DIVERSITY OF SEXUAL EXPERIENCE IN COLLEGE STUDENTS: THE ROLE OF PERSONAL CHARACTERISTICS

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### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>iv</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Attractiveness and Dating Relationships/Sexual Partners</td>
<td>1</td>
</tr>
<tr>
<td>Involvement in Casual Relationships</td>
<td>3</td>
</tr>
<tr>
<td>Attractiveness and Casual Relationships/Experiences</td>
<td>5</td>
</tr>
<tr>
<td>The Role of Gender</td>
<td>7</td>
</tr>
<tr>
<td>Measurement of Casual Behaviors</td>
<td>9</td>
</tr>
<tr>
<td>The Current Study</td>
<td>10</td>
</tr>
<tr>
<td>METHODS</td>
<td>17</td>
</tr>
<tr>
<td>Participants</td>
<td>17</td>
</tr>
<tr>
<td>Materials and Procedure</td>
<td>18</td>
</tr>
<tr>
<td>ANALYSIS PLAN</td>
<td>24</td>
</tr>
<tr>
<td>Interpretation of Incident Rate Ratio ($e^b$)</td>
<td>24</td>
</tr>
<tr>
<td>RESULTS</td>
<td>26</td>
</tr>
<tr>
<td>Preliminary Analyses</td>
<td>26</td>
</tr>
<tr>
<td>Casual Sexual Intercourse Partners</td>
<td>28</td>
</tr>
<tr>
<td>Specific Relationships and Experiences</td>
<td>30</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>37</td>
</tr>
<tr>
<td>Limitations of the Current Study</td>
<td>41</td>
</tr>
<tr>
<td>Conclusion and Implications</td>
<td>43</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>45</td>
</tr>
</tbody>
</table>
List of Tables

Table 1. Correlations among study variables................................................................. 17

Table 2. Results of negative binomial regression predicting total casual sexual intercourse partners. ................................................................. 19

Table 3. Results of negative binomial regression predicting total number of committed relationships ................................................................. 21

Table 4. Results of negative binomial regression predicting total number of casual dating relationships ................................................................. 23

Table 5. Results of negative binomial regression predicting total number of friends with benefits relationships. ................................................................. 25

Table 6. Results of negative binomial regression predicting total number of booty-call relationships ................................................................. 23

Table 7. Results of negative binomial regression predicting total number of one-night stands ........................................................................... 25
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Introduction

While society may proclaim that beauty is only skin deep, it cannot be denied that physical attractiveness is a powerful quality. Physical attractiveness affects individuals’ prospects in several areas of life including the amount of money they earn, their social interactions, and how intelligent others believe them to be (Hosoda, Stone-Romero, & Coats, 2003; Langlois, Kalakanis, Rubenstein, Larson, & Smoot, 2000; Eagly, Ashmore, Makhijani, & Longo, 1991). Moreover, physical attractiveness permeates the realm of sexual relationships by positively biasing one’s desirability to potential sexual partners (Eagly et al., 1991). The current paper expands previous research by examining the role of physical attractiveness in involvement in a variety of casual relationships and experiences.

Attractiveness and Dating Relationships/Sexual Partners

Physically attractive individuals have the advantage in the heterosexual dating scene. Individuals attribute a number of positive characteristics to physically attractive individuals, making those with higher levels of attractiveness more appealing dating options (Feingold, 1992; Eagly et al., 1991). Research has made it clear that physical attractiveness is one of the most important characteristics affecting young adult’s initial attraction toward each other (Sprecher, 1989). In fact, studies have shown that the largest determinant of an individual’s desire to date a target individual is the physical attractiveness of the target (Luo & Zhang, 2009).
Researchers have also postulated that physical attractiveness serves as a marker of mate-value or “good genes” (Fink & Penton-Voak, 2002; Rhodes 2006; Thornhill & Gangestad, 1999). While mate value consists of qualities such as health, intelligence, and fertility, most research connects physical attractiveness to health (Rhodes, 2006 for review). Physical attractiveness has been linked with positive mental and physical health outcomes (Rhodes, 2006; Feingold, 1992; Langlois et al., 2000; Hume & Montgomerie, 2001). Furthermore, faces that look healthy are perceived as attractive (Henderson & Anglin, 2003; Jones et al., 2001) and physically attractive individuals are rated as healthier than non-attractive individuals (even if the individuals are not actually healthier) (Kalick, Zebrowitz, Langlois, & Johnson, 1998). These findings suggest that at the very least physical attractiveness affects the judgments people make regarding other individuals’ health.

Whether originating through genetic or social influences (or both), physically attractive individuals do exhibit greater sexual success, as demonstrated by a greater number of sexual partners. For example, Bogaert and Fisher (1995) found, using a combined measure of self and other-rated attractiveness, that men with higher levels of attractiveness reported having a higher number of partners in one month than less attractive men. Similarly, Stelzer, Desmond, and Price (1987) found that college women rated by others as physically attractive had a greater number of lifetime sex partners and were almost twice as likely to have engaged in sexual intercourse as those who were rated as average in their attractiveness or those who were rated unattractive. Weiderman and Hurst (1998), on the other hand, found that only self-rated - but not other-rated -
physical attractiveness was associated with higher lifetime numbers of sexual partners for non-virgin women. The researchers postulated that women with high self-rated physical attractiveness were more confident in their interactions with men and as a result had a higher number of sex partners. These findings suggest that physical attractiveness is associated with higher numbers of sexual partners overall, but that the link depends on the measure of attractiveness (self-rated or other-rated) employed.

Other determinants of physical attractiveness have also been related to sexual involvement. Hughes and Gallup (2003) found that females with lower waist-to-hip ratios and males with higher shoulder-to-hip ratios reported engaging in sexual intercourse at an earlier age and having more lifetime sexual partners. Both of these physical characteristics have been associated with facial attractiveness (Platek & Singh, 2010). Furthermore, Thornhill and Gangestad (1994) found that facial attractiveness could be predicted by the degree of symmetry in a male’s body traits: asymmetries (deviations from symmetry) in non-facial body traits were negatively associated with number of lifetime sexual partners. Taken together, these studies suggest that physical attractiveness, as indicated by bodily and facial attractiveness, is related to involvement with a greater number of sexual partners.

**Involvement in Casual Relationships**

Despite a large body of research relating physical attractiveness to number of sexual partners, the physical attractiveness literature has not kept up with changes in our understanding of sexual relationships in early adulthood. A high number of sexual partners may indicate sexual involvement within a series of committed relationships, but
it can also represent sexual activity which occurs outside of committed relationships. Research in the last decades has moved to a broader understanding of sexual relationships, recognizing that many young adults encounter intimacy and sexuality outside of traditional committed relationships (e.g., Grello, Harper, & Welsh, 2005). The understanding of sexual relationships and encounters during young adulthood has grown to encompass a diverse range of experiences including short-term involvements such as a one-night stand/ hookup, or “a sexual encounter, usually lasting only one night, between two people who are strangers or brief acquaintances” (Paul, McManus, & Hayes, 2000, p. 76). Researchers have also identified longer-term relationships that lack commitment such as friends with benefits relationships, or relationships “between cross-sex friends in which the friends engage in sexual activity but do not define their relationship as romantic” (Hughes, Morrison, & Asada, 2005, p. 49) and booty-call relationships, which involve “a communication initiated towards a non-long-term relationship partner with the urgent intent, either stated or implied, of having sexual activity and/or intercourse” (Jonason, Li, & Cason, 2009, p. 3).

Involvement in these casual relationships/experiences reflects a different style of involvement than participation in committed relationships (Dhariwal, Connolly, Paciello, & Capara, 2009). In an 8-year longitudinal study of Italian adolescents Dhariwal et al. (2009) demonstrated two normative styles of romantic and sexual involvement within young adulthood: consolidated and exploratory. The consolidated style, emphasizing the formation of committed relationships, was linked with later relationship stages (romantically uninvolved to married), relationship satisfaction, and sexual intimacy. On
the other hand an exploratory style, emphasizing trials with different partners, was demonstrated by greater number of partners, breakups, and diversity of relationship activities. These two styles were orthogonal, suggesting that they represent distinct forms of sexuality and romance during emerging adulthood, with an exploratory style possibly leading to a consolidated style later in adulthood.

Given these findings, it appears that some individuals, those with exploratory relationship styles, may be particularly prone to engaging in casual relationships and experiences. In accordance with the changing landscape of sexuality research, it is important to examine how physical attractiveness may be related to involvement in different casual relationships and experiences.

**Attractiveness and Casual Relationships/Experiences**

The main body of research linking physical attractiveness and casual relationships and experiences has come from an evolutionary perspective. For instance, the theory of sociosexual orientations has strong ties to attraction literature. Sociosexual orientations represent an individual’s willingness to engage in uncommitted sexual relations (Gangestad & Simpson, 1990; Simpson & Gangestad 1991a; 1991b). According to this theory, individuals with restricted sociosexual orientations become involved in long-term relationships characterized by high levels of commitment and strong emotional ties. These individuals are unlikely to have sex with a partner on only one occasion and have a low number of lifetime sexual partners. Individuals with unrestricted sociosexual orientations, on the other hand, are more liberal regarding sexual behaviors. They participate in short-term relationships with minimal commitment and are willing to have
one-night stands. When they do become involved in a relationship, these individuals often fantasize about engaging in sexual behaviors with individuals outside of the relationship (Simpson & Gangestad, 1991a; 1991b).

Individuals who are more willing to engage in casual relationships and experiences may value physical attractiveness more than individuals not willing to engage in these behaviors. Specifically, researchers have proposed that for unrestricted individuals good genes (marked by physical attractiveness) are more important than parental investment (Simpson & Gangestad, 1991a; 1991b). Supporting this hypothesis, Simpson and Gangestad (1991a; 1992) found that individuals who possessed an unrestricted sociosexual orientation, as measured by the Sociosexual Orientation Inventory (SOI), tended to value physical attractiveness and social visibility in their partners whereas restricted individuals valued personal and parenting qualities. Simpson and Gangestad (1992) also found that the actual dating partners of unrestricted individuals tended to be socially visible and physically attractive, whereas the partners of restricted individuals were responsible, faithful, and affectionate.

Individuals who score high on the SOI may also be physically attractive themselves. Gangestad and Simpson (2000) postulate that short-term mating is strongly influenced by high mate quality, which is marked by physical attractiveness. In order to have the opportunity to actually engage in these short-term relationships, unrestricted individuals need to be more attractive. In fact, these individuals rate themselves as more physically attractive and more confident than restricted individuals (Clark, 2004; Reise & Wright, 1996). Furthermore, less restricted sociosexuality has been linked to decreased
fluctuating asymmetry (one determinant of physical attractiveness) (Thornhill & Gangestad, 1994; Simpson, Gangestad, Christen, & Leck, 1999). Finally, research demonstrates that individuals can determine someone’s sociosexual orientation solely using visual cues including appearance and body language (Gangestad, Simpson, DiGeronimo, & Biek, 1992). Boothroyd, Jones, Burt, DeBruine, and Perrett (2008) further demonstrated that sociosexuality can also be identified by static facial cues alone.

This research has also established that faces of unrestricted individuals are seen as more attractive than the faces of restricted individuals (Boothroyd et al., 2008). However, research findings are not conclusive on the association between physical attractiveness and sociosexual orientations. For example, Weeden & Sabini (2007) found in a sample of 456 college students that objective (or other-rated) attractiveness (as measured by composite ratings of a smiling, neutral, and profile photographs by 10 opposite-sex raters) was associated with sexual behaviors but not with sociosexuality (study-specific measure) or sexual attitudes. As such, it may be that attractiveness increases opportunities for sexual encounters but does not always change an individual’s attitudes towards casual relationships.

**The Role of Gender**

Evolutionary mate selection theories (i.e., Sexual Strategies Theory, Parental Investment Theory) suggest that differential parental investment leads to different mating strategies for men and women (Triver, 1972; Buss & Schmitt, 1993). Men, in this view, desire short-term relationships whereas women seek longer-term relationships.
Furthermore, men in this view desire women with reproductive fitness (signaled by attractiveness) whereas women seek men with resources (Buss, 1989).

For males, whose best guarantee of reproductive success is to spread their sperm, greater physical attractiveness, which provides advantages in the dating scene, should allow them to participate in a greater number of short-term relationships. For females, on the other hand, physical attractiveness should lead to more long-term relationships. Supporting this hypothesis, Rhodes, Simmons, and Peters (2005) found that males with higher other-rated facial attractiveness (which has been consistently used in the literature as a proxy of overall other-rated physical attractiveness) had a greater number of short-term partners (relationships lasting less than one month) than less facially attractive males, whereas more facially attractive females had more long-term relationships (relationships lasting more than 12 months) than their less facially attractive peers. However, it is important to note that short-term relationships conceptualized as relationships lasting less than one month do not fully relate to casual relationships and experiences. As mentioned earlier, casual relationships can often be long-term (e.g., friends-with-benefits or booty-calls), so the study conducted by Rhodes et al. (2005) does not fully clarify how men and women act across casual relationships and experiences. However, this study does suggest that highly attractive men are more likely to engage in short-term mating than highly attractive women.

According to the evolutionary perspective, men also tend to place a greater value on physical attractiveness when selecting a partner for a committed relationship than women (Shackelford, Schmitt, & Buss, 2005, Buss 1989; Feingold, 1990).
considering potential partners for casual sexual relationships, however, this difference disappears and both men and women value physical attractiveness over other characteristics such as resources, honesty, and intelligence (Li & Kenrick, 2006; Regan, Levin, Spreacher, Christopher, & Cate, 2000). One explanation is that in the absence of committed relationships women may desire casual relationships with individuals higher on physical attractiveness (“good-genes”) while placing less emphasis on traits that suggest the individual would be a good provider (Rhodes et al., 2005). Women, in essence, may be willing to trade commitment in order to mate with men who are of higher genetic quality (Weeden & Sabini, 2007). Casual relationships and experiences, therefore, present a unique situation where the emphasis on physical attractiveness may be especially prominent for both men and women.

**Measurement of Casual Behaviors**

Previous studies linking physical attractiveness to lifetime sexual partners and sociosexual styles have been hampered by measurement issues and a lack of clear conceptualization. Most studies of casual involvement and physical attractiveness have focused solely on lifetime number of sexual partners (Wiederman & Hurst, 1998) or scores on SOI (Simpson & Gangestad, 1991a; 1992) as measures of casual involvement. Measures of lifetime sexual partners do not capture whether these partners have been within committed or casual relationships and experiences. Even limiting the number of sexual partners to a 3-year period (i.e., Weeden and Sabini, 2007) or measuring length of relationship (i.e., Rhodes et al., 2005) does not provide a clear picture of casual involvement; some individuals may engage in a series of committed relationships that are
short in duration or casual relationships that are long-lasting but lack commitment (e.g. a friends with benefits relationship).

Similar arguments can be made regarding the SOI. While sociosexual orientation is certainly related to casual involvement, the SOI specifically focuses on one-night stands (e.g., “With how many different partners have you had sex on one and only one occasion”), neglecting other forms of casual sexual relationships and experiences (Simpson & Gangestad, 1991a). As reviewed earlier, current research has shown that casual involvement includes a broad range of relationships and experiences. Furthermore the Sociosexual Orientation Inventory measures primarily attitudes rather than actual behaviors (e.g. “I can imagine myself being comfortable and enjoying casual sex with different partners”). Individuals may desire casual relationships and experiences, but not be physically attractive enough to succeed in obtaining these relationships/experiences, and as such this measure may not entirely reflect behavior (Weeden & Sabini, 2007). Overall, research on physical attractiveness and casual sexual behavior thus far has failed to truly capture the wide spectrum of casual relationships and experiences.

The Current Study

While previous research provides evidence that physical attractiveness is related to involvement in casual relationships and experiences, the current literature has not fully examined this possibility (e.g., Walsh, 1993; Rhodes, et al., 2005; Weeden & Sabini, 2007). Specifically, research has shown that when considering casual relationships and experiences, individuals (both male and female) value physical attractiveness more than other characteristics (e.g., Li & Kenrick, 2006). Furthermore, being physically attractive
may create opportunities for casual involvement (Weeden & Sabini, 2007; Weiderman & Hurst, 1998). However, research to date has failed to keep up with current trends in research regarding casual relationships and experience. In order to truly understand the role of physical attractiveness and sexuality, research must take into account the findings suggesting that not all sexual relationships and experiences are alike and that the context of sexual behaviors is important (Grello, et al., 2005). The current study expands upon previous research by examining the role of physical attractiveness in a broad range of casual relationships and behaviors. Rather than using simple measures of lifetime partners or attitudes regarding casual sexual behavior, the current study examines a range of casual sexual relationships and experiences, providing the opportunity to pinpoint exactly how physical attractiveness is related to casual involvement.

I will first extend findings from previous studies by examining the link between physical attractiveness and total lifetime number of casual sexual partners (rather than simply calculating lifetime numbers of partners regardless of relationship type). Then, I will examine the role of physical attractiveness across the different forms of casual relationships and experience (i.e., casual dating relationships, friends with benefits, booty-calls, and one-night stands). I hypothesize that physical attractiveness will have a positive relationship with involvement in all relationship/experience forms, but that it will be more strongly related to relationships/experiences that lack commitment and intimacy (e.g., one-night stands and booty-calls) than those with more commitment and intimacy (e.g., friends with benefits relationships and committed relationships). This prediction stems from research showing that attractiveness is related to more permissive sexual
styles (Simpson & Gangestad, 2000) and involvement with a greater number of overall sexual partners (Weeden & Sabini, 2007; Rhodes et al., 2005).

The current study also addresses a limitation in previous research regarding the measurement of physical attractiveness. Many studies (e.g., Rhodes et al., 2005; Mikach & Bailey, 1999) do not include measures of both self-rated and other-rated physical attractiveness, which has led to confusion about whether subjective (self-rated) or objective (other-rated) attractiveness is more important in determining sexual behavior. As such, this study will include measures of both self-rated and other-rated physical attractiveness. I hypothesize that both self-rated and other-rated physical attractiveness will be positively related to involvement in casual relationships/experiences.

While no studies have specifically examined the role of self-rated attractiveness and other-rated attractiveness in casual relationships and experiences, I hypothesized that other-rated attractiveness will be more strongly linked than self-rated attractiveness to less committed and intimate relationships (e.g., booty-calls and one-night stands). This hypothesis is based on findings that other-rated attractiveness may create opportunities for casual sex (Weedne & Sabini, 2007; Wiederman & Hurst, 1998) and because other individuals value physical attractiveness when deciding whether or not to participate in a casual sexual relationship (Li & Kendrick, 2006). Conversely, I hypothesize that self-rated attractiveness will be more highly related than other-rated attractiveness to the number of partners for relationships that involve more commitment and intimacy (e.g., committed relationships, casual dating relationships, and friends with benefits, see Jonason, Li, & Richardson, 2011).
While there may exist a link between physical attractiveness and involvement in casual relationships and experiences, not all physically attractive individuals engage in these behaviors (Rhodes et al., 2005). To date, studies examining the link between physical attractiveness and sexual involvement have been limited by including either no control variables (e.g., Clark, 2004; Wiederman & Hurst, 1997; 1998; Weeden & Sabini, 2007) or examining only age and gender as control variables (e.g., Walsh, 1993; Rhodes et al., 2005). As such, it is important to examine if attractiveness can predict involvement in casual relationships and experiences after controlling for known factors that influence participation in these behaviors. While there is evidence that increased age and male gender are positively related to involvement in casual relationships and experiences (e.g., Rhodes et al., 2005, Walsh, 1993), three other factors that may be related to involvement in casual relationships/experiences are alcohol use, self-esteem, and intimacy goals (Paul et al., 2000).

**Alcohol use.** Alcohol use has been established as an important precursor to engaging in casual sex (Bersamin, Paschall, Saltz, & Zamboanga, 2012; Grello et al., 2006). Alcohol use (both frequency and quantity) has been consistently associated with higher numbers of sexual partners as well as having uncommitted sexual partners (Desiderato and Crawford, 1995; Halpern-Felsher, Millstein, & Ellen, 1996; Cooper, 2006, Gold, Karmiloff-Smith, Skinner, & Morton, 1992). Alcohol use is also associated with participation in several specific casual relationships and experiences, including friends with benefits relationships and one-night stands (Owen & Fincham, 2011, Owen, Fincham, & Moore, 2011; Grello et al., 2006). Given these findings, greater alcohol use
is expected to be associated with greater involvement in casual sexual relationships and experiences.

**Self-esteem.** Having high levels of self-esteem has been related to a number of beneficial outcomes (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). Individuals with higher levels of self-esteem may be more confident and have more favorable interactions with others. As such, these individuals may attract more sexual partners. The literature does support the idea that both males and females high in self-esteem report having significantly more sexual partners than individuals who report low self-esteem (Cole, 1997). Similarly, Walsh (1993) found a positive association between self-esteem and total number of sexual partners, especially for males.

While self-esteem may relate to overall number of sexual partners, some researchers propose that individuals with high self-esteem are actually less likely than others to engage in casual relationships and experiences. For example, Paul et al. (2000) found that college students with a history of involvement in casual sex (sex outside of committed relationships) had lower self-esteem (as measured by the Global Self-Esteem subscale of Harther’s (1986) Self-Perception Profile for College Students) than students who had been involved in only committed sexual relationships and individuals who did not engage in sexual behaviors. Furthermore, the authors found that participation in casual sex was associated with experiences of guilt. Similarly, Eshbaugh and Gute (2008) found that engaging in hook-ups was positively related to sexual regret in college women.

The causal direction of the relationship between self-esteem and participation in casual sex, however, is not entirely clear. Individuals with low self-esteem may engage in
casual behaviors/experiences in order to promote a temporary boost in self-esteem, individuals who engage in casual relationships/experiences may feel guilty and experience a decline in their self-esteem, or the relationship may be circular. Some research does support a causal relationship between hooking-up and lowered self-esteem. In a longitudinal study, Fielder and Carey (2010) found that females who began hooking-up did not have lower self-esteem. However, females who hooked-up but did not engage in sexual intercourse had higher self-esteem at a later time-point than females who engaged in sexual intercourse in a hook-up context. Furthermore, involvement in casual sex has been related to other negative mental health outcomes, including increases in depression (Grello et al., 2006).

Given that self-esteem is related to a greater number of lifetime partners but lowered participation in casual sexual relationships and experiences, I hypothesize that individuals with high levels of self-esteem will be less likely to engage in casual relationships and experiences than individuals with low self-esteem, but that individuals with high self-esteem may be more likely than those with low self-esteem to have committed relationships (Grello et al., 2006; Walsh, 1991).

Finally, I hypothesize self-rated physical attractiveness will be positively associated with self-esteem. It is reasonable to expect that self-esteem would be related to physical attractiveness considering that highly attractive individuals are more valued by society. However, there exists only a relatively weak relationship between objective physical attractiveness and self-esteem (Maruyama & Miller, 1981; Feingold, 1992). Conversely, self-rated physical attractiveness has been shown to be related to self-esteem
(Feingold, 1992). Self-rated attractiveness, in effect, may be more a reflector of self-esteem than a cause.

**Intimacy goals.** Intimacy goals represent an individual’s desire for intimacy and attachment within a relationship (Sanderson & Cantor, 1995). Those with a higher intimacy goal focus have a greater desire for self-disclosure as well as for mutual dependence with their partner. Intimacy goals conceptualized in this manner have been related to commitment as well as satisfaction within relationships (Sanderson & Cantor, 2001). Because intimacy goals represent factors of committed relationships, it is reasonable to assume that individuals with higher levels of intimacy goals will be less likely to engage in casual relationships and experiences. Research supports this idea; high levels of intimacy goals are linked with lower levels of sexual activity in casual dating contexts for adolescents (Sanderson & Cantor, 1995). I expect to find a similar link in young adults; I hypothesize that there will be a negative relationship between intimacy goals and involvement in casual relationships/experiences.
Methods

Participants

Participants in the current study included 174 Kent State undergraduate students. Participants were recruited through the Kent State University psychology department computerized experimental sign-up website (SONA). Participants were limited to individuals between the ages of 18 and 25 years (the age range associated with emerging adulthood; Arnett, 2004), allowing us to have a sample of comparable ages to evaluate sexual histories. Two individuals declined to be photographed. In addition, eight individuals had missing or inconsistent data on main study variables (e.g., inconsistent answers regarding the number of partners they had had for a given relationship/experience), leaving a final sample of 164 individuals.¹

The demographics of our sample have been relatively typical of those drawn from the Kent State subject pool: 82% female, 83% Caucasian, with a mean age of 19.88 ($SD =1.58$). Of the sample, 57% were currently in a romantic relationship at the time of assessment, 6 were engaged and 1 participant was married. A total of 2 participants had children. Unfortunately, these subgroups were too small for separate analyses.

Participants received course credits for participation in the study.

¹ Analyses to predict partners in individual relationships/experiences ranged from $N = 161-164$
Materials and Procedure

General demographic information (age, race, educational status) as well as information on sexual behaviors, intimacy goals, self-esteem, and alcohol use were collected from participants. For the initial in-lab assessment, research assistants administered a battery of survey instruments to the participants. Following completion of the survey measures, research assistants took a facial photograph of participants from a distance of 190 cm using a Canon PowerShot SD1300 IS Digital camera with a 3.0 zoom level to ensure constant photograph quality. Photographs were taken under uniform lighting conditions and all participants stood in front of a white wall. Participants were also asked to produce a neutral facial expression and to remove any hats, glasses, or other objects that would obscure their face.

Other-rated physical attractiveness (objective physical attractiveness). In accordance with previous research, facial attractiveness was used as a proxy indicator of overall physical attractiveness (Feingold, 1990; Clark, 2004; Weeden & Sabini, 2007). Facial photographs were rated by 17 (4 male, 13 female) undergraduate research assistants from the psychology departments at neighboring universities (in order to guarantee participant anonymity). Ratings from one (female) coder had to be dropped due to misuse of equipment. Photographs were rated on a seven-point scale, from 1 = “not at all attractive” to 7 “very attractive” (see Hönekopp, Rudolph, Beier, Liebert, & Müller, 2007). Following the methodology of Rhodes et al. (2005) definitions of attractiveness were not provided to raters, and photographs were presented as a power-point presentation on individual computers, at a resolution of 72 pixels per inch. Each rater was
presented with a total of 86 (half of the total number) photographs in one of four randomized orders. Raters were first presented with 5 practice photographs to rate (randomly selected from the 86 photographs not being rated) before beginning their session. Each photograph was presented for 10 seconds and raters were given 3 seconds to record their rating. Photographs were presented in black-and-white with pupil centers located on the same y-coordinate. An oval was placed around the face to mask the effects of hairstyle. In general, ratings of facial attractiveness tend to be very consistent regardless of gender or race of the rater (for a meta-analysis see Langlois et al., 2000). For the current study the interrater reliability (as measured by the intraclass correlation coefficient) was $r = .84$.

**Self-rated physical attractiveness (subjective physical attractiveness).** As a measure of subjective physical attractiveness, participants were asked to rate their perceived level of physical attractiveness on the same seven-point scale used by raters (see Weeden & Sabini, 2007).

**Sexual behaviors.** A Sexual Behaviors Questionnaire was designed by our research lab to assess lifetime sexual behaviors and the types of sexual relationships in which the behaviors occurred. These relationships included committed dating relationships, casual dating relationships, friends-with-benefits, booty calls, and one-night stands. The following definitions were provided to participants:
Committed relationship: a dating relationship which you have made official (i.e., you have indicated on Facebook you are “in a relationship”, you have introduced each other as your boyfriend/girlfriend).

Casual Dating Relationship: you are going out on dates, but you have not made it official.

Friend with benefits: friends who have sex but do not consider themselves to be in a romantic relationship.

Booty Call: individuals available for free sex on an as-needed basis.

One-night stand: a sexual encounter with another individual that only occurred one time.

Individuals were asked if they had engaged in the following behaviors: touched someone or been touched by someone under your clothing or with no clothing on, been touched on your genitals/private parts or touched someone else on his/her genitals/private parts, oral sex (given or received), sexual intercourse (defined as “sexual union between two people involving genital contact. This includes when a male inserts his penis into a female’s vagina”), and oral sex. For all behaviors they had engaged in they were asked the number of people with whom they had engaged in the behavior and in what categories of relationship the behavior occurred (committed, casual dating, friend with benefit, booty call, or one-night stands).

Example question:
What is the total number of people you have had sexual intercourse with? _______
How many of these people:
a. were in a committed dating relationship with you? ______
b. were in a casual dating relationship with you? ______
c. do you consider a friend with benefits? ______
d. do you consider a “booty-call”? ______
e. were a one-night stand? ______
f. were male? ______
g. were female? ______

Finally, as a quality check questions regarding sexual behaviors were asked in a reverse manner. That is, in addition to being asked about specific behaviors and having to qualify the type of relationship the behavior occurred within, participants were also given a specific relationship type and asked to check all sexual behaviors in which they had engaged within that type of relationship. If the answers to these questions were inconsistent, the participant’s data was not used (see discussion of missing data above).

Participants were also asked the number of lifetime partners that fit into that relationship category.

Example question:

Please circle all the things that you have experienced with someone that you were in a committed relationship with.

a) Touched someone or been touched by someone under your clothing or with no clothing on
b) Touched someone else on his/her genitals/private parts or been touched on your genitals/private parts by someone
c) Engaged in oral sex (either given or received it)
d) Engaged in sexual intercourse
e) Engaged in anal sex
f) Engaged in a threesome
g) Other (Please Describe __________________________________________)

h. How many different people have you been in a committed relationship with in your lifetime?_______

**Intimacy goals.** The Intimacy Goals Scale (IGS, Sanderson & Cantor, 1995) provides a measure of a person’s desire for intimacy and attachment within dating relationships. The scale measures individuals’ willingness to participate in self-disclosure and mutual dependence in dating relationships (e.g., “In my dating relationships, I try to share my most intimate thoughts and feelings”) as well as their focus on self-exploration and autonomy (e.g., “In my dating relationships, I try to maintain a strong sense of independence”). The measure consists of 13 items, each rated on a 1 to 5 scale, with higher mean scores representing a greater focus on intimacy goals. This scale has demonstrated a high internal consistency and a test-retest reliability of .76 (Sanderson & Cantor, 1995). Chronbach’s alpha was .70 for the current study.

**Self-esteem.** Rosenberg Self-Esteem Scale (Rosenberg, 1965). The measure consists of 10 items assessing global self-esteem (e.g., “On the whole, I am satisfied with myself”). All items are rated on a four-point Likert-scale from “Strongly Agree” to “Strongly Disagree”. A sum of the 10 items is used, with higher scores representing higher self-esteem. The scale has demonstrated good test-retest reliability and internal consistency (Bosson, Swann, & Pennebaker, 2000). Chronbach’s alpha was .90 for the current study.
**Alcohol use.** The alcohol use scale from the Adult Self-Report (ASR) was used as an indicator of alcohol use. This measure includes questions regarding the frequency of alcohol use (e.g., “In the past 6 months, on how many days were you drunk?”).
Analysis Plan

All of the sexual behavior data I collected were markedly nonnormal, with as many as 48% of the participants indicating that they had not engaged in any casual relationships and a few participants reporting more than 20 casual partners. Because it can lead to negative predicted values, ordinary least squares is not the most appropriate model to explain variation in discrete count data, especially when it demonstrates the type of positive skew apparent in the sexual behavior data collected for the current study (Karazsia & van Dulmen, 2008; Hilbe, 2011). While both poisson regression and negative binomial regression have distributions that are appropriate for count data with positive skew, the current data did not meet the poisson regression requirements of equidispersion (mean = variance on a given variable). Specifically, the likelihood-ratio (LR) tests of the overdispersion parameters were significant for all models, indicating that the negative binomial regression better explained the observed data (Long & Freese, 2006; Hilbe, 2011). As such, I employed negative binomial regressions as my primary method of data analysis.

Interpretation of Incident Rate Ratio ($e^b$)

For negative binomial regressions $e^b$, which is the exponentiated regression coefficient, represents the incident rate ratio (IRR). The IRR is the “ratio of the probability of disease for a given risk factor compared with the probability of disease for
those not having the risk factor” (Hilbe, 2011, p. 15). It can be used to determine the difference in expected counts for any incremental increase on a predictor. An IRR greater than one suggests an increase in expected count, where an IRR lower than one indicates a decrease in expected count (Hilbe, 2011). Using an IRR of 1.35 for age for an example, we see that with a one-year increase in age, the expected number of sexual partners increases by a factor of 0.35, with the other predictor values held constant. That is, for each additional year in age, individuals are expected to have .35 more casual partners, other predictor values being constant. Another way of interpreting the IRR is as an increase in frequency (Hilbe, 2011). That is, for a one point increase in age, the predicted frequency of casual sexual partners increases by 1.35 times (35%), with the remaining predictor values held constant.
Results

In order to examine the relationship between facial attractiveness and overall lifetime casual relationships and experiences, a casual sexual intercourse score was created by summing the number of casual dating relationships, friends with benefits relationships, booty-call relationships, and one-night stands within which an individual reported engaging in sexual intercourse. The range was 0-25 ($M = 2.14$, $SD = 3.68$). The distribution of this number of lifetime casual intercourse partners demonstrated substantial positive skew. Only 52% of the sample reported ever engaging in these behaviors, with a majority of these individuals reporting only one casual sexual intercourse partner. In regards to involvement in specific relationships (regardless of if sexual intercourse had occurred), 94% of the sample reported engaging in at least one committed relationship, 89% of the sample reported engaging in at least one casual dating relationship, 51% of the sample reported engaging in at least one friends with benefits relationship, 25% of the sample reported engaging in at least one booty-call relationship, and 43% of the sample reported engaging in at least one one-night stand.

Preliminary Analyses

Table 1 presents the descriptive statistics and correlations for the study variables. Age and alcohol use were significantly positively related to the total number of casual sexual intercourse partners, and intimacy goals were negatively related to casual sexual intercourse partners. As expected, self-esteem was significantly related to self-rated
physical attractiveness \((r = .37, p < .001)\). Self-esteem was also positively related to age.

**Table 1**

*Correlations among study variables (N=164)*

<table>
<thead>
<tr>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
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<th>9</th>
<th>10</th>
<th>11</th>
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<td></td>
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<td></td>
<td></td>
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<td>2. Committed</td>
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<td></td>
</tr>
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<td>4. Friends With Benefits</td>
<td>.29**</td>
<td>.10</td>
<td>.13</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>5. Booty-Call</td>
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<td>.10</td>
<td>.03</td>
<td>.18*</td>
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<td></td>
<td></td>
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</tr>
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<td>6. One Night Stand</td>
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<td>.14</td>
<td>.15</td>
<td>.12</td>
<td>.39**</td>
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<td>-.03</td>
<td>.13</td>
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<td>-.02</td>
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<td>8 Self-Rated PA</td>
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<td>.12</td>
<td>.13</td>
<td>.04</td>
<td>.07</td>
<td>.08</td>
<td>.05</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>9 Intimacy Goals</td>
<td>-.20**</td>
<td>.21**</td>
<td>-.11</td>
<td>-.19*</td>
<td>-.14</td>
<td>.00</td>
<td>.05</td>
<td>.15</td>
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</tr>
<tr>
<td>10 Self-Esteem</td>
<td>-.12</td>
<td>.04</td>
<td>.02</td>
<td>-.14</td>
<td>.03</td>
<td>-.17*</td>
<td>.002</td>
<td>.37**</td>
<td>.05</td>
<td>1</td>
<td></td>
<td></td>
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<td>11 Age</td>
<td>.34**</td>
<td>.10</td>
<td>.08</td>
<td>-.01</td>
<td>.21**</td>
<td>.10</td>
<td>-.21**</td>
<td>.12</td>
<td>.10</td>
<td>.20**</td>
<td>1</td>
<td></td>
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<tr>
<td>12 Alcohol Use</td>
<td>.25**</td>
<td>.14</td>
<td>.18*</td>
<td>.14</td>
<td>.21**</td>
<td>.30**</td>
<td>.10</td>
<td>.07</td>
<td>-.06</td>
<td>-.09</td>
<td>.06</td>
<td>1</td>
</tr>
</tbody>
</table>

\(M\)

| 2.14 | 3.06 | 2.93 | 1.52 | .73 | 1.02 | 3.46 | 4.85 | 4.90 | 22.79 | 19.88 | 8.11 |

\(SD\)

| 3.68 | 2.23 | 3.20 | 2.76 | 2.23 | 1.77 | .93 | .94 | .64 | 5.11 | 1.58 | 12.6 |

\(Range\)

| 0-25 | 0-13 | 0-20 | 0-18 | 0-22 | 0-11 | 1.5- | 1.7- | 9-30 | 18.02- | 0-65 | 5.5 |

\(M\)

| 2.14 | 3.06 | 2.93 | 1.52 | .73 | 1.02 | 3.46 | 4.85 | 4.90 | 22.79 | 19.88 | 8.11 |

\(SD\)

| 3.68 | 2.23 | 3.20 | 2.76 | 2.23 | 1.77 | .93 | .94 | .64 | 5.11 | 1.58 | 12.6 |

\(Range\)

| 0-25 | 0-13 | 0-20 | 0-18 | 0-22 | 0-11 | 1.5- | 1.7- | 9-30 | 18.02- | 0-65 | 5.5 |

| Note. *\(p < .05\), **\(p < .001\) |

**Sex differences.**

Males and females differed by age. Males were significantly older than females \((t = -2.88 (36.18) p = .007, d = .50)\), with males on average 20.74 years old and females on average 19.70 years old. Females also had significantly higher other-rated attractiveness than males \((t = 2.35 (162) p = .020, d = .63)\), with the average rating for females 0.44 points higher than the average rating for males.
Current involvement.

I tested for differences between individuals in a relationship at the time of testing and those not involved in a romantic relationship. Not surprisingly, those in a current relationship demonstrated significantly higher intimacy goals than individuals not in a current romantic relationship \((t = -3.17 (162), p = .002, d = .50)\). Self-esteem was also higher among individuals in a current romantic relationship \((t = -2.81 (162), p = .006, d = .44)\). Finally, alcohol use was also lower in those in current romantic relationship \((t = 2.07 (162), p = .040, d = .20)\). However, the number of casual sexual intercourse partners was not significantly different between the two groups.

Casual Sexual Intercourse Partners

In order to first examine casual relationship involvement in general, a negative binomial regression was conducted in STATA with the total lifetime number of casual sexual intercourse partners as the outcome variable.\(^2\) Age and alcohol use were entered as control variables, along with self-rated physical attractiveness, other-rated facial attractiveness, intimacy goals, gender (with males as the reference group), and self-esteem. For casual sexual partners the model fit the data well \((\chi^2 (7) = 31.96, p < .001)\). Results from the negative binomial regressions are shown in Table 2. As predicted, age \((B = .30, e^b = 1.35, p < .001)\) and alcohol use \((B = .022, e^b = 1.02, p = .036)\) were

\(^2\) While extreme values existed, replacing these values with values two standard deviations above the mean did not alter results and they represent plausible values. As such these values were included in the final models
positively associated with total number of casual sex partners while intimacy goals ($B = - .43, e^b = .65, p = .028$) was negatively associated with total number of sex partners.

Table 2

Results of negative binomial regression predicting total casual sexual intercourse partners ($N = 164$)

<table>
<thead>
<tr>
<th></th>
<th>$B$ (SE)</th>
<th>p</th>
<th>Exp($B$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-3.42(2.02)</td>
<td>.092</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.30(.09)</td>
<td>.000**</td>
<td>1.35</td>
</tr>
<tr>
<td>Alcohol use</td>
<td>.02(.01)</td>
<td>.036*</td>
<td>1.02</td>
</tr>
<tr>
<td>Gender</td>
<td>.14(.33)</td>
<td>.645</td>
<td>1.16</td>
</tr>
<tr>
<td>Intimacy goals</td>
<td>-.43(.20)</td>
<td>.028*</td>
<td>0.65</td>
</tr>
<tr>
<td>Self esteem</td>
<td>-.04(.03)</td>
<td>.194</td>
<td>0.97</td>
</tr>
<tr>
<td>Self-rated attractiveness</td>
<td>.10(.15)</td>
<td>.528</td>
<td>1.10</td>
</tr>
<tr>
<td>Other-rated attractiveness</td>
<td>.05(.15)</td>
<td>.744</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Note. * $p < .05$, ** $p < .001$
Specific Relationships and Experiences

Next, to test involvement in the different subdomains of casual sexual experiences/relationships, a series of negative binomial regressions were conducted in STATA. These analyses allowed us to investigate the effects of physical attractiveness on the total number of relationships of each individual relationship type. Results from the negative binomial regressions are shown in Tables 3-7.

**Number of committed relationships.** The overall model fit the data well ($X^2 (7) = 17.07, p = .016$). The following control variables were significant in the direction expected: intimacy goals ($B = .23, e^b =1.25, p = .012$) alcohol use ($B = .01, e^b = 1.01, p = .032$). Neither self-rated nor other-rated attractiveness were significant predictors of the number of committed relationships an individual reported.

**Number of casual dating relationships.** The overall model fit the data well ($X^2 (7) = 22.38, p = .002$). The following control variables were significant in the direction expected alcohol use ($B = .01, e^b =1.01, p = .030$), gender ($B = -.48, e^b = .62, p = .022$), and intimacy goals ($B = -.24, e^b = .78, p = .036$). Age was also marginally associated with the number of casual dating partners ($p = .064$). I hypothesized that physical attractiveness would be related to a greater number of casual dating relationships. This hypothesis was partially supported: self-rated facial and other-rated attractiveness were

---

3 Zero-inflated negative binomial regressions were also considered. The results were similar overall, but the logistic portion of the model was not explained well by the variables, and as such these results are not reported.
marginally associated \((B = .15, e^b = 1.17, p = .081\) and \(B = .15, e^b = 1.17, p = .060\) respectively) with the total casual dating partners.

**Number of friends with benefits relationships.** The model fit the data well \(\chi^2 (7) = 18.20, p = .011\). In terms of control variables, intimacy goals \((B = -.56, e^b = .57, p = .007)\) and self-esteem \((B = -.06, e^b = .94, p = .019)\) were significantly (negatively) related to the total number of friends with benefits relationships an individual had within their lifetime. The hypothesis that physical attractiveness would relate to friends with benefits involvement was partially supported; self-rated physical attractiveness was marginally associated with friend with benefits relationships \((B = .30, e^b = 1.35, p = .060)\).

**Number of booty-call relationships.** The model fit the data well \(\chi^2 (7) = 24.58, p < .001\). Only one control variable was significantly related to booty-call relationships: alcohol use \((B = .04, e^b = 1.05, p = .016)\) Age was marginally positively associated \((p = .063)\) with booty-call relationships. In regards to physical attractiveness, the hypotheses were not supported in that neither other nor self-rated attractiveness were significantly associated with booty-call relationships.

**Number of one-night stands.** The model fit the data well \(\chi^2 (7) = 27.11, p < .001\). Of the control variables, alcohol use \((B = .03, e^b = 1.03, p = .013)\) and self-esteem \((B = -.08, e^b = .92, p = .004)\) were significantly related to the total number of one-night stands in the predicted directions. Age showed a marginally positive association with one-night stand involvement \((p = .100)\). The hypotheses regarding physical attractiveness was supported in that other-rated facial attractiveness \((B = .34, e^b = 1.40, p = .019)\) was
significantly related to the total number of one-night stands. Specifically, with every one-point increase in other-rated physical attractiveness the expected number of one-night stands increases by a factor of 0.40 (40%), with the other predictor values held constant.

Table 3

Results of negative binomial regression predicting total number of committed relationships (N = 164)

<table>
<thead>
<tr>
<th></th>
<th>B (SE)</th>
<th>p</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-.92(.38)</td>
<td>.268</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.04 (.03)</td>
<td>.310</td>
<td>1.04</td>
</tr>
<tr>
<td>Alcohol use</td>
<td>.01(.00)</td>
<td>.032*</td>
<td>1.01</td>
</tr>
<tr>
<td>Gender</td>
<td>-.23(.15)</td>
<td>.123</td>
<td>0.79</td>
</tr>
<tr>
<td>Intimacy goals</td>
<td>.23(.09)</td>
<td>.012*</td>
<td>1.24</td>
</tr>
<tr>
<td>Self esteem</td>
<td>.00(01)</td>
<td>.922</td>
<td>1.00</td>
</tr>
<tr>
<td>Self-rated attractiveness</td>
<td>.06(.06)</td>
<td>.316</td>
<td>1.06</td>
</tr>
<tr>
<td>Other-rated attractiveness</td>
<td>-.04(.06)</td>
<td>.456</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Note. * p < .05, ** p < .001
Table 4

Results of negative binomial regression predicting total number of casual dating relationships (N = 161)

<table>
<thead>
<tr>
<th></th>
<th>B (SE)</th>
<th>p</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-.80(1.13)</td>
<td>.477</td>
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</tr>
<tr>
<td>Age</td>
<td>.09(.05)</td>
<td>.064</td>
<td>1.09</td>
</tr>
<tr>
<td>Alcohol use</td>
<td>.01(.01)</td>
<td>.030*</td>
<td>1.01</td>
</tr>
<tr>
<td>Gender</td>
<td>-.48(.21)</td>
<td>.022*</td>
<td>0.62</td>
</tr>
<tr>
<td>Intimacy goals</td>
<td>-.24 (.12)</td>
<td>.036*</td>
<td>0.78</td>
</tr>
<tr>
<td>Self esteem</td>
<td>-.00(.02)</td>
<td>.874</td>
<td>1.00</td>
</tr>
<tr>
<td>Self-rated attractiveness</td>
<td>.15(.09)</td>
<td>.081</td>
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</tr>
<tr>
<td>Other-rated attractiveness</td>
<td>.15(.08)</td>
<td>.060</td>
<td>1.17</td>
</tr>
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</table>

Note. * p < .05, ** p < .001
Table 5

*Results of negative binomial regression predicting total number of friends with benefits relationships (N = 163)*

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<tr>
<td>Age</td>
<td>.01(.09)</td>
<td>.892</td>
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<td>Alcohol use</td>
<td>.01(.01)</td>
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<tr>
<td>Gender</td>
<td>.40 (.34)</td>
<td>.222</td>
<td>1.52</td>
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<tr>
<td>Intimacy goals</td>
<td>-.56(.21)</td>
<td>.007**</td>
<td>0.57</td>
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<td>Self esteem</td>
<td>-.06(.03)</td>
<td>.019*</td>
<td>0.94</td>
</tr>
<tr>
<td>Self-rated attractiveness</td>
<td>.30(.16)</td>
<td>.060</td>
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<tr>
<td>Other-rated attractiveness</td>
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<td>.695</td>
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*Note.* *p < .05, **p < .001*
Table 6

*Results of negative binomial regression predicting total booty-call relationships (N = 163)*

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<th></th>
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<tr>
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<tr>
<td>Gender</td>
<td>.77 (.51)</td>
<td>.119</td>
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<td>-.40 (.28)</td>
<td>.239</td>
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<td>Self esteem</td>
<td>-.03 (.04)</td>
<td>.413</td>
<td>0.97</td>
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<td>.07 (.27)</td>
<td>.883</td>
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<td>Other-rated attractiveness</td>
<td>.21 (.20)</td>
<td>.325</td>
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*Note.* *p < .05, **p < .001
Table 7

*Results of negative binomial regression predicting total number of one-night stands (N = 163)*

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<tr>
<td>Alcohol use</td>
<td>.03(.01)</td>
<td>.013*</td>
<td>1.03</td>
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<td>Gender</td>
<td>.54(.34)</td>
<td>.109</td>
<td>1.72</td>
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<tr>
<td>Intimacy goals</td>
<td>.05(.21)</td>
<td>.791</td>
<td>1.06</td>
</tr>
<tr>
<td>Self esteem</td>
<td>-.08(.03)</td>
<td>.004**</td>
<td>0.92</td>
</tr>
<tr>
<td>Self-rated attractiveness</td>
<td>.14(.16)</td>
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<tr>
<td>Other-rated attractiveness</td>
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<td>.019*</td>
<td>1.40</td>
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</tbody>
</table>

*Note. *p* < .05, **p* < .001
**Discussion**

The current study demonstrates that the association between physical attractiveness and involvement in casual relationships/experiences varies by relationship/experience type. Furthermore, I found differing patterns of associations between the other main study variables (i.e., age, gender, alcohol use, intimacy goals and self-esteem) and involvement in different forms of casual relationships and experiences. When examining the total number of casual sexual intercourse partners an individual had throughout his or her lifetime (i.e., the number of casual dating relationships, friends with benefits relationships, booty-call relationships, and one-night stands in which an individual had engaged in sexual intercourse), I found that older age, higher levels of alcohol use and lower intimacy goals were significantly related to engaging in these types of behavior. While this pattern fits with previous findings (e.g., Paul et al., 2000; Grello et al., 2006), when I examined the specific relationships and experiences separately, I found that these patterns differed by relationship/experience.

In particular, I found partial support for hypotheses that physical attractiveness would be more predictive of relationships involving less commitment and intimacy. Neither self-rated nor other rated physical attractiveness was associated with involvement in committed relationships. However, other-rated attractiveness was positively associated with one-night stands, even after controlling for other factors related to engaging in these experiences (such as alcohol use). Other-rated was not, however, significantly related to
the other relationship domains. This result suggests that other-rated physical attractiveness is important in predicting one-night stands (or hookups), which involve less intimacy and commitment than other casual relationships/experiences. This finding is consistent with studies showing that individuals preference physically attractive partners when considering one-night stands (Li & Kenrick, 2006) and with the proposition that attractiveness creates opportunities for hookups/one-night stands (Weeden & Sabini, 2007; Weiderman & Hurst, 1998). Because only other-rated attractiveness, and not self-rated attractiveness, was related to one-night stand involvement, this finding also partially supports the hypothesis that other-rated attractiveness is more predictive of relationships lacking intimacy and commitment than self-rated attractiveness.

Although I did not find any other significant associations between attractiveness and involvement in the different relationships and experiences, there were several statistical trends consistent with my hypotheses. Specifically, both self and other-rated attractiveness were (marginally) positively associated with engaging in casual dating relationships. While casual dating has not been specifically examined with regards to attraction, this type of relationship is casual in nature but has the added possibility of leading to a committed relationship. Because of this unique combination it is in line with hypotheses that both other-rated and self-rated attractiveness would be associated with involvement in this type of relationship. Self-rated physical attractiveness was also (marginally) positively associated with involvement in friends with benefits relationships. This is consistent with the hypothesis that self-rated physical attractiveness would be more predictive than other-rated attractiveness for involvement in casual
relationships/experiences that include an emotional intimacy component. While neither self-rated nor other-rated physical attractiveness was associated with involvement in booty-call relationships, this finding was not entirely surprising given the low frequency of occurrence of booty-call relationships overall (only ¼ of the sample reported ever having engaged in a booty-call). Although these findings do not represent statistically significant associations, the effect sizes for these associations are similar to those found in other studies (Rhodes et al., 2005; Clark, 2004). Thus, the findings of the current study are consistent with previous findings on this topic.

Overall, these findings show that physical attractiveness is not associated with involvement across all relationships/experiences and that self and other-rated physical attractiveness are not equal predictors of relationship/experience involvement. Specifically, other-rated attractiveness predicts involvement in one-night/stands or hookups. By examining each form of relationship/experience individually, the current study was able to shed light on some of the inconsistencies within the literature. The measure commonly used in other studies, lifetime sexual partners, does not consider the relationship/experience in which sexual behavior occurs, which may explain why some studies have found associations between objective measures of physical attractiveness and lifetime numbers of intercourse partners (Hughes & Gallup, 2003; Weeden & Sabini, 2007; Rhodes et al., 2005) and others have not (Mikach & Bailey, 1999; Weiderman & Hurst, 1998). While this discrepancy may be due in part to the lack of control variables in many studies, my study suggests that it could also be because other studies have not examined the context of the sexual partners. It is important to note that I found no
bivariate associations between physical attractiveness and involvement in casual relationships and experiences. This may be a function of the somewhat low involvement in the current study compared to other studies [e.g., the average lifetime number of sexual partners was 5.8, (SD = 11.6) in Rhodes et al., 2005 but was 3.91 (4.69) for the current study]. The current study does suggest that while attractiveness may be associated with involvement in casual sexual relationships/experiences, other factors may better account for individual differences in sexual behavior.

Specifically, age, gender, alcohol use, self-esteem, and intimacy goals were predictive of involvement in casual relationships and experiences. I found as expected that age was positively related to overall number of sexual partners and marginally positively associated with casual dating, booty-calls and one-night stands. Male gender was positively associated with the number of casual dating relationships an individual reported, but was not significantly associated with any of the other relationships/experiences. Alcohol use was especially important in predicting relationship involvement across the spectrum of relationships, emerging as a significant predictor of all relationships except friends with benefits relationships. This is highly consistent with literature showing that alcohol use is a predictor of casual sexual intercourse (Desiderato and Crawford, 1995; Halpern-Felsher et al., 1996; Cooper, 2006, Gold et al., 1992; Grello et al., 2006).

Consistent with previous findings, self-esteem was negatively related to friends with benefits and one-night stands (Paul et al., 2000). Also consistent with the proposed hypotheses, intimacy goals were negatively related to total number of casual sexual
partners, casual dating relationships, and friends with benefits. Intimacy goals were also positively related to committed relationship involvement as anticipated. However, intimacy goals were not related to involvement in booty-calls or one-night stands. This finding was somewhat surprising given that high levels of intimacy goals has been associated with lowered involvement in casual sex for adolescents (Sanderson & Cantor, 1995). Further studies could help determine the exact role of intimacy goals within casual sexual relationships/experiences.

Overall the findings from the current study illuminate the inconsistency of the relationship between physical attractiveness (as well as all the other predictors) and involvement in different forms of casual relationships and experiences. Neither attractiveness nor the other study variables were related to involvement across all forms of relationships/experiences. This suggests that there may be unique predictors of sexual involvement within each casual relationship/experience. As such, future research should consider whether predicting behavior in each domain requires unique conceptual models.

**Limitations of the Current Study**

While the findings of the current study add to the literature on physical attractiveness and sexual behaviors by showing that physical attractiveness is not universally (i.e., across all casual relationships and experiences) related to engaging in all relationships/experiences, there are several limitations to the current study that need to be acknowledged. The study had a very limited sample of males. This presents a problem for several reasons. First, the relationship between physical attractiveness and sexual activity has been more consistent for males than females (Rhodes et al., 2005). The relationships
between physical attractiveness and sexual behaviors are less clear for females in general, with some studies finding negative relationships and others finding positive relationships (e.g., Walsh, 1993; Rhodes et al., 2005; Weeden & Sabini, 2007). The relative dearth of male participants may have also been problematic for other-ratings of facial attractiveness. In general, the raters were mostly female individuals rating a predominantly female sample. While there is evidence that males and females rate physical attractiveness in a similar manner (Langolis et al, 2007), I found that males had slightly higher average ratings than female raters. Especially when rating facial attractiveness in order to determine sexual behavior it would be ideal to have opposite-sex raters.

I also had only a single measure of other-rated attractiveness. While single-modality stimuli have been found to be acceptable proxy indicators of overall physical attractiveness (Saxton, Burriss, Murray, Rowland, & Roberts, 2009; Roberts et al., 2009), the use of only facial photographs could have led to a biased estimate of overall physical attractiveness. While the range of physical attractiveness was similar to other studies employing measures of facial physical attractiveness (Clark, 2004; Rhodes et al., 2005), my mean rating was slightly higher. It is unclear whether this is a reflection of the population sampled or an artifact of overly positive (i.e., less critical) raters. Regardless of the reason, this may have led to less variability in my physical attractiveness measure.

Another important issue with all sexual behavior data is a possibility of reporting bias. For example, studies of sexual behaviors are likely to encounter participation biases as well as underreporting and recall biases (see Fenton, Johnson, McManus, & Erens,
While reporting of sexual behaviors was kept as anonymous as possible in order to reduce biases in self-reported sexual behavior (Alexander & Fisher, 2003), some individuals may have participated in behaviors that they did not report.

**Conclusion and Implications**

While the current study shows that physical attractiveness is associated with involvement in certain relationships/experiences but not others, replication in a larger, less homogenous sample is recommended to fully capture college student’s involvement in casual relationships and experiences. Most of the research in the area of casual sexual behaviors has been conducted using convenience samples of college students. Given that relationship patterns may differ for individuals who do not attend college (Goldstein & Kenney, 2001), it is reasonable to assume that casual involvement may differ in individuals who do not attend college. Furthermore, the role of sexual orientation was not assessed in the current study. Homosexual men in particular may demonstrate high levels of acceptance of and involvement in casual sex (Schmitt, 2006). Research regarding patterns of involvement in casual relationships and experiences in homosexual individuals provides an interesting avenue for future research.

The current study suggests physical attractiveness, along with self-esteem, gender, alcohol use, age, and intimacy goals, relates to participation in some forms of casual sexual relationships/experiences, but not others. While research now recognizes that there is a difference between committed and casual involvement during young adulthood, research has yet to fully explain the differences between these relationship forms (Grello et al., 2006). As such, the findings from this study are important in helping move our
understanding forward. Specifically, this study suggests potential variables (physical attractiveness, alcohol use, intimacy goals, age, gender, and self-esteem) which may help explain why individuals engage in certain casual relationships and experiences. In particular, alcohol use has emerged in the current study and others as having important association with engaging in relationships/experiences across the spectrum. Overall, this line of research may culminate in a model that can help further our understanding of participation in casual relationships and experiences. While the current study suggests potentially important predictors of involvement in different casual relationships and experiences, an important next step is to examine these variables using a longitudinal framework (including all relevant variables), allowing us to better determine what factors lead to involvement in the various casual relationships and experiences.
References


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