking at upside-down faces. *Journal of Experimental Psychology, 81*(1), 141-145. doi:http://ezproxy.purchase.edu:2111/10.1037/h0027474

Tables

Table 1. Total, non-sexually coercive group, and sexually coercive group demographics

	Total (*n*= 425)		Non-sexually Coercive (*n*= 378)		Sexually Coercive (*n*=47)	
Factor	*n*	Percent	*n*	Percent	*n*	Percent
Race						
Asian/Pacific Islander	102	24	90	23.8	12	25.5
Black/African American	33	7.8	30	7.9	3	6.4
Caucasian/White	220	51.8	198	52.4	22	46.8
Hispanic/Latino	61	14.4	52	13.8	9	19.1
Native American	1	0.2	1	0.3	0	0
Other	8	1.9	7	1.9	1	2.1
Education						
Associate Degree	31	7.3	27	7.1	4	8.5
Bachelor's Degree	101	23.8	85	22.5	16	34
High-School/GED or Less	82	19.3	75	19.8	7	14.9
Master's Degree or Higher	11	2.6	9	2.4	2	4.3
Some College/Current Student	200	47.1	182	48.1	18	38.3
Sexuality						
Bisexual	31	7.3	30	7.9	1	2.1
Heterosexual	374	88	328	86.8	46	97.9
Homosexual	16	3.8	16	4.2	0	0
Other	3	0.7	3	0.8	0	0
Prefer not to say	1	0.2	1	0.3	0	0

Table 2. Alphas, means, and standard deviations for rape myth acceptance, hostility towards women, and male gender role adherence

Variables	*a*	Total (*n*= 425) *M*	*SD*	Non-sexually coercive (*n*= 378) *M*	*SD*	Sexually coercive (*n*=47) *M*	*SD*	*t*	*p*	*d*
Rape myth acceptance	0.93	2.27	1.01	2.21	0.97	2.69	1.24	-3.07	0.002**	-0.47
Hostility towards women	0.89	2.78	1.03	2.71	0.99	3.4	1.12	-4.49	< .001***	-0.7
Male gender role adherence	0.92	2.63	0.95	2.57	0.87	3.09	1.24	-3.56	< .001***	-0.55
Frequency of porn usage	NA	4.27	1.47	4.23	1.49	4.55	1.27	-1.42	0.157	-0.22
Social Desirability Bias	NA	5.4	2.78	5.54	2.81	4.26	2.28	3.02	0.003**	0.47

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 3. Pearson's correlations between risk factors

Measure		**1**	**2**	**3**	**4**	**5**	**6**
1. Belief in rape myth	*r*	—					
	p	—					
2. Hostility towards women	*r*	0.619***	—				
	p	< .001	—				
3. Male gender roles adherence	*r*	0.634***	0.511***	—			
	p	< .001	< .001	—			
4. Porn usage	*r*	0.044	0.005	-0.010	—		
	p	0.358	0.911	0.833	—		
5. Social desirability bias	*r*	-0.072	-0.173***	-0.046	-0.110*	—	
	p	0.137	< .001	0.342	0.022	—	
6. Objectification	*r*	-0.077	-0.034	-0.074	0.019	-0.061	—
	p	0.11	0.472	0.124	0.681	0.207	—

* p < .05, ** p < .01, *** p < .001

Appendix A

Demographics Survey

1. How old are you? ___________________
2. How do you describe yourself?
    - Male
    - Female
    - Rather not say/Other
3. Please click the answer that most accurately describes you:
    - Caucasian/White
    - Black/African American
    - Hispanic/Latino
    - Native American
    - Asian/Pacific Islander
    - Other
4. What is the highest level of education that you have completed?
    - High-School/GED or Less
    - Some College/Current Student
    - Associate's Degree
    - Bachelor's Degree
    - Master's or Higher
5. What is your sexual orientation?
    - None
    - Once a month or less
    - 2 or 3 days a month
    - 1 or 2 days a week
    - 3 to 5 days a week
    - Every day or almost every day
6. How many days in the last 12 months have you viewed pornography?
    - Heterosexual
    - Homosexual
    - Bisexual
    - Other
    - Prefer not to say

Appendix B

Sexual Experiences Questionnaire

Please answer the following questions as they pertain to you with 1= never and 5 = often.

1. Have you ever had sexual intercourse with a woman when she didn’t want to because you threatened to end your relationship with her otherwise?
2. Have you ever had sexual intercourse with a woman when she didn’t want to because she felt pressured by your continual arguments?
3. Have you ever obtained sexual intercourse with a woman by making her think that you cared for her more than you really did?
4. Have you ever obtained sexual intercourse with a woman by deliberately getting her too drunk to resist?
5. Have you ever persisted in having sexual intercourse with a woman, without using force, even though she verbally tried to stop you?
6. Have you ever felt the urge to physically force a woman to have sexual intercourse with you even though you did not act on the urge?

Appendix C

Illinois Rape Myth Acceptance Scale-Short Form

Please read each statement below carefully and circle the number that indicates how you feel about it. This is about what you truly believe.

1 = very strongly disagree

2 = strongly agree

3 = agree

4 = neither agree nor disagree

5 = disagree

6 = strongly disagree

7 = very strongly disagree

1. A woman who dresses in skimpy clothes should not be surprised if a man tries to force her to have sex.
2. If a woman is raped while she is drunk, she is at least somewhat responsible for letting things get out of control.
3. A woman who “teases” men deserves anything that might happen.
4. When women are raped, it’s often because the way they said “no” was ambiguous.
5. When a man is very sexually aroused, he may not even realize that the woman is resisting.
6. Rape happens when a man’s sex drive gets out of control.
7. Many women secretly desire to be raped.
8. Although most women wouldn’t admit it, they generally find being physically forced into sex a real “turn-on.”
9. A lot of women lead a man on and then they cry rape.
10. Rape accusations are often used as a way of getting back at men
11. Women tend to exaggerate how much rape affects them.
12. If a woman is willing to “make out” with a guy, then it’s no big deal if he goes a little further and has sex.
13. Men from nice middle-class homes almost never rape.
14. It is usually only women who dress suggestively that are raped.
15. Rape is unlikely to happen in the woman’s own familiar neighborhood.

Appendix D

Hostility Towards Women Scale

Please complete the following questions by clicking the number which indicates your level of agreement or disagreement with each statement.

1. I feel that many times women flirt with men just to tease them or to hurt them.
2. I believe that most women tell the truth.
3. I usually find myself agreeing with (other) women.
4. I think that most women lie just to get ahead.
5. Generally, it is safer not to trust women.
6. When it really comes down to it, a lot of women a deceitful.
7. I am easily angered by women.
8. I am sure I get a raw deal from the women in my life.
9. Sometimes women bother me by just being around.
10. Women are responsible for most of my troubles.

Appendix E

Male Role Norms Inventory-Short Form

Please complete the following questions by clicking the number which indicates your level of agreement or disagreement with each statement.

Restrictive Emotionality

1. A man should never admit when others hurt his feelings
2. Men should be detached in emotionally charged situations
3. Men should not be too quick to tell others that they care about them

Self-Reliance Through Mechanical Skills

4. Men should have home improvement skills
5. Men should be able to fix most things around the house
6. A man should know how to repair his car if it should break down

Negativity Toward Sexual Minorities

7. Homosexuals should never marry
8. All homosexual bars should be closed down
9. Homosexuals should never kiss in public

Avoidance of Femininity

10. Men should watch football games instead of soap operas
11. A man should prefer watching action movies to reading romantic novels
12. Boys should prefer to play with trucks rather than dolls

Importance of Sex

13. Men should always like to have sex
14. A man should not turn down sex
15. A man should always be ready for sex

Toughness

16. It is important for a man to take risks, even if he might get hurt
17. When the going gets tough, men should get tough
18. I think a young man should try to be physically tough, even if he’s not big.

Dominance

19. The President of the U.S. should always be a man
20. Men should be the leader in any group
21. A man should always be the boss

Appendix F

Marlowe-Crowne Social Desirability Scale Short Form

Read each item and decide whether it is true (T) or false (F) for you. Try to work rapidly and answer each question by on the T or the F.

1. It is sometimes hard for me to go on with my work if I am not encouraged.
2. I sometimes feel resentful when I don’t get my way.
3. On a few occasions, I have given up something because I thought too little of my ability.
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.
5. No matter who I’m talking to, I’m always a good listener.
6. There have been occasions when I have taken advantage of someone.
7. I’m always willing to admit it when I make a mistake.
8. I sometimes try to get even rather than forgive and forget.
9. I am always courteous, even to people who are disagreeable.
10. I have never been irked when people expressed ideas very different from my own.
11. There have been times when I was quite jealous of the good fortune of others.
12. I am sometimes irritated by people who ask favors of me.
13. I have never deliberately said something that hurt someone’s feelings.

Appendix G

Do you have any thoughts, comments or feedback that you would like to share with us? Your response is optional and will not affect your payment.