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# Associations between Self-esteem and Experiences from Short-term Dating Contexts

Hovedoppgave i Profesjonsstudiet i psykologi

Veileder: Mons Bendixen

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Norges teknisk-naturvitenskapelige universitet  
Fakultet for samfunns- og utdanningsvitenskap  
Institutt for psykologi

### **Forord**

Denne hovedoppgaven ble skrevet ved NTNU fra og med Februar 2018 til april 2019. Ferdigstillingen av denne oppgaven markerer for meg fullføringen av den teoretiske delen av profesjonsstudiet i psykologi.

Jeg ønsket å arbeide med en problemstilling drevet av genuin nysgjerrighet. Jeg valgte derfor å gjøre et dykk i evolusjonspsykologi og selvfølelse for å undersøke om erfaringer knyttet til dagens datingkultur påvirker hvordan unge ser på seg selv.

Jeg har vært så heldig å få mye hjelp fra min veileder Mons Bendixen. Han har gjennom hele prosessen vært svært tilgjengelig og ikke minst tålmodig, noe jeg har satt stor pris på. Med genuint engasjement og stor kompetanse har han gjort prosessen rundt hovedoppgaven til en positiv opplevelse. Gjennom prosessen har jeg fått gode innspill og rettleiding i forhold til utforming av hypoteser, samt analyser og tolkning. Arbeidet med SPSS har vært en utfordrende og lærerik prosess, hvor jeg har fått god hjelp til å bruke og forstå verktøyet, for deretter å gjennomføre analysene selv. Jeg må takke Mons Bendixen, Robert Biegler og Leif Edward Ottesen Kennair for at jeg fikk basere oppgaven min på deres datainnsamling gjennomført vår- og høstsemesteret 2015.

Marthe Kristine Dingen  
Trondheim, 1. april 2019

**Abstract**

Sociometer theory holds that self-esteem is like a thermometer constantly monitoring our value as relational partners and how desired we are for social inclusion. Looking to sociometer theory we wanted to investigate the relationship between experiences from a short-term dating context and self-esteem. Based on predictions from sexual strategies theory we also asked the question of how this association may differ for men and women. Findings from the current study indicates that self-esteem in a Norwegian student population is, indeed related to experiences tied to short-term dating. Those who reported being hit on more often than hitting on others showed higher self-esteem scores, than those who reported being hit on fewer times relative to number of times hitting on others. The hypothesized sex-difference in effect is however not supported by the data, indicating that experiences from short-term dating is equally important for both men and women despite the existing sex difference in sexual strategies. Findings are discussed in light of Sociometer theory, previous research on self-esteem and methodical limitations, as well as with regards to theoretical implications and implications for future research.

**Contents**

**Introduction.....4**

**Self-esteem.....5**

**Mate value.....9**

**Sexual strategies theory.....10**

**Sociosexuality.....12**

**The current study.....13**

**Method.....15**

**Participants and procedures.....15**

**Measurements.....15**

**Statistical analysis.....18**

**Results.....19**

**Sex, Relationship Status, and Study Differences.....19**

**Table 1. Means and SDs.....21**

**Table 2. F-values, p-values and  $\eta^2$ -values for 2 x 2 x 2 ANOVA.....22**

**Correlations.....23**

**Analysis of covariates.....24**

**Discussion.....25**

**Limitations and implications.....28**

**Conclusion.....32**

**References.....33**

**Appendix A.....38**

**Appendix B.....40**

## Introduction

Self-esteem is considered a core component of mental health and overall psychological functioning. Research has indicated associations between low self-esteem and various negative outcomes such as depression, anxiety (Sowislo & Orth, 2013), lower socioeconomic status and even criminal behavior (Trzesniewski et al., 2006). Self-esteem has been theorized to be of importance in various social- and psychological phenomena, and the construct of self-esteem is seemingly discussed in every major theoretical framework. In its essence, self-esteem may be conceptualized as the “evaluation of one’s own worth, value or importance” (Rosenberg, 1965) or “the level of global regard that one has for the self as a person” (Harter, 2003). By definition the word “esteem” means to regard highly or favorably, regard with respect or admiration, or to consider as of a certain value (dictionary.com). Self-esteem is therefore an expression of the degree to which we view ourselves as valuable, desirable, approved and likeable human beings. Considering the fact that self-esteem stems from a subjective evaluation of the self, it will not, however, always be an accurate reflection of one’s actual qualities or accomplishments (Leary & Baumeister 2000).

Self-esteem is often viewed as being global, representing an overall appraisal of the self. On the contrary, self-esteem can also be considered domain specific, reflecting self-evaluation within in specific areas such as physical appearance, athletic ability, or intellectual ability (Neiss, Sedikides & Stevenson, 2002)

Enhancement and maintenance of self-esteem seems central to social behavior and mental health (Baumeister, 1998; Brown & Dutton, 1995; Sedikides & Strube, 1997; Taylor & Brown, 1988). Given the importance of self-esteem for psychological well-being, and personal functioning, the question of what determines self-esteem has received a substantial amount of attention from researchers (Neiss et al., 2002). Self-esteem may be affected and shaped by both specific experiences and cognitive processes. Leary and Baumeister (2002) argue that self-esteem is a sociometer, meaning that self-esteem is “*like a gauge that, much like fuel gauges and thermostats, has a function in terms of monitoring and maintaining the quality of people’s interpersonal relationships*” (p. 10). Hence self-esteem would be affected by any experience that might tell us about our social value or desirability for inclusion in groups and significant relationships. Direct experiences of rejection or inclusion and indirect hints or cues about rejection or accept, represent such events. Further, as the sociometer is sensitive to social value, the extent to which we possess socially valued attributes is thought to move the sociometer. Thus, experiences providing us with information about our

intellectual ability, athletic skills, physical attractiveness and other desirable attributes should affect our view of the self (Leary & Baumeister, 2002).

With regard to dating and sexual encounters several factors seems likely to impact self-esteem. Being hit on, approached by the opposite sex, or experiencing someone showing sexual interest would signify desirability, whereas romantic or sexual rejection would signal the opposite. Casual sexual relationships has become more frequent recent years, and among American college students 50-70% report having had casual sex once or more times during the last year (Glenn & Marquardt, 2001). The increasing trend, especially among student populations, has been named the “Hookup culture” (Garcia, Reiber, Massey, Merriwether, 2012). The literature on casual sex suggest that hook-ups, or sexual intercourse outside of a committed relationship, tend to occur in the context of partying or social drinking (Bersamin et al., 2011; Grello, Welsh & Harper, 2010). In a study looking at casual sex among Norwegian adolescents, Træen and Lewin (1992) found that the amount of sexual experience was related to participation in social behaviors such as drinking alcohol and smoking.

The theoretical framework for this study is evolutionary psychology. Evolutionary psychology theories argues that the ways in which we act in modern society results from evolved psychological mechanisms that has proven to be effective throughout human history by securing survival and successful reproduction. The present study explores the question of whether self-esteem and short-term dating experiences are associated in a Norwegian student population.

### **Self-esteem**

The sociometer theory of self-esteem is grounded in evolution. Hence self-esteem is considered a product of natural selection, and a psychological mechanism that has increased humans survival and reproductive success by solving the adaptive problem of social inclusion and belonging. The development of sociometer theory was built on Baumeister and Leary’s (1995) earlier theorizing about social belonging. In their seminal article “The need to belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation”, they discussed the implications of humans’ need to belong, for interpersonal relationships, social behavior and psychological functioning. “*The belongingness hypothesis is that human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships*” (Baumeister & Leary, 1995, p. 497). It’s this fundamental need that is thought to lay the foundation for self-esteem.

Leary et al. (1995) point out that the importance of self-esteem seemed to be taken for granted in the social sciences for a long period of time. The question of why self-esteem appear to be of such importance for human beings was sparsely asked until Leary et al. (1995) asked the question in their article “Self-esteem as an interpersonal monitor: The sociometer hypothesis”. Later, Leary and Baumeister (2000) elaborated on the question in their work on Sociometer theory. They attempted to answer the fundamental questions of what self-esteem is, why we have it, and why it is so important to us? Explaining self-esteem within the evolutionary perspective, the sociometer takes the concept of self-esteem away from the somewhat elusive, free floating goal state of being, and ties it to social relations and survival. Humans are profoundly motivated to form social bonds and seek peer acceptance (Leary et al., 1995). The ability to maintain intimate social bonds and being eligible for social inclusion had clear benefits throughout history. Bigger groups were able to share both responsibilities and resources, and looking back, various obstacles faced by human kind was best overcome by numbers. Raising children, hunting, maintaining a defense and collecting resources are all tasks debatably better solved by groups, than by single individuals. Therefore, beginning at birth, to secure survival, humans are equipped with a desire for belonging and for being close to others. Baumeister & Leary (2000) likens out self-esteem to a gauge specialized at measuring our social inclusion. More specifically, Leary & Baumeister (2000) argues that *“self-esteem serves as a subjective monitor of one’s relational evaluation- the degree to which other people regard their relationship with the individual as valuable, important or close”* (p. 9). Further, as the self-esteem monitors the individual’s social status and eligibility for significant relationships, it’s affective component helps motivate the individual to engage in social desired behavior. When exposed to cues hinting at diminished acceptance or lesser desirability, we usually experience discomfort following more negative attitudes towards the self. It’s these unpleasant feelings that are thought to motivate us to reconsider our behavior and trigger corrective action. In essence self-esteem is like a thermometer, constantly measuring our social desirability, equipped with a thermostat that through affective activation helps the individual correct behavior in order to maintain a minimum level of social acceptance.

In society a range of different skills, capacities and attributes are deemed attractive. Feedback confirming or disconfirming that one possesses such characteristics has been showed to correlate with self-esteem (Baumeister et al. 2003; Harter 1993; Pelham & Swann, 1989). Hence sources of self-esteem may range from athletic performance and intellectual ability, to being funny or physical attractive. In their article on sociometer theory, Leary and



Baumeister refer to previous research on self-esteem in the social sciences, and argues for how these might be explained and understood in light of their theory. They conclude that “*The results of numerous laboratory and field experiments, correlational studies, and longitudinal investigations support a link between perceived inclusion-exclusion on the one hand and state and trait self-esteem on the other*” (Leary & Baumeister, 2000, p. 42).

Comparing the sociometer to other feedback mechanisms in the body, designed to maintain homeostasis, it's assumed that the sociometer operates unconsciously and continuously. If we were to constantly evaluate how we fare socially and take every cue in to conscious consideration, we would have no capacity left for other cognitive tasks. As we don't have the capacity to monitor and evaluate the implications of all interpersonal transactions while we interact with other people and being present and engaged in the moment, we need this monitoring to happen at a preconscious level. Further it's reasonable to assume that the sociometer would be especially sensitive to rejection and hints about our social value sinking, as this would threaten our vital need to belong. The cost of missing hints about rejection, potentially leading to social exclusion would be much greater than the cost of missing out on positive feedback. Also, by assuming that most people have some close relationships most of the time, and thus have their minimal need of belonging covered, the danger of losing belongingness should be greater than the appeal of forming new relationships (Leary & Baumeister, 2000). In addition to the strong effects of ostracism shown in the work by Williams (2007), other studies has also illustrated the negative effect of exclusion. In a study by Leary, Tambor et. al., (1995) participants who thought they were being excluded showed decrements in self-esteem compared to controls, whereas participants led to believed they were accepted showed no corresponding increase in self-esteem.

In the literature on self-esteem, both trait and state self-esteem are frequent terms. In addition to this constructs such as global self-esteem (Rosenberg, 1965), contingent self-esteem (Crocker & Wolfe, 2001; Patrick, Neighbors & Knee, 2004), domain specific self-esteem (Harter, 1999; Crocker & Wolfe, 2001) and stable self-esteem (Kernis, 2005) are described. Overall there seems to be little debate about there, indeed, being a trait-like component to our self-esteem (Trzesniewski, Donnellan & Robins, 2003, as well as a more flexible and shifting aspect to the construct (Baumeister & Leary, 2000; Butler, Hokanson & Flynn, 1994) In their “Sociometer theory of self-esteem”, Leary & Baumeister (2000), posits a dynamic and responsive “state” self-esteem in addition to the seemingly stable, “trait” self-esteem. Whereas the trait self-esteem is based on long term self-evaluation, consisting of both an affective and a cognitive component, the state self-esteem is thought to represent a

person's more fluctuating self-evaluation specific to a given situation (Leary & Baumeister, 2000). In order to aid the individual at obtaining acceptance the system has to evoke a response in advance to rejection actually occurring. One immediate and one long term system is thought to be at works. The long term system corresponds to trait self-esteem, and monitors the person's general relational evaluation, meaning whether the person is one who generally would be desired as a partner, friend or member of a group. State self-esteem corresponding to immediate evaluations monitors the social environment looking for cues to rejection or acceptance. The system is also thought to respond with affective and motivational activation when cues of possible rejection is detected. In the literature on self-esteem the terms "global" self-esteem and "domain-specific" self-esteem are also used. Whereas global self-esteem is referred to as "*heavily invested with feelings about the self*" (Baumeister et al., 2003, p.6), domain-specific self-esteem is thought of as self-related thoughts and direct affective reactions in specific situations. Kirkpatrick & Ellis (2001) argues that different facets of our self-esteem monitors different areas of our social life and our relationships. They question whether the sociometer is a single gauge, monitoring all aspects of social inclusion across all settings? Or if our self-esteem is a more complex construct which reflects several different gauges monitoring social desirability in different settings and kinds of relationships? By likening the sociometer to a gauge monitoring a car engine, they argue that in the same way no one single gauge can keep track of all functions of the engine, the sociometer is unlikely to be capable of monitoring all kinds, and aspects of social relationships. Kirkpatrick and Ellis (2001) suggests that our sociometer has different parts that are sensitive to specific settings, types of relationships and conditions. Measuring every aspect of social belonging along an inclusion-exclusion continuum may be too rough to effectively guide behavior. Self-esteem in different situations, and connected to different characteristics such as physical appearance, intellectual ability and athletic ability could represent somewhat independent aspects of self-esteem. Our sociometer should be able to monitor different aspects of social functioning and desirability in order to effectively guide behavior and maximize inclusive fitness (Kirkpatrick & Ellis, 2001). Friendships, ingroup status, dominance, intersexual attractiveness, family and mating relationships are some examples of relations important for survival and reproductive success. Brace & Guy (2012) explains it by saying that even though the output from the sociometer, our self-esteem, may be as a single state of awareness, experience or "feeling", it's actually a composite constructed by input from multiple sociometers. Given that individuals with high self-esteem represent a heterogeneous group, it seems that global self-esteem has poor predictive power regarding people's abilities and characteristics (Baumeister

et al. 2003). An overall perception of the self as being capable, valuable and liked won't necessarily predict performance on say a biathlon or a math test. Baumeister et al. (2003) point out that what we base our self-esteem on differ between people and corresponds to what we are interested in and deem personally important.

### **Mate value**

Mate value has, amongst other definitions, been defined as “the total value of the characteristics that an individual possesses in terms of the potential contribution to his or her mate’s reproductive success” (Waynforth, 2001, p. 207). While some researchers emphasize the importance of genetic fitness and observable characteristics, for mate value (Kirsner, Figueredo & Jacobs, 2003) others argue that mate has value self-evaluating and intrinsic aspects (Fisher et al., 2008). Fisher et al. (2008) propose a definition of mate value as “the total sum of characteristics an individual possesses at a given moment and within a particular context that impacts on their ability to successfully find, attract and retain a mate” (p.157). Mate value is essentially the evaluation of how attractive a person would be for mating (Brase & Guy, 2003). This will be affected by attributes such as age, physical appearance, personality and various demographic factors (Buss, 1999). From an evolutionary perspective the mate value is a construct reflecting the characteristics desired in the opposite sex. These characteristics and how good you are at attracting potential mating partners intuitively should correlate with how desirable you are for social inclusion. Therefore, one could assume a positive correlation between attractiveness or mate value and self-esteem. Forming romantic relationships facilitates both mating/reproduction and a meaningful, supportive relationship to another adult. In a population where people are of reproductive age, and on search for a romantic or sexual partner, such as in a student population, this should be especially evident.

Although not directly related to mate value, relationship status may be a significant variable both when considering subjective mate value, and the value one signals to the surroundings. Indeed, Brase and Guy (2003) found a significant effect of marital status on mate value, with married people reporting a heightened mate value. This might reflect that involvement in a committed romantic relationship serves as a powerful cue to mate value, specifically long-term mate value. Being in a relationships signals that the individual possesses characteristics desired in a relationship to others, but may also through the sociometer give the individual a subjective feeling of mate value.

In light of romantic or sexual relationships, being rejected will, by definition, violate the desire for accept, and should therefore be expected to lower self-esteem. On the other hand, being hit on should evoke the opposite response. In their article on Sociometer theory from 2000, Leary and Baumeister refer to a study by Baumeister, Wotman and Stillwell (1993), where they found accounts of unrequited love and indications of romantic rejection to be of negative influence on self-esteem, using autobiographical narratives about being rejected or becoming romantic partners. Social acceptance and desirability are essential for reproduction, as well as critical for survival.

### **Sexual strategies theory**

Trivers (1972) was an early proponent of the asymmetry between the sexes minimal parental investment being the key influence on preferred mating strategy. Women being the sex that has to invest the biggest amount of time and resources in the offspring will consequently be the most selective sex in terms of mate selection. Because the biological costs are bigger for women, including the possibility of nine months pregnancy, birth and lactation, they are the sex most carefully managing their sexuality (Trivers, 1972). Men, being the less investing sex, will compete for access to women. Sexual strategies theory (Buss & Schmitt, 1993) is a more elaborate model for explaining gender differences in mating preferences. SST makes a distinction between two major forms of sexual strategies, long-term and short-term sexual strategies. The theory predict that both women and men have evolved short- and long-term mating strategies, and that which strategy provides the individual with the greatest reproductive success, relative to cost, is the deciding factor for which strategy an individual will devote the greatest amount of resources to. This depends heavily on sex, but is also influenced by parental influences, cultural influences, sex ration in the population and personal attributes such as mate value (Gangestad, Simpson, 2000). These variables are affecting either the availability of possible mates, sexual attitudes or both.

Buss and Schmitt's (1993) sexual strategies theory is one of the most influential contributions to evolutionary psychology. If we want to explain why men and women behave differently in the pursuit of sexual and romantic relationships SST provides solid framework for understanding. By looking at human behavior it seems unlikely to conclude that lifelong, monogamous relationships represent the only human mating strategy. Data on hookups and extramarital sex tells us that humans will mate outside a committed relationship (Garcia, Reiber, Massey Merriwether, 2012; Blow, Hartnett, 2005). From an evolutionary perspective it's assumed that natural selection has produces flexible mating strategies in humans so that

we can adapt our behavior in order to maximize reproductive success. Long-term strategies refer to emotionally committed, monogamous relationships which are built on an expectation of staying together over a longer period of time, possibly for life. Short-term strategies, on the other hand, refers to sexual encounters without any explicit expectation of any long-term commitment or emotional investment. Hookups, one-night stands, friends with benefits etc. are considered short-term sexual relationships.

Distinct reproductive challenges following differences in reproductive biology, are thought to explain gender differences in sexual preferences (Buss, 1998). For men, the limiting factor for number of viable offspring's are the number of women which he can successfully fertilize. For women, on the other hand the limiting factor will be how many successful pregnancies, childbirths and periods of lactation she can complete. Whereas a man in theory can father the same number of offspring's a year, as the number of women he can sleep with within one year, a woman will only be able to give birth approximately once a year. Given that the limiting factor for women's reproductive success is number of successful pregnancies and periods of lactation, whereas the limiting factor for men is how many women he can mate with, the expectation is that men will devote substantially more time and resources to short term mating then will women. Substantial amounts of data and research support SST's predictions that men to a larger degree than women have a preference for short-term mating. In a large study on 48 nations, investigating sexual strategy preference, Schmitt (2005) found that sex differences were generally large in all nations included. Men showed the greatest preference for short-term mating strategies across all cultures included, although the size of the sex-effect seemed to be affected by political and economic gender equality and how demanding the reproductive environment is (Schmitt, 2005).

One of the sociometers specialized segments would correspond to sexual or romantic relations. No doubt, these kinds of relationships are essential from a reproductive perspective, and therefore according to evolutionary psychology, should play a central role for self-esteem. It might be reasonable to expect that separate sociometers work to monitor how well one is doing with regards to a short-term mating strategy, and success with regards to a long-term mating strategy. Here, Kirkpatrick and Ellis (2001) makes a connection between the sociometer theory and SST. Humans are thought to engage in both short- and long-term mating as long as both of these strategies give reproductive success, depending on individual and environmental variables. Success with either strategy is not necessarily related to the other, and as mentioned individuals vary with respect to allocation of time and resources. As mentioned men show a greater preference for short term strategies than do women. Possibly,

short-term mating success or failure may have a greater effect in the self-esteem for men than for women. Conversely, long-term success or failure might affect women's self-esteem more than men's. However, this is still an empirical question.

The degree to which one views oneself as an attractive partner has been referred to as self-perceived mate value (Haselton, 2003). In context of SST, short- and long-term mate value is thought to reflect how attractive individuals deem themselves in respectively a short-term or long-term dating context. Drawing the line to attractiveness or mate value, one could hypothesize that global self-esteem might be more strongly associated with short-term mate value for men than for women.

### **Sociosexuality**

While SST focuses on sex and environmental variables when explaining variance in sexual strategy preferences, the concept of sociosexuality adds individual differences to the equation. People differ in their attitudes towards uncommitted sex and their desire for, and engagement in such behavior. These differences are thought to reflect people's preference for casual sex. Sociosexuality is defined, by Simpson and Gangestad (1991), as one's orientation toward uncommitted sexual activity, as measured with the "Sociosexual Orientation Inventory (SOI; Simpson & Gangestad, 1991) or the "Sociosexual Orientation Inventory – Revised, (SOI-R; Penke & Asendorpf, 2008). Put another way, sociosexuality indicates an individual's preference for a short-term mating strategy. A higher sociosexuality indicates a bigger investment of time and resources in pursuing short term strategies. It is important to note that a lower sociosexuality score does not necessarily reflect a greater preference for long term mating strategies. In accordance with predictions from SST, previous studies have found reliable sex differences on the sociosexuality (e.g., Lippa, 2009; Schmitt, 2005). The research indicate that the most substantial sex difference lie in people's desire for and attitudes towards uncommitted sex. While actual behavior shows small to no sex difference, attitudes show moderate sex differences, and desire show moderate to large sex differences (Arnocky, Woodruff, & Schmitt, 2016; Penke & Asendorpf, 2008, Schmitt, 2005). Social constructivist/role theories hold that these sex differences are a result of socialization and conformity to traditional gender roles in a society (Eagly & Wood, 1999). However, evidence suggest that sex differences in sociosexuality holds true in highly egalitarian and sexually liberal societies as well. In a study conducted on a Norwegian student population, investigating jealousy Bendixen, Kennair and Buss (2015) found that men found that men reported significantly higher scores than women on SOI-R (Penke & Asendorpf, 2008).

Similar findings was done by Kennair, Bendixen and Buss (2016), using the SOI-R (Penke & Asendorpf, 2008) in their study on sexual regret. With Norway being ranked one of the top countries on the *Global Gender Gap Report* (World Economic Forum, 2016), these findings would support sexual strategies theory's prediction that men and women have evolved preferences for sexual strategies.

### **The Current Study**

In the current study the aim was to investigate the relationship between self-esteem and experiences tied to sexual interest and dating, primarily in a short-term mating/dating context. Are differences in self-esteem associated with experiences tied to short term dating, sociosexuality and self-perceived mate value? Do these predictors differ in their effect for men and women, singles and partnered? The data were collected through two separate surveys of university students, asking about their most recent opposite-sex encounters, using self-reports from naturalistic dating contexts.

Casual sexual relationships have become more frequent recent years, and the increasing trend, especially among student populations, has been named the "Hookup culture" (Garcia, Reiber, Massey, Merriwether, 2012). Social events involving alcohol consumption, such as parties and going out, has been the primary arena for hook-ups and casual sexual encounters for a relatively long time (Garcia et al., 2012). Although some meet their long-term romantic partners through parties or hook-ups, one expects that this context primarily favors a short-term strategy. Therefore, in the present study, participants were asked about their experiences with sexual experiences, sexual interest and hook-ups from parties and going out.

The sociometer theory predicts that our self-esteem monitors our social "value" or desirability. If this is true one should expect that positive dating experiences, such as being hit on, should contribute to increased self-esteem. Sociometer theory also posits that our self-esteem is more sensitive to indications of lack of desirability. Following this, experiences that might indicate lesser "social value" should have a negative effect on self-esteem. We expect that the balance between being hit on and hitting on others will signal desirability or indirect rejection, and therefore affect self-esteem. We therefore made the following hypothesis (H1): The ratio between number of times being hit on during the last month, and number of tried hits during the last month will show a positive association with self-esteem. Low rates of being hit on and having many tried hits may be an indirect indication of rejection. In accordance with sociometer theory the experience of being rejected is thought to have a

negative effect on self-esteem (Leary & Baumeister, 2002; Williams, 2007). Sexual strategies theory argues that short-term mating is more important for men's reproductive success than for women's reproductive success. Men tend to pursue a short-term mating strategy to a greater extent than women, and they devote more resources pursuing short-term sexual relationships. Experiences in the context of short-term dating and mating might therefore weigh heavier on men's self-esteem than on women's self-esteem. We therefore formed the second hypothesis (H2): The association from Hypothesis 1, will be stronger for men than for women.

Mate value is expected to be associated with self-esteem. In the present study we asked participants to rate their short-term mate value, their long-term mate value and their physical attractiveness. With this study being focused on short-term mating/dating contexts, short-term and physical mate value will be of most interest. Considering oneself an attractive short-term partner does not imply that one also views oneself as an attractive long-term partner, and vice versa. Taking sexual strategies theory into consideration short-term mate value and long-term mate value will be two separate constructs following the discrepancies between the traits one would seek in a partner when pursuing a short term versus a long-term sexual relationship. Due to the fact that men to a greater extent than women pursue a short-term mating strategy, one might expect men's self-esteem to be more strongly correlated with short term mate value, than women's self-esteem. Measures of SOI, the preference for short-term mating, has been showed to correlate with mate value. Clarke (2006) found that men's mate value was associated with higher sociosexuality, whereas the association between women's mate value and SOI scores are more ambiguous. If higher SOI is associated with greater mate value for men, but not for women, this could, indeed, indicate that short-term mating is more important for men's self-esteem than for women's self-esteem. We therefore hypothesize that (H3): Self-esteem is associated with short-term mate value, and that (H4): The association between short-term mate value and self-esteem will be stronger for men than for women.

Dion, Berscheid and Walster (1972) emphasize that a person's physical appearance (i.e., level of attractiveness) is the characteristic most accessible to others in social interaction. Physical attractiveness, being socially desirable (Lemay, Clark & Greenberg, 2010) should lead to positive social experiences and indicate to the individual that he or she is desired. We therefore hypothesize that (H5): Physical mate value/physical attractiveness will have a positive effect on self-esteem. We expect this effect be similar for men and women. Finally, informed by the previous research on self-esteem and gender, we generally expect that men



will report somewhat higher levels of self-esteem than women (Kling Hyde, Showers & Buswell, 1999).

## **Method**

### **Participants and Procedures**

The data analyzed in this study were obtained from two different samples, recruited at different times. All participants (Study 1 and Study 2) were undergraduate students at the Norwegian University of Science and Technology. They were recruited while attending lectures in Social and Natural sciences. They were informed that participation was completely anonymous and voluntary. The respondents did not receive any course credit or incentives for participating.

Study 1 was conducted in the spring semester of 2015. The final sample covered 228 heterosexual men (84) and women (144) between the ages of 20-29 years old. The average age was 23.3 years for men, and 22.1 years for women. Of the total sample 115 reported being single (49 men, 66 women) and 113 reported having a partner (35 men, 78 women). In order to investigate whether the general pattern of results from Study 1 would replicate in a context with increased chances of sexual encounters and a greater abundance of mating opportunities, a second study was conducted. Study 2 was conducted in the end of August, during the university's introduction week. This period is usually characterized by students getting to know each other through parties, organized freshmen rituals and mentor groups. The sample was recruited in the same manner as in Study 1 and covered of 213 heterosexual men (78) and women (135) aged between 19 and 30 years old. The average age was 22.2 years for men, and 21.6 years for women. More than half of the students reported being single (118) with 47 men and 71 women, while 30 men and 64 women reported being partnered. More details on the samples can be found in Bendixen, Kennair, Biegler, and Haselton (2019).

All questionnaires were scanned electronically.

### **Measurements**

The questionnaire contains questions about background information such as gender, age, relationship status and sexual orientation. It further measures sociosexuality, self-perceived mate value (long, short and physical), self-esteem and experiences with dating and partying.

**Self-esteem.** Self-esteem was assessed using four items from Rosenberg Self-esteem Scale (1965). The scale was translated to Norwegian and adopted for adolescents by Alsaker & Olweus (1986). This is a self-report measure asking respondents to indicate how strongly they agree or disagree with each statement on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The four items read: “I certainly feel useless at times”, “I feel that I’m a person of worth, at least on an equal plane with others”, “All in all, I am inclined to feel that I am a failure” and “On the whole, I am satisfied with myself”. The items were internally consistent ( $\alpha = 0.81$ ) and is thought to reflection individual’s global self-esteem. The scale is constructed to be able to rank people along a single continuum and is therefore unidimensional (Rosenberg, 1965).

**Sociosexual orientation.** Sociosexual orientation was measured using the Norwegian translation of the revised Sociosexual Orientation Inventory (SOI-R; Penke & Asendorpf, 2008). The Norwegian version is translated by Mons Bendixen, Leif Edward Ottesen Kennair and Trond Viggo Grøntvedt. Simpson & Gangestad (1991) developed a measure for individual differences in sociosexuality, the “Sociosexual orientation inventory”. The scale has later been further advanced and revised by Penke & Asendorpf in 2008, resulting in the sociosexual orientation inventory – revised (SOI-R). The SOI-R assess people’s behavior, attitudes and desire towards casual, uncommitted sex through self-report. Score on the SOI-R is thought to reflect the degree to which an individual pursues a short-term mating strategy. Firstly, individuals high on SOI-desire report experiencing more sexual fantasies and a greater wish for higher numbers of sexual partners. SOI-desire also reflect the degree to which an individual experience sexual interest in people, outside the frame of a romantically committed relationship. Penke and Asendorpf (2008) therefor describes this as a motivational state within the individual. Second, SOI-behavior reflects the degree to which the individual has a promiscuous behavioral tendency. People scoring high on the behavior component report higher numbers of sexual partners, and casual sexual encounters, whereas individuals with low scores report a more restricted sexual behavior. The score is thought to indicate to what extent the individual allocates mating effort with regards to short versus long term mating. Finally, the SOI attitudes reflect the individual’s evaluative disposition towards sexual activity without romantic commitment. How does the individual feel and think about casual or uncommitted sex? The SOI-R is a 9-item self-report measure with three subscales corresponding to three different facets of sociosexuality. The three subscales are attitudes, behavior and desire. SOI-attitudes ( $\alpha = 0.85$ ) taps the individual’s thoughts and beliefs about

uncommitted sexual activity. SOI-behavior ( $\alpha = 0.87$ ) asks about uncommitted sexual activity in the past. And SOI-desire ( $\alpha = 0.87$ ) reflects an individual's desire for, or interest in uncommitted sex. The respondents are asked to mark their answer along a 9-point Likert scale, and higher scores are thought to reflect a more unrestricted sociosexual orientation. By computing the mean of the scores on the 9-items, a global sociosexual orientation score is obtained ( $\alpha = 0.87$ ). In this paper however, the scores of the subscales will be used and reported separately (unless otherwise specified).

**Mate value.** Mate value was measured with the two global items used by Haselton (2003): (1) "Compared with other women [men] you know who are about your age, how desirable do men [women] find you as a long-term mate or marriage partner?" and (2) "Compared with other women [men] you know who are about your age, how desirable do men [women] find you as a short-term or casual sex partner? In addition, participants rated their physical attractiveness on three different items. The three items asked the participants how generally physically attractive they perceived themselves to be, how attractive they perceived their face to be, and how attractive they perceived their body to be. Participants were asked to give their response on a 7-point response scale with the anchors 1 (*Well below average*) and 7 (*Well above average*) for each mate value question. Scores on the three physical attractiveness items were aggregated.

**Dating experiences.** The participant's dating experiences were measured with six questions. Participants were asked to report (1) how frequently they experience being hit on when they are out partying, (2) how often they experienced being hit on by a person of the opposite sex the last month, and (3) how often they hit on someone of the opposite sex the last month. Further they are asked to report (4) how many times during the last year they have experienced sexual harassment by people of the opposite sex, and (5) how often they have experiences clear sexual rejection by a person of the opposite sex. The response format was open ended<sup>1</sup>, for all questions except the question of how frequent they experience being hit on (1), which was answered using a 5-point scale with the following responses 1 (*never*), 2 (*rarely*), 3 (*sometimes*), 4 (*often*) and 5 (*always*). To reduce the effect of extreme scores on the questions using the open ended response format, scores were categorized. For variables asking participants about number of times being hit on (variable 2), and number of tried hits (variable 3) scores were categorized as follows (0, 5): 0 = 0, 1 = 1, 2 = 2, 3 = 3, 4 = 4, 5 and more = 5. For the variables asking participants about number of times being sexually

harassed (variable 4) and number of times experiencing clear sexual rejection (variable 5), scores were categorized as (0, 4) 0 = 0, 1 = 1, 2 = 2, 3 = 3, 4 and more = 4.

**Effort-payoff.** In order to indicate the degree of payoff relative to effort the participants. A variable to indicate effort relative to payoff was constructed by subtracting number of tried hits from number of times being hit on. The variable is thought to reflect feedback the individual receives about sexual attractiveness or desirability. More specifically the variable tells us how much sexual interest an individual has to show in the opposite sex, relative to how much sexual attention they receive.

### **Statistical Analysis**

A three-way (2 x 2 x 2) ANOVA was applied to the data in order to investigate the differences between scores for groupings based on sex (women vs. men), relationship status (single vs. partnered), and study (Study 1 vs. Study 2). The analysis provides output based on three main effects of the fixed variables, as well as two-ways interaction plus a three-way interaction. Effect sizes are reported as Partial Eta Squared.

A bivariate correlational analysis (Pearson's  $r$ ) was conducted, looking at correlations between the outcome variables and the assumed predictors. The analysis was conducted for the total sample (see Result section), and for four main groups, women Study 1, men Study 1, women Study 2 and men Study 2

Several three-way ANCOVAs were conducted controlling for one covariate at a time, looking for significant effects on self-esteem. Fixed factors were sex (men and women), and relationship status (singles and partnered). Covariates that showed significant effects were then included in another ANCOVA to see which variables help predict self-esteem.

## Results

### Sex, Relationship Status, and Study Differences

Women reported a higher average Frequency of being hit on than men (see Table 1). The effect ( $\eta_p^2$ ) of gender on experienced frequency reported, was large and significant (see Table 2). There was a weak interaction effect of Sex and Study. Men's scores in Study 1 was somewhat higher than in Study 2, whereas women's scores are similar across studies. Women reported higher scores on Number of times being hit on during the last month, than men did. The effect was small. On this variable there was also a small effect of Relationship status, with singles reporting being hit on more often than partnered, and a small effect of Study. Participants in Study 2 experienced being hit on more than those in Study 1. When asked about Number of tried hits last month, men reported the highest numbers. The effect was small. Relationship status had a strong effect on Number of tried hits, with singles reporting the highest frequency. There was also a small effect of Study, and participants in Study 2 had most tried hits. A small, but significant interaction between Sex and Relationship status was present. Men's behavior was more affected by Relationship status than women's. Sex has a moderate effect on the Effort-payoff variable. Men report a lower mean score than women, which indicates that men have to put up a greater effort than women, in order to obtain the same amount of success. The effect of Relationship status on Effort-payoff is small. Partnered participants report higher scores than singles. The interaction effect between Sex and Relationship status is somewhat bigger, but still considered small. Partnered men reported a higher score than single men, while women reported approximately the same scores independent of status. Relationship status also interacts with Study to produce a small effect where partnered reported their highest scores in Study 2, while singles reported their highest scores in Study 1. There is a moderate to strong sex-effect on Number of times experiencing unwanted sexual interest. Women reported experiencing this more often than men. There is also a weak to moderate sex-effect on reported number of times being rejected. Here, men reported the highest scores. A weak effect of Relationship status is also present, as well as a weak effect of Study. Singles reported a higher frequency of rejection than partnered, so did participants in Study 2 compared to Study 1. Looking at Sociosexuality, and the behavior component, the only significant effect was for Relationship status. There is a weak effect where singles report higher scores than partnered. On the Attitude component there is a moderate effect of Sex. Men reported higher scores than women. There is also a small effect of Study with higher scores in Study 2 .

Scores on Sociosexual desire showed a strong effect of Sex. Men reported higher Sociosexual desire than women. Status also has a moderate effect on Sociosexual desire, and reflect singles reporting higher scores than partnered. There was a small interaction effect between Sex and Status where the difference between single and partnered women being greater than the difference between the single and partnered men. Status and Study also interact to produce a small effect. Singles reported higher scores in Study 1 compared to Study 2, whereas partnered reported higher scores in Study 2 compared to Study 1.

For Self-esteem there are two main effects in the study. One was provided by the participants Sex and the other by Relationship status. The sex-effect was small and reflect that men reported slightly higher Self-esteem than women. The effect provided by Relationship status was also small and reflect that partnered participants reported slightly higher self-esteem than singles.

Scores on Physical attractiveness were subject to a small effect of Sex. Men rated themselves somewhat more favorably than women. There was also an effect of Relationship status which had partnered rating themselves higher than the singles did. A small interaction effect of Status and Study reflected that singles reported higher Physical attractiveness in Study 1 compared to Study 2, whereas partnered reported higher scores in Study 2 compared to Study 1.

Self-reported Long-term mate value showed a small effect of Sex. Men reported slightly higher scores than women. Relationship status also had an effect on Long-term mate value. The effect was small, and reflect that partnered participants rated themselves somewhat higher than the singles did.

PSYPRO4700

Table 1. Means and SDs for Woman and Men, Singles and Partnered Study 1 and Study 2

Variable	Woman (N=279)				Men (N=162)			
	Single		Partnered		Single		Partnered	
	Study 1	Study 2	Study 1	Study 2	Study 1	Study 2	Study 1	Study 2
How frequently being hit on	<i>M (SD)</i> 3.32 (0.73)	<i>M(SD)</i> 3.23 (0.81)	<i>M(SD)</i> 3.04 (0.75)	<i>M(SD)</i> 3.06 (0.75)	<i>M(SD)</i> 2.45 (0.94)	<i>M(SD)</i> 2.35 (0.82)	<i>M(SD)</i> 2.66 (0.68)	<i>M(SD)</i> 2.37 (0.72)
Number of times being hit on <sup>1</sup>	2.18 (1.50)	2.59 (1.98)	1.14 (1.43)	1.83 (1.46)	1.35 (1.61)	1.49 (1.57)	0.91 (1.22)	1.43 (1.89)
Number of tried hits <sup>1</sup>	0.52 (0.75)	0.89 (1.35)	0.03 (0.16)	0.02 (0.13)	1.10 (1.58)	1.68 (1.95)	0.11 (.40)	0.13 (0.73)
Effort-payoff <sup>1</sup>	1.67 (1.27)	1.70 (1.53)	1.12 (1.38)	1.81 (1.47)	0.24 (1.70)	-0.19 (1.68)	0.80 (1.13)	1.30 (1.99)
Number of times being harassed <sup>1</sup>	1.94 (1.46)	1.93 (1.62)	1.64 (1.51)	2.25 (1.51)	0.82 (1.42)	0.57 (1.08)	0.74 (1.31)	0.87 (1.48)
Number of times being rejected <sup>1</sup>	0.44 (0.86)	0.63 (1.16)	0.18 (0.68)	0.30 (0.83)	0.94 (1.54)	0.98 (1.41)	0.37 (0.80)	1.03 (1.54)
SOI (Behavior)	3.18 (2.01)	3.33 (1.95)	2.33 (1.33)	2.73 (1.51)	3.18 (2.28)	2.97 (2.10)	2.50 (1.43)	3.12 (1.97)
SOI (Attitudes)	5.13 (2.28)	5.99 (2.34)	4.67 (2.29)	5.64 (2.18)	6.08 (2.35)	6.55 (2.01)	6.24 (2.03)	6.66 (2.09)
SOI (Desire)	4.36 (1.76)	3.93 (1.90)	2.26 (1.22)	2.58 (1.15)	5.58 (1.69)	4.76 (1.91)	4.14 (1.81)	5.10 (1.98)
Self-Esteem	3.59 (0.78)	3.52 (0.93)	3.74 (0.71)	3.80 (0.83)	3.78 (0.82)	3.60 (0.80)	3.90 (0.72)	4.04 (0.60)
Mate Value (physical attractiveness)	4.33 (1.00)	4.10 (1.22)	4.39 (0.85)	4.47 (0.88)	4.76 (1.04)	4.27 (1.24)	4.69 (0.98)	5.10 (0.92)
Mate Value (Long term)	5.05 (1.43)	4.82 (1.45)	5.61 (0.92)	5.50 (1.17)	5.67 (1.10)	5.19 (1.25)	5.43 (1.01)	5.87 (1.25)
Mate Value (Short term)	3.86 (1.47)	4.15 (1.68)	3.83 (1.57)	3.89 (1.53)	3.87 (1.67)	3.51 (1.69)	4.11 (1.21)	4.07 (1.80)

Note.<sup>1</sup> Scores are categorized.

PSYPRO4700

Table 2. *F-values, p-values and  $\eta^2$ -values for 2 x 2 x 2 ANOVA (sex, status and study)*

Variable	Sex	Status	Study	Sex x Status	Sex x Study	Status x study
How frequently being hit on	$F=80.31, p<.001$ $\eta^2=.158$	$F < 1$	$F=2.15, p=.143,$	$F=4.55, p=.034$ $\eta^2=.010$	$F=1.06, p=.304$	$F < 1$
Number of times being hit on <sup>1</sup>	$F=15.85, p<.001$ $\eta^2=.035$	$F=12.73, p<.001$ $\eta^2=.029$	$F=7.49, p=.006$ $\eta^2=.017$	$F=4.19, p=.041$ $\eta^2=.010$	$F < 1$	$F=1.04, p=.309$
Number of tried hits <sup>1</sup>	$F=13.97, p<.001$ $\eta^2=.031$	$F=84.34, p<.001$ $\eta^2=.163$	$F=5.12, p=.024$ $\eta^2=.012$	$F=7.66, p=.006$ $\eta^2=.017$	$F < 1$	$F=4.93, p=.027,$ $\eta^2=.011$
Effort- pay off <sup>1</sup>	$F=47.10, p<.001$ $\eta^2=.098$	$F=7.05, p=.008,$ $\eta^2=.016$	$F=1.75, p=.187$	$F=16.99, p=.000$ $\eta^2=.038$	$F=1.23, p=.267$	$F=6.98, p=.009$ $\eta^2=.016$
Number of times being harassed <sup>2</sup>	$F=65.84, p<.001$ $\eta^2=.133$	$F < 1$	$F < 1$	$F < 1$	$F=1.53, p=.217$	$F=2.84, p=.093$
Number of times being rejected <sup>2</sup>	$F=16.26, p<.001$ $\eta^2=.036$	$F=6.36, p=.012$ $\eta^2=.015$	$F=5.34, p=.021$ $\eta^2=.012$	$F < 1$	$F < 1$	$F=1.53, p=.217$
SOI (Behavior)	$F < 1$	$F=7.21, p=.008$ $\eta^2=.016$	$F=1.71, p=.192$	$F=1.58, p=.210$	$F < 1$	$F=2.18, p=.140$
SOI (Attitudes)	$F=20.90, p<.001$ $\eta^2=.046$	$F < 1$	$F=9.21, p=.003$ $\eta^2=.021$	$F=1.45, p=.229$	$F=1.08, p=.300$	$F < 1$
SOI (Desire)	$F=93.64, p<.001$ $\eta^2=.179$	$F=46.41, p<.001$ $\eta^2=.097$	$F < 1$	$F=12.43, p<.001$ $\eta^2=.028$	$F < 1$	$F=14.30, p<.001$ $\eta^2=.032$
Self-Esteem	$F=4.42, p=.036$ $\eta^2=.010$	$F=9.68, p=.002$ $\eta^2=.022$	$F < 1$	$F < 1$	$F < 1$	$F=1.91, p=.167$
Mate Value (physical attractiveness)	$F=13.85, p<.001$ $\eta^2=.031$	$F=8.64, p=.003$ $\eta^2=.020$	$F < 1$	$F < 1$	$F < 1$	$F=8.95, p=.003$ $\eta^2=.020$
Mate Value (Long term)	$F=6.28, p=.013$ $\eta^2=.014$	$F=12.79, p<.001$ $\eta^2=.029$	$F < 1$	$F=2.96, p=.086$	$F < 1$	$F=4.79, p=.029$ $\eta^2=.011$
Mate Value (Short term)	$F < 1$	$F < 1$	$F < 1$	$F=2.94, p=.087$	$F=1.43, p=.232$	$F < 1$

Note. Participants were asked to report number of times during the last month<sup>1</sup>, or number of times last year<sup>2</sup>. All  $p$ -values<sup>3</sup> < 0.001 are reported as  $p < 0.001$ .



## Correlations

Overall Self-esteem was moderately related to Physical attractiveness  $r(439) = 0.40, p < 0.001$ . Self-esteem also correlated moderately with Long-term mate value  $r(439) = 0.32, p < 0.001$ , and showed a weak association with Short term-mate value  $r(437) = 0.16, p < 0.001$ , when all groups (men, women, singles, partnered, Study 1 and Study 2) were included. Physical attractiveness covaried with both Long-term mate value  $r(439) = 0.41, p < 0.001$ , and Short-term mate value  $r(439) = 0.45, p < 0.000$ . There was no association between Long-term mate value and Short-mate value. Self-esteem showed a weak relationship with Effort-payoff,  $r(439) = 0.12, p = 0.011$ , overall. The association was stronger for men  $r(161) = 0.28, p < 0.001$  than for women  $r(278) = 0.08, p = 0.165$ . Effort-payoff, further, showed a weak relationship with Physical attractiveness  $r(439) = 0.15, p = 0.002$  and Short-term mate value  $r(439) = 0.20, p < 0.001$ . Number of times being hit on during the last month was positively associated with Self-esteem  $r(439) = 0.11, p = 0.017$ , while Number of tried hits during the last month showed no association with Self-esteem  $r(439) = -0.01, ns$ .

There were no associations between the Sociosexuality measures and Self-esteem. However, the Mate value (short-term, long-term, and physical attractiveness) measures correlated with the Sociosexuality components. Physical attractiveness correlated with Sociosexual desire  $r(439) = 0.18, p < 0.001$ , Sociosexual attitudes  $r(439) = 0.12, p = 0.014$ , and sociosexual behavior  $r(439) = 0.23, p < 0.001$ . Short-term mate value also showed positive covariations with Sociosexuality. Short-term mate value showed a weak correlation with Sociosexual desire  $r(439) = 0.20, p < 0.001$ , a strong correlation with Sociosexual attitudes  $r(439) = 0.43, p < 0.001$ , and a strong correlation with Sociosexual behavior  $r(439) = 0.43, p < 0.001$ . While these were all positive associations, Long-term mate value showed a weak, negative relationships with Sociosexual attitudes  $r(439) = -0.13, p = 0.009$ , and Sociosexual behavior  $r(439) = -0.14, p = 0.004$ .

As expected, the three components of the Sociosexuality inventory was correlated. Sociosexual desire showed a moderate relation to both Sociosexual attitudes  $r(439) = 0.44, p < 0.000$ , and Sociosexual behavior  $r(439) = 0.40, p < 0.000$ . The attitude component correlated strongly with Sociosexual behavior  $r(439) = 0.55, p < 0.000$ . Sociosexuality was also related to the Number of times being hit on, and Number of tried hits. Number of times being hit on during the last month correlated moderately with Sociosexual behavior  $r(439) = 0.36, p < 0.000$ , and showed the same association with Sociosexual attitudes and Sociosexual desire, both  $r(439) = 0.23, p < 0.001$ . Number of tried hits during the last month correlated moderately with all three components, Sociosexual behavior  $r(439) = 0.39, p < 0.000$ ,

Sociosexual attitudes  $r(439) = 0.30, p < 0.000$  and Sociosexual desire  $r(439) = 0.44, p < 0.000$ . The Effort-payoff variable did not, however, correlate significantly with any of the Sociosexual components. Sociosexual behavior and Effort payoff showed a correlation of  $r(439) = 0.09, p = 0.069$ , Sociosexual attitudes and Effort-payoff showed a correlation of  $r(439) = 0.02, ns$ . Finally, Sociosexual desire and Effort-payoff showed a correlation of  $r(439) = -.08, p = ns$ .

See Appendix A for correlations split on sex and study.

### **Analysis of covariates**

The ANCOVA including the effect of the covariate Effort-payoff showed a significant main effect on Self-esteem over and above that of Sex and Relationship status,  $F(1,439) = 9.44, p = 0.002, \eta_p^2 = 0.021$ . There were no interaction effects. When the effect of Effort-payoff was accounted for, men still reported higher scores on Self-esteem than women,  $F(1,439) = 5.12, p = 0.024, \eta_p^2 = 0.012$ . The effect of Relationship status was not affected by the inclusion of Effort-payoff,  $F(1,439) = 7.19, p = 0.008, \eta_p^2 = 0.016$ . When controlling for the covariate Number of times being hit on last month, there was a small main effect on Self-esteem,  $F(1,439) = 12.46, p < 0.000, \eta_p^2 = 0.028$ . There were no significant interaction effects. The sex-effect on Self-esteem remains small, but significant when controlling for Number of times being hit on,  $F(1,439) = 7.52, p = 0.006, \eta_p^2 = 0.017$ , and the effect of Relationship status was of small to moderate size,  $F(1,439) = 13.70, p < 0.001, \eta_p^2 = 0.031$ . Conducting the analysis with Number of tried hits last month as the covariate showed no main effect of the variable. There was a significant covariate x Sex interaction effect,  $F(1,439) = 5.30, p = 0.022, \eta_p^2 = 0.012$ . The association between Number of tried hits last month and Self-esteem was stronger for men than for women  $Z = 2.02, p = 0.044$ . (See Appendix). The effect of Sex was not affected by the covariate,  $F(1,439) = 7.50, p = 0.006, \eta_p^2 = 0.017$ , neither was the effect of Relationship status,  $F(1,439) = 9.54, p = 0.002, \eta_p^2 = 0.022$ . Number of times being rejected during the last year provided no effects when controlled for, neither did Number of times being harassed last year.

The ANCOVA including the effect of Physical attractiveness showed that Physical attractiveness affected Self-esteem over and above that of Sex and Relationship status,  $F(1,439) = 59.59, p < 0.001, \eta_p^2 = 0.121$ . None of the interactions were significant. The results indicated no significant effects, of neither Sex nor Relationship status, on Self-esteem when controlling for Physical attractiveness. When controlling for Long-term mate value,

there was a moderate main effect of the covariate,  $F(1,439) = 40.41, p < 0.001, \eta_p^2 = 0.086$ , and no significant interaction effects. There was no significant effects of the fixed factors sex and Relationship status when controlling for Long-term mate value. As a covariate Short-term mate value showed a small effect on Self-esteem,  $F(1,439) = 10.29, p = 0.001, \eta_p^2 = 0.023$ . There were no interaction effects, and no effect of Sex when controlling for Short-term mate value. Relationship status had a small effect on Self-esteem when controlled for Short-term mate value,  $F(1,439) = 5.04, p = 0.025, \eta_p^2 = 0.012$ .

Sociosexual behavior showed no effect on Self-esteem over and above that of Sex and Relationship status. However, there was a significant Sociosexual behavior x Relationship status interaction effect,  $F(1,439) = 7.16, p = 0.008, \eta_p^2 = 0.016$ . Sociosexual behavior was positively associated with Self-esteem for singles ( $r = 0.14$ ), while the association between Sociosexual behavior and Self-esteem was negative for partnered participants ( $r = -0.11$ ),  $Z = 2.61, p = 0.009$ . When controlled for Sociosexual behavior there was a small to moderate main effect of Relationship status,  $F(1,439) = 15.75, p < 0.001, \eta_p^2 = 0.035$ . Neither Sociosexual attitudes or Sociosexual desire showed any main effects, and they did not significantly interact with other variables.

Finally, when both Effort-payoff and Physical attractiveness was included as covariates in the model, Physical attractiveness had a marked effect on Self-esteem,  $F(1,439) = 52.75, p < 0.000, \eta_p^2 = 0.110$ , whereas Effort-payoff evinced a small effect on Self-esteem,  $F(1,439) = 5.54, p = 0.019, \eta_p^2 = 0.013$ . When both covariates were accounted for, the analysis indicate that the effect of Physical attractiveness was moderated by Sex,  $F(1,439) = 4.10, p = 0.044, \eta_p^2 = 0.009$ . However, the bivariate correlations between Physical attractiveness and Self-esteem were not significantly different for men and women,  $Z = 0.24, p = 0.81, ns$ . Effort-payoff also had some moderating effect of Physical attractiveness,  $F(1,439) = 3.98, p = 0.047, \eta_p^2 = 0.009$ . When controlling for Effort-payoff and Physical attractiveness as covariates, there was no effect of Relationship status on Self-esteem. The effect of Sex remained small,  $F(1,439) = 4.75, p = 0.030, \eta_p^2 = 0.011$ .

## Discussion

We wanted to investigate how different experiences related to dating may affect self-esteem. We hypothesized that self-esteem would be affected by experiences tied to sexual interest and rejection in a short-term dating context, and that the effect of such experiences would differ for men and women. Our first hypothesis (H1) predicted that higher rates of

being hit on, relative to rates of hitting on others would have a positive effect on self-esteem. The hypothesis was supported by the data, and indicate that dating experiences have an effect on self-esteem among a sample of Norwegian university students. The effect size is however considered small. In light of Sociometer theory, this finding might be understood as an example of how self-esteem is a reflection of the subconscious evaluation of our relational value. Low rates of being hit on, while having many tried hits may be considered an indirect indication of rejection, whereas experiencing being hit on often while not having to take initiative might signal desirability. Further, we expected that the effect of this ratio would differ for men and women (H2), mainly due to different preferences for sexual strategies. With men's reproductive success being more dependent on success with short-term mating strategies than women's reproductive success (Buss & Schmitt, 1993), experiences tied to pursuing a short-term partner may bear a greater impact on male self-esteem. The bivariate correlation between effort-payoff was indeed somewhat greater for men than for women. However, the difference in effect was not backed by the multivariate analysis, when controlled for relationship status and physical attractiveness. Hence the findings in this study does not support the hypothesis (H2) that men's self-esteem is more strongly affected by experiences in a short-term dating context, than women's self-esteem.

Overall, Short-term mate value had a small effect on Self-esteem for both men and women. This matches the prediction (H3) that self-esteem would be associated with self-reported short-term mate value. On the other hand, the findings do not match the prediction (H4) that the effect would be more pronounced for men than for women. The value we place on ourselves as a short-term partner should somewhat intuitively be associated with self-esteem if sociometer theory is correct. Being an attractive sexual partner would from an evolutionary perspective be a social and competitive advantage.

As expected from the predictions made (H5), Physical attractiveness was associated with Self-esteem. It was the strongest predictor for self-esteem scores included in the study. These findings support the hypothesis that aspects of mate value, in this case physical attractiveness, is associated with self-esteem. The effect is similar for men and women. As previously mentioned, physical attractiveness is a socially desirable trait. In their work from 1972, Dion, Berscheid and Walster conclude by saying that in our judgement of others we seem to believe that "*what is beautiful is good*" (p.285). In their meta-analytic review from 1991, Eagly et al. conclude by supporting this summary phrase, however they emphasize that the effect seems to be weaker than initially assumed. Looking to sociometer theory our results fit well with the assumption that self-esteem reflects our social inclusion and social value.

Other than physical attractiveness being a desirable trait in itself, the “beautiful is good” stereotype might also affect how good-looking people are treated compared to less good-looking people. If we have the tendency to conclude that other people have positive attributes because of their good looks, physical attractive people will be treated more favorably than less attractive people. Also, we quite possibly find our own attractiveness important when trying to estimate our own social value, due to the fact that we know it’s a desired trait. Although this seems reasonable, some researchers (Major, Carrington & Carnevale, 1984) posit that, although physically attractive people seem to be evaluated more favorably and receive more positive feedback than less attractive people, there seems to be no consistent association between physical attractiveness and self-esteem. Nonetheless, the present data indicate that there indeed seems to be a positive association between physical attractiveness and self-esteem. It’s important to note that the measures applied in the current study was self-report measures. This means that the association may in fact be between self-esteem and the individuals self-perceived attractiveness, which won’t necessarily correspond to how one is perceived by others. If sociometer theory is right in that self-esteem reflects to what degree we regard ourselves as desired and accepted for inclusion in groups and significant relationships, and self-reported physical attractiveness reflects the degree to which we believe others find us sexually attractive, a positive association between the two seems reasonable.

In general, our results showed that men tend to score higher than females on measures of self-esteem. The results also indicated that participants who were in a relationship scored higher on self-esteem than singles. Why might men have better self-esteem than women? It is possible that different challenges in the social environment for men and women has led to different needs for self-esteem. Indeed Walsh (1991) argues that the engagement in any behavior that carries with it the potential risk of rejection, demands a minimum level of self-esteem. Men, compete more for sexual access than women (Trivers, 1972) and men do more often than women take sexual initiative towards (hit on) the opposite sex. Although different societal roles throughout human history has favored competitive traits in men more than in women, males engage in more competition in the pursuit of a mate also in other species (Trivers, 1972). For humans, this kind of behavior may demand a greater self-regard and belief in the self, and one’s capacities, which again would be associated with better self-esteem. Higher sociosexuality has also been linked to better self-esteem, with a stronger relationship for men than for women (Walsh, 1991). Higher self-esteem individuals reported having significantly higher numbers of sexual partners than low self-esteem individuals. A short-term mating strategy might favor individuals with higher self-esteem because a high

frequency of partner change demands that one is a desired partner. Males tend to place greater value on physical abilities and interpersonal dominance than women (Rosenberg, 1979). Both of these attributes relate to sexual competition. Women on the other hand, Rosenberg (1979) point out, value being liked, interpersonal harmony, and sociability. These attributes related more to interpersonal relationships.

### **Limitations and implications**

The self-esteem measure used in the present study does, as previously described, aim to measure global self-esteem, or what Baumesiter & Leary (2000) would refer to as trait self-esteem. Taking into consideration the fact that trait self-esteem by definition is somewhat stable across time and situations, this might contribute to limited effects of dating experiences on the self-esteem scores. It's reasonable to assume that one might find more robust effects if a measure for state self-esteem was applied rather than trait self-esteem, and that such a measure would be better fitted for the present research question. For future research one should consider using measures directed at more dynamic aspects of self-esteem, such as the State Self-Esteem Scale (SSES) by Heatherton and Polivy (1991).

One obvious limitation of the effort-payoff measure is the fact that it will provide the same score for, possibly, very different patterns of behavior and experience. The person being hit on a lot, while hitting a lot on others, will get the same effort-payoff score as the person not being hit on at all, and not hitting on anybody. Even the person being hit on occasionally, while once in a while hitting on others will get a similar score. In short, the variable tells us little about actual behavior. It does, however, provide an estimate of the balance between the effort made to find a mate, and the experience of being a desired mate choice. Looking at the results from the current study, effort-payoff was a better predictor of self-esteem than the separate effects of the variables hitting on others or being hit on. This might be due to the fact that the relationship between tried hits and self-esteem seem to differ in direction for men and women.

One might also discuss whether the self-report measures represent a limitation for this study. Although self-report through questionnaires has many benefits with regards to administration, recruitment of participants, resource demands and so on, the data might be subject to bias. Self-report data might be influenced by factors such as response bias, social desirability and inaccurate memory (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). Under the present conditions social desirability likely is not a problem however. Due to anonymity and the nature of the questions included, one would not assume that neither intrusiveness,

threat of disclosure or sensitivity would trigger a bias for social desirable answers.

Tourangeau, R., & Yan, T, 2007 writes:

*“Respondents in surveys seem to lie for pretty much the same reasons they lie in everyday life- to avoid embarrassment or possible repercussions from disclosing sensitive information- and procedures that take these motives into account are more likely to elicit accurate answers. The methodological findings suggest that socially desirable responding in surveys is largely contextual, depending both on the facts of the respondent’s situation and on features of the data collection situation such as the degree of privacy it offers.”*

Hence the current survey format should not be particularly vulnerable for socially desirability. A known bias that might come into play however, is the “better-than-average effect”. This refers to peoples tendency to evaluate themselves more favorably than what might be justifiable. Half the people in the world will by definition be below average, few people nonetheless classify themselves as such. As humans we have the tendency to evaluate ourselves as being better than we are, while our assessment of others tend to be more accurate (Alicke, Govorun, 2005). In the current study scores on the self-report items asking participants about their mate value (short-term-, long-term-, and physical mate value) could likely be affected by this response bias. One could, as previously mentioned, argue that there are benefits to having a somewhat more favorable evaluation of one’s own value as a mate than what might be realistic. Especially for men. This could for instance encourage to showing interest in others and taking initiative, which would be an advantage in the competition for access to mates. If the data are subject to this kind of bias, one could nevertheless argue that this do not represent an issue for the validity of the findings. A change in overall level of participants self-reported mate value scores won’t erase the statistical association found with self-esteem.

With all the measures being self-report, the associations found in this study are between evaluations and attitudes towards the self and personal experiences, and not between objective measures. For instance, the measure of physical mate value not tell us if people actually are physically attractive, only if participants perceive themselves as being so. On the other hand, if the person perceives him- or herself as being physically attractive, he or she might have good reason to do so. It seems reasonable to assume that the perception of one’s own attractiveness, after all, will be related to personal experience.

The cross-sectional design of the study implies that no inferences about causality can be made. Also, due to all the participants being university students in their 20s, the findings

cannot be generalized to the population at large. Therefore, future research may investigate whether similar patterns exist in other demographic groups.

The effect sizes of experiences (Effort-payoff) versus the effect sizes of self-perceived attractiveness (Physical mate value) could be interpreted as indicating that personality may be of greater importance to self-esteem than experiences. Although sociometer theory emphasizes the importance of social interactions in development of self-esteem, another line of enquiry has assumed that self-esteem is transmitted within families. In a review of behavioral genetic studies on self-esteem in twins and siblings Neiss et al. (2002) finds evidence for genetic influences, especially on stability of self-esteem. Others argue for the importance of factors such as family structure (McCormick & Kennedy, 2000) and parenting style (Lamborn, Mounts, Steinberg & Dornbusch, 1991) in the development of children's self-esteem. Also, Baumeister et al. (2003) states "*self-esteem has not been found to predict quality or duration of relationships*" (p.1). This implies lack of evidence for an association between attributes important for maintaining intimate personal relationships and self-esteem. A complex but interesting issue to consider investigating is therefore the interplay between genetics and experience in formation and maintenance of self-esteem.

In their meta-analysis from 2009, Blackhart, G. C., Nelson, B. C., Knowles, M. L., & Baumeister, R. F. found that there seem to be stronger associations between cues of acceptance and inclusion, and increments in self-esteem, than between rejection and decrements in self-esteem. This might signify that people are equipped with defense mechanisms that lessens the blow to our self-esteem considering rejections negative effect on emotional state and the fact that self-esteem seems positively affected by social inclusion (Blackhart et al., 2009). These findings do not support sociometer theory's prediction that self-esteem should be more responsive to cues of rejection and exclusion, than to cues of acceptance and inclusion. Sociometer theory assumes that the cost of being excluded from significant relationships is greater than the benefit of forming additional ones, assuming one already has a certain degree of belonging. Whether self-esteem is indeed less responsive to negative than to positive social cues in dating situations, and how this might relate to ego defense mechanisms needs to be examined in future research.

Findings from the current study implies that the short-term dating experiences are unlikely to make or break your self-esteem. How much initiative one experiences from others relative to how much initiative one has to take on the short-term dating scene however seems to affect the way young adults view themselves. Following from this one should maybe not be too afraid of being the part to take initiative, regardless of being man or woman.



The question that remains to answer is what the results from the current study implies with regards to sociometer theory? According to sociometer theory self-esteem should be contingent upon our experience of social valuation or devaluation. Experiences indicating that one is a valued and desired individual is theorized to boost self-esteem, while experiences signaling that one is being negatively evaluated by peers should have a negative effect on self-esteem. Rejection in short-term dating context is thought to represent such a negative experience, whereas being hit on should signify desirability. Hence, the fact that the ratio between rejection and being hit on having an effect on self-esteem may be seen as supporting sociometer theory. It seems, based on the current findings, that information about our value as a relational partner does indeed affect self-esteem. It's however not possible to assess the association between experiences aggregated over longer periods of time and self-esteem with the current design. The findings does however indicate that recent experiences are associated with level of self-esteem, and support the assumption that social experiences are affect with self-esteem. Although we find an effect of Effort-payoff on self-esteem in this study one cannot rule out the possibility of the association between the two being more complex than we hypothesize based on sociometer theory. High self-esteem might in itself lead to certain behavior patterns which leads to better dating experiences. From there on, better experiences tied to dating might influence self-esteem. This kind of loop would not, however, contradict sociometer theory in that feedback on relational value is reflected in self-esteem. It would, nevertheless, be an argument for self-esteem having implications for behavior, and not simply being a psychological epi-phenomenon. Sociometer theory do discuss the implications of bad self-esteem and how this is thought to adaptively correct socially devalued behavior through evoking negative emotions. It does not, on the other hand, discuss in any detail the possible implications of good self-esteem for behavior, and neither the possibility of a feedback-loop existing between behavior and self-esteem. The effects of experiences tied to short-term dating accumulated through longer periods of time should have a greater impact on trait self-esteem, than experiences from a limited period of time. If self-esteem reflects the sum of evaluations of one's relational value based on experiences from the whole life span, a longitudinal study of dating behavior and dating experience would be better fit to assess the explore the phenomenon. Although the current findings seem to support sociometer theory in that self-esteem reflect relational and social value, the nature of the association in present data is somewhat weak and thus warrants further exploration.

### **Conclusion**

We wanted to investigate whether experiences of relational value obtained in a short-term dating context affects self-esteem. Self-esteem is argued to be of importance to overall functioning and mental health, and with the dating market changing in a direction of more short-term and casual sexual encounters, we were curious about the implications of dating experiences for self-esteem. In conclusion the results from the current study suggest that experiencing feedback signifying eligibility for short-term mating has a positive effect on self-esteem. The correlation was slightly stronger for single men than for women and partnered men, but the multivariate analysis did not support any difference in effect. Short-term mate value also showed a small effect on self-esteem for all groups. Physical attractiveness was, however, the variable included best predicting self-esteem. This holds true for both genders and independent of relationship status. In conclusion, although not being a strong predictor, short-term dating experiences seems to be relevant for self-esteem based on the current study.

**References:**

- Arnocky, S., Woodruff, N., & Schmitt, D. P. (2016). Men's sociosexuality is sensitive to changes in mate availability. *Personal Relationships*, 23(1), 172- 181.  
<https://doi.org/10.1111/per.12118>
- Baumeister, R. F., Wotman, S. R., & Stillwell, A. M. (1993). Unrequited love: On heartbreak, anger, guilt, scriptlessness, and humiliation. *Journal of Personality and Social Psychology*, 64(3), 377-394. <http://dx.doi.org/10.1037/0022-3514.64.3.377>
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does High Self-Esteem Cause Better Performance, Interpersonal Success, Happiness, or Healthier Lifestyles? *Psychological Science in the Public Interest*, 4(1), 1–44. <https://doi.org/10.1111/1529-1006.01431>
- Baumeister, R. F. (Ed.). (2013). *Self-esteem: The puzzle of low self-regard*. Springer Science & Business Media. Harter, S., Chapter 5, Causes and Consequences of Low Self-Esteem in Children and Adolescents, 87-111. [https://doi.org/10.1007/978-1-4684-8956-9\\_5](https://doi.org/10.1007/978-1-4684-8956-9_5)
- Bendixen, M., Kennair, L. E. O., Biegler, R., & Haselton, M. G. (2019). Adjusting Signals of Sexual Interest in the Most Recent Naturally Occuring Opposite-Sex Encounter in Two Different Contexts. *Evolutionary Behavioral Sciences*.  
<https://dx.doi.org/10.1037/ebs0000162>
- Bersamin, M. M., Paschall, M. J., Saltz, R. F., & Zamboanga, B. L. (2012). Young adults and casual sex: The relevance of college drinking settings. *Journal of sex research*, 49(2-3), 274-281. <https://doi.org/10.1080/00224499.2010.548012>
- Blackhart, G. C., Nelson, B. C., Knowles, M. L., & Baumeister, R. F. (2009). Rejection Elicits Emotional Reactions but Neither Causes Immediate Distress nor Lowers Self-Esteem: A Meta-Analytic Review of 192 Studies on Social Exclusion. *Personality and Social Psychology Review*, 13(4), 269–309. <https://doi.org/10.1177/1088868309346065>
- Blow, A. J., & Hartnett, K. (2005). Infidelity in committed relationships ii: A substantive review. *Journal of marital and family therapy*, 31(2), 217-233.  
<https://doi.org/10.1111/j.1752-0606.2005.tb01556.x>
- Brown, J. D., & Dutton, K. A. (1995). The thrill of victory, the complexity of defeat: Self-esteem and people's emotional reactions to success and failure. *Journal of personality and social psychology*, 68(4), 712. <https://psycnet.apa.org/doi/10.1037/0022-3514.68.4.712>
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: an evolutionary perspective on human mating. *Psychological review*, 100(2),  
<https://doi.org/10.1037/0033-295X.100.2.204>

- Buss, D. M. (1998). Sexual strategies theory: Historical origins and current status. *Journal of Sex Research*, 35(1), 19-31. <https://doi.org/10.1080/00224499809551914>
- Butler, A. C., Hokanson, J. E., & Flynn, H. A. (1994). A comparison of self-esteem lability and low trait self-esteem as vulnerability factors for depression. *Journal of Personality and Social Psychology*, 66(1), 166-177. <https://doi.org/10.1037/0022-3514.66.1.166>
- Clark, R. D., & Hatfield, E. (1989). Gender differences in receptivity to sexual offers. *Journal of Psychology & Human Sexuality*, 2(1), 39-55. [https://doi.org/10.1300/J056v02n01\\_04](https://doi.org/10.1300/J056v02n01_04)
- Clarke, A. P. (2006). Are the correlates of sociosexuality different for men and women? *Personality and Individual Differences*, 41(7), 1321-1327. <https://doi.org/10.1016/j.paid.2006.05.006>
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review*, 108(3), 593-623. <http://dx.doi.org/10.1037/0033-295X.108.3.593>
- Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology*, 24(3), 285-290. <http://dx.doi.org/10.1037/h0033731>
- Eagly, A. H., Ashmore, R. D., Makhijani, M. G., & Longo, L. C. (1991). What is beautiful is good, but...: A meta-analytic review of research on the physical attractiveness stereotype. *Psychological Bulletin*, 110(1), 109-128. <https://doi.org/10.1037/0033-2909.110.1.109>
- Fisher, M., Cox, A., Bennett, S., & Gavric, D. (2008). Components of self-perceived mate value. *Journal of Social, Evolutionary, and Cultural Psychology*, 2(4), 156-168. <http://dx.doi.org/10.1037/h0099347>
- Gangestad, S. W., & Simpson, J. A. (2000). The evolution of human mating: Trade-offs and strategic pluralism. *Behavioral and brain sciences*, 23(4), 573-587. <https://doi.org/10.1017/S0140525X0000337X>
- Gangestad, S. W., Haselton, M. G., & Buss, D. M. (2006). Evolutionary foundations of cultural variation: Evoked culture and mate preferences. *Psychological Inquiry*, 17(2), 75-95. [https://doi.org/10.1207/s15327965pli1702\\_1](https://doi.org/10.1207/s15327965pli1702_1)
- Garcia, J. R., Reiber, C., Massey, S. G., & Merriwether, A. M. (2012). Sexual hookup culture: A review. *Review of General Psychology*, 16(2), 161-176. <https://doi.org/10.1037%2Fa0027911>
- Grello, C. M., Welsh, D. P., & Harper, M. S. (2006). No strings attached: The nature of casual sex in college students. *Journal of sex research*, 43(3), 255-267. <https://doi.org/10.1080/00224490609552324>

- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: Guilford Press.
- Haselton, M. G. (2003). The sexual overperception bias: Evidence of a systematic bias in men from a survey of naturally occurring events. *Journal of Research in Personality*, 37(1), 34-47. [https://doi.org/10.1016/S0092-6566\(02\)00529-9](https://doi.org/10.1016/S0092-6566(02)00529-9)
- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social psychology*, 60(6), 895. <https://doi.org/10.1037/0022-3514.60.6.895>
- Kennair, L. E. O., Schmitt, D., Fjeldavli, Y. L., & Harlem, S. K. (2009). Sex differences in sexual desires and attitudes in Norwegian samples. *Interpersona: An International Journal on Personal Relationships*, 3(supp1), 1-32. <https://doi.org/10.5964/ijpr.v3isupp1.67>
- Kernis, M. (2005). Measuring self-esteem in context: The importance of stability of self-esteem in psychological functioning. *Journal of Personality*, 73, 1-37. <https://doi.org/10.1111/j.1467-6494.2005.00359.x>
- Kirsner, B. R., Figueredo, A. J., & Jacobs, W. J. (2003). Self, friends, and lovers: Structural relations among Beck Depression Inventory scores and perceived mate values. *Journal of affective disorders*, 75(2), 131-148. [https://doi.org/10.1016/S0165-0327\(02\)00048-4](https://doi.org/10.1016/S0165-0327(02)00048-4)
- Kling, K. C., Hyde, J. S., Showers, C. J., & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin*, 125(4), 470-500. <https://doi.org/10.1037/0033-2909.125.4.470>
- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child development*, 62(5), 1049-1065. <https://doi.org/10.1111/j.1467-8624.1991.tb01588.x>
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of personality and social psychology*, 68(3), 518. <https://doi.org/10.1037/0022-3514.68.3.518>
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, Vol. 32, pp. 1-62). San Diego, CA, US: Academic Press. [https://doi.org/10.1016/S0065-2601\(00\)80003-9](https://doi.org/10.1016/S0065-2601(00)80003-9)
- Lemay Jr, E. P., Clark, M. S., & Greenberg, A. (2010). What is beautiful is good because what is beautiful is desired: Physical attractiveness stereotyping as projection of

- interpersonal goals. *Personality and Social Psychology Bulletin*, 36(3), 339-353.  
<https://doi.org/10.1177%2F0146167209359700>
- Lippa, R. A. (2009). Sex differences in sex drive, sociosexuality, and height across 53 nations: Testing evolutionary and social structural theories. *Archives of sexual behavior*, 38(5), 631-651. <https://doi.org/10.1007/s10508-007-9242-8>
- McCormick, C. B., & Kennedy, J. H. (2000). Father—Child Separation, Retrospective and Current Views of Attachment Relationship with Father, and Self-Esteem in Late Adolescence. *Psychological Reports*, 86(3), 827-834.  
<https://doi.org/10.2466%2Fpr0.2000.86.3.827>
- Neiss, M. B., Sedikides, C., & Stevenson, J. (2002). Self-esteem: a behavioural genetic perspective. *European Journal of Personality*, 16(5), 351-367.  
<https://doi.org/10.1002/per.456>  
<https://www.dictionary.com/browse/esteem>
- Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: a more differentiated look at sociosexuality and its effects on courtship and romantic relationships. *Journal of personality and social psychology*, 95(5), 1113.  
<https://doi.org/10.1037/0022-3514.95.5.1113>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Schmitt, D. P. (2005). Sociosexuality from Argentina to Zimbabwe: A 48-nation study of sex, culture, and strategies of human mating. *Behavioral and Brain Sciences*, 28(2), 247-275.  
<https://doi.org/10.1017/S0140525X05000051>
- Sedikides, C., & Strube, M. J. (1997). Self-evaluation: To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better. In *Advances in experimental social psychology* (Vol. 29, pp. 209-269). Academic Press.  
[https://doi.org/10.1016/S0065-2601\(08\)60018-0](https://doi.org/10.1016/S0065-2601(08)60018-0)
- Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in sociosexuality: evidence for convergent and discriminant validity. *Journal of personality and social psychology*, 60(6), 870. <https://psycnet.apa.org/doi/10.1037/0022-3514.60.6.870>
- Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, 139(1), 213-240.  
<http://dx.doi.org/10.1037/a0028931>
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: a social psychological

- perspective on mental health. *Psychological bulletin*, 103(2), 193.  
<https://doi.org/10.1037/0033-2909.103.2.193>
- Tourangeau, R., & Yan, T. (2007). Sensitive questions in surveys. *Psychological Bulletin*, 133, 859-883). <https://psycnet.apa.org/doi/10.1037/0033-2909.133.5.859>
- Trivers, R. (1972). *Parental investment and sexual selection* (Vol. 136, p. 179). Cambridge: Biological Laboratories, Harvard University.
- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2003). Stability of self-esteem across the life span. *Journal of Personality and Social Psychology*, 84(1), 205-220.  
<https://doi.org/10.1037/0022-3514.84.1.205>
- Trzesniewski, K. H., Donnellan, M. B., Moffitt, T. E., Robins, R. W., Poulton, R., & Caspi, A. (2006). Low self-esteem during adolescence predicts poor health, criminal behavior, and limited economic prospects during adulthood. *Developmental Psychology*, 42(2), 381-390. <http://dx.doi.org/10.1037/0012-1649.42.2.381>
- Træen, B., & Lewin, B. (1992). Casual sex among Norwegian adolescents. *Archives of Sexual Behavior*, 21(3), 253-269. <https://doi.org/10.1007/BF01542996>
- Waynforth, D. (2001). Mate choice trade-offs and women's preference for physically attractive men. *Human Nature*, 12(3), 207-219. <https://doi.org/10.1007/s12110-001-1007-9>
- Williams, K. D. (2007). Ostracism. *Annual review of psychology*, 58.  
<https://doi.org/10.1146/annurev.psych.58.110405.085641>
- World Economic Forum. (2016). *The global gender gap report 2016*. Geneva, Switzerland.  
Author.

**Appendix A:***Correlations, women and men study 1*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1.How frequently being hit on	-	0.55	0.05	0.49	0.47	-0.03	0.34	0.30	0.18	0.21	0.32	0.11	0.46
2.Number of times being hit on	0.42	-	0.42	0.60	0.33	0.32	0.47	0.27	0.34	0.16	0.30	0.11	0.44
3.Number of tried hits	0.20	0.50	-	-0.47	0.14	0.59	0.52	0.29	0.45	-0.08	0.07	-0.04	0.19
4. Effort- pay off	0.40	0.93	0.15	-	0.20	-0.21	0.00	0.01	-0.07	0.22	0.23	0.14	0.26
5.Number of times being harassed	0.30	0.31	0.14	0.30	-	0.20	0.25	0.09	0.08	-0.01	-0.00	0.04	0.07
6.Number of tines being rejected	0.13	0.20	0.41	0.05	0.22	-	0.45	0.23	0.36	-0.11	0.11	0.07	0.11
7.SOI (Behavior)	0.42	0.40	0.47	0.26	0.22	0.26	-	0.53	0.52	0.02	0.10	0.04	0.41
8.SOI (Attitudes)	0.21	0.31	0.25	0.24	0.04	0.06	0.52	-	0.34	-0.19	0.02	-0.24	0.52
9.SOI (Desire)	0.35	0.41	0.43	0.28	0.19	0.20	0.36	0.37	-	-0.01	0.15	0.05	0.30
10.Self esteem	0.05	0.00	0.01	0.00	-0.14	-0.05	-0.04	0.10	-0.17	-	0.33	0.37	0.14
11.Mate value (physical appearance)	0.38	0.20	0.16	0.16	0.10	0.12	0.24	0.16	0.23	0.36	-	0.38	0.40
12.Mate value (Long term)	0.10	-0.24	-0.22	-0.18	-0.08	-0.04	-0.23	-0.07	-0.01	0.20	0.45	-	0.03
13.Mate Value (Short term)	0.42	0.31	0.17	0.28	0.19	0.09	0.36	0.37	0.23	0.15	0.50	-0.01	-

*Note. Coefficients below the diagonal represent correlations for women (N=144). Coefficients above the diagonal represent correlations for men (N=84).*



PSYPRO4700

*Correlations, women and men study 2*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1.How frequently being hit on	-	0.61	0.22	0.33	0.25	-0.01	0.40	0.20	0.24	0.14	0.51	0.17	0.42
2.Number of times being hit on	0.51	-	0.37	0.54	0.23	0.29	0.33	0.25	0.25	0.21	0.31	0.19	0.32
3.Number of tried hits	0.25	0.55	-	-0.59	0.24	0.38	0.28	0.22	0.38	-0.16	-0.02	-0.05	0.18
4. Effort- pay off	0.43	0.80	-0.06	-	-0.02	-0.09	0.03	0.22	-0.13	0.33	0.29	0.21	0.11
5.Number of times being harassed	0.39	0.37	0.24	0.27	-	0.11	0.28	0.05	0.23	0.02	0.25	0.12	0.25
6.Number of times being rejected	0.10	0.24	0.49	-0.06	0.23	-	0.27	0.23	0.34	-0.13	-0.08	-0.24	0.08
7.SOI (Behavior)	0.25	0.31	0.43	0.06	0.23	0.20	-	0.54	0.52	0.09	0.37	-0.19	0.56
8.SOI (Attitudes)	0.05	0.22	0.34	0.02	0.13	0.19	0.61	-	0.39	0.17	0.12	-0.31	0.59
9.SOI (Desire)	0.12	0.33	0.43	0.09	0.19	0.17	0.37	0.50	-	-0.10	0.20	-0.07	0.33
10.Self esteem	0.22	0.19	0.10	0.15	0.15	0.10	0.05	0.08	0.03	-	0.43	0.32	0.31
11.Mate value (physical appearance)	0.44	0.18	0.03	0.20	0.22	0.04	0.21	0.07	-0.04	0.43	-	0.38	0.54
12.Mate value (Long term)	0.12	-0.01	-0.07	0.03	0.14	0.06	-0.13	-0.08	-0.11	0.37	0.38	-	0.09
13.Mate Value (Short term)	0.19	0.27	0.19	0.19	0.06	0.10	0.42	0.41	0.12	0.10	0.43	0.04	-

*Note. Coefficients below the diagonal represent correlations for women (N=135). Coefficients above the diagonal represent correlations for men (N=78).*

# SEKSUELL INTERESSE

Formålet med denne spørreundersøkelsen er å få mer kunnskap om det seksuelle samspillet mellom kvinner og menn, og hvordan vi tolker signaler fra personer av motsatt kjønn. Spørsmålene i skjemaet handler om deg, dine tolkninger av situasjoner i samspill med andre, hva du gjorde, og seksuelle erfaringer, tanker og fantasier. Enkelte av spørsmålene kan virke nokså nærgående, men det er likevel viktig at du svarer ærlig på dem. Resultatene fra undersøkelsen vil bli presentert ved internasjonale konferanser og i vitenskapelige artikler.

Det er frivillig å delta i undersøkelsen, og alle som svarer er anonyme. Det skal ikke skrives navn eller annen personidentifiserende informasjon på skjemaet. Returner skjemaet i posten (porto er betalt) eller lever det til prosjektassistentene på oppgitt sted.

Har du spørsmål, kontakter du førsteamanuensis Mons Bendixen, tlf. 73 59 74 84.

Takk for at du er villig til å delta i undersøkelsen!  
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og profesjonsstudentene i psykologi

 **NTNU**  
Kunnskap for en bedre verden  
Psykologisk institutt

<b>LES DETTE FØR DU STARTER!</b>	Skjemaet skal leses maskinelt. Vennligst følg disse reglene: <ul style="list-style-type: none"><li>• <i>Bruk svart/blå kulepenn. Skriv tydelig, og ikke utenfor feltene. <b>Kryss av slik:</b> <input checked="" type="checkbox"/>.</i></li><li>• <i>Feilkryssinger kan annulleres ved å fylle hele feltet med farge. Kryss så i rett felt.</i></li><li>• <i>Sett bare ett kryss på hvert spørsmål om ikke annet er oppgitt.</i></li></ul>
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## A. BAKGRUNNSINFORMASJON

1. Kjønn: ⇒ Kvinne ..... <sub>1</sub> Mann ..... <sub>2</sub>      2. Fødselsår: ⇒ 19
3. Sivil status: ⇒ Singel..... <sub>1</sub>  
Har kjæreste .... <sub>2</sub>  
Samboer ..... <sub>3</sub>  
Gift..... <sub>4</sub>
4. Hvor tilfreds er du med din sivilstatus?
- | Svært<br>utilfreds                    | Utilfreds                             | Verken<br>/eller                      | Tilfreds                              | Svært<br>tilfreds                     |
|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> |
5. Hvem er du seksuelt tiltrukket av? ⇒
- | Bare<br>menn                          | Mest<br>menn                          | Menn og kvinner<br>like mye           | Mest<br>kvinner                       | Bare<br>kvinner                       | Ingen /<br>vet ikke                   |
|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> | <input type="checkbox"/> <sub>4</sub> | <input type="checkbox"/> <sub>5</sub> | <input type="checkbox"/> <sub>6</sub> |



- |  | Edru                       |                          |                          |                          |                          | Svært påvirket            |                          |
|--|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|--------------------------|
|  | 1                          | 2                        | 3                        | 4                        | 5                        |                           |                          |
| 10. Hvor påvirket var du selv av alkohol? ⇨  | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                           |                          |
| 11. Hvor påvirket var den andre personen? ⇨  | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                           |                          |
| 12. Hvor attraktiv synes du personen var som en potensiell partner for et langvarig og seriøst forhold (ekteskap)? ⇨ | Langt under gjennomsnittet |                          |                          |                          |                          | Langt over gjennomsnittet |                          |
|  | 1                          | 2                        | 3                        | 4                        | 5                        | 6                         | 7                        |
|  | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |
| 13. Hvor attraktiv synes du personen var for et potensielt kortvarig, mer tilfeldig forhold («one-night stand»)? ⇨   | Langt under gjennomsnittet |                          |                          |                          |                          | Langt over gjennomsnittet |                          |
|  | 1                          | 2                        | 3                        | 4                        | 5                        | 6                         | 7                        |
|  | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |

### C. OM FESTING OG SJEKING

- I løpet av den siste måneden, hvor mange ganger har du vært på fest, på byen e.l.? *Skriv 0 hvis ingen.* ⇨
- Generelt*, hvor ofte prøver personer av motsatt kjønn å «sjekke deg opp» når du er på fest, på byen e.l.? ⇨

Aldri	Sjelden	Av og til	Ofte	Alltid
1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- I løpet av *den siste måneden*, hvor mange ganger har det hendt at personer av motsatt kjønn har prøvd å «sjekke deg opp» på fest, på byen e.l.? *Skriv 0 hvis ingen.* ⇨
- I løpet av *den siste måneden*, hvor mange ganger har du selv prøvd å «sjekke opp» personer av motsatt kjønn på fest, på byen e.l.? *Skriv 0 hvis ingen.* ⇨
- I løpet av det siste året, hvor mange ganger har du opplevd uønskede/ubehagelige seksuelle tilnærmelser fra personer av motsatt kjønn, selv om du ikke signaliserte noen seksuell interesse? *Skriv 0 hvis ingen.* ⇨
- I løpet av *det siste året*, hvor mange ganger har du opplevd åpenbar seksuell avvisning fra personer av motsatt kjønn? *Skriv 0 hvis ingen.* ⇨

### C. SEX OG SEKSUELL AKTIVITET

- Vennligst svar så ærlig som mulig på de følgende spørsmålene:
  - Hvor mange forskjellige partnere har du hatt sex (samleie) med *de siste 12 månedene*? .....  0  1  2  3  4  5-6  7-9  10-19  20+
  - Hvor mange forskjellige partnere har du hatt samleie med én og kun én gang? .....
  - Hvor mange forskjellige partnere har du hatt samleie med uten at du har hatt interesse for et langvarig, forpliktende forhold med personen?.....

2. På skalaen fra 1 til 9, hvor enig eller uenig er du i følgende utsagn?

Veldig uenig 1 2 3 4 5 6 7 8 9 Veldig enig

1. Sex uten kjærlighet er OK.....
2. Jeg er komfortabel med tanken på å ha tilfeldig sex med forskjellige partnere .....
3. Jeg vil ikke ha sex med en person før jeg er sikker på at forholdet kommer til å være seriøst og varig .....

3. Hvor ofte opplever du følgende?

Aldri 1 Veldig sjelden 2 En gang hver 2-3 mnd. 3 Ca. en gang pr. mnd. 4 Ca. en gang hver 2. uke 5 Ca. en gang i uka 6 Flere ganger i uka 7 Nesten daglig 8 Minst en gang daglig 9

1. Hvor ofte fantaserer du om å ha sex med noen du ikke er i et forpliktende kjærlighetsforhold til? .....
2. Hvor ofte opplever du seksuell opphisselse når du er i kontakt med noen du ikke har i et forpliktende kjærlighetsforhold til? .....
3. I det daglige, hvor ofte opplever du spontane fantasier om sex med noen du nettopp har møtt? .....

4. Sammenlignet med andre du kjenner på din egen alder og av ditt eget kjønn, ...

Klart under gjennomsnittet 1 2 3 4 5 6 7 Klart over gjennomsnittet

1. ... hvor generelt fysisk attraktiv mener du selv at du er? .....
2. ... hvor attraktivt mener du ansiktet ditt er? .....
3. ... hvor attraktiv mener du kroppen din er? .....
4. ... hvor attraktiv mener du selv at du er som partner i et langvarig og seriøst forhold (ekteskap)? .....
5. ... hvor attraktiv mener du selv at du er som partner i et kortvarig, mer tilfeldig forhold («one-night stand»)? .....

5. Hvor enig eller uenig er du i hvert av disse utsagnene om deg selv?

Svært uenig 1 Uenig 2 Verken / eller 3 Enig 4 Svært enig 5

1. Av og til føler jeg meg virkelig unyttig .....
2. Jeg mener jeg er verdt noe, i alle fall like mye som andre .....
3. Stort sett har jeg en tendens til å føle at jeg er mislykket .....
4. I det store og hele er jeg fornøyd med meg selv .....

Takk for at du ville svare på spørsmålene!

# SEKSUELL INTERESSE

Formålet med denne spørreundersøkelsen er å få mer kunnskap om det seksuelle samspillet mellom kvinner og menn, og hvordan vi tolker signaler fra personer av motsatt kjønn. Spørsmålene i skjemaet handler om deg, dine tolkninger av situasjoner i samspill med andre, hva du gjorde, og seksuelle erfaringer, tanker og fantasier. Enkelte av spørsmålene kan virke nokså nærgående, men det er likevel viktig at du svarer ærlig på dem. Resultatene fra undersøkelsen vil bli presentert ved internasjonale konferanser og i vitenskapelige artikler.

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## A. BAKGRUNNSINFORMASJON

1. Kjønn: ⇒ Kvinne.....<sub>1</sub> Mann.....<sub>2</sub>      2. Fødselsår: ⇒ 19
3. Er du førsteårsstudent? ⇒ Nei.....<sub>1</sub> Ja.....<sub>2</sub>
4. Sivil status: ⇒ Singel.....<sub>1</sub> Har kjæreste ....<sub>2</sub> Samboer .....<sub>3</sub> Gift.....<sub>4</sub>
5. Hvor tilfreds er du med din sivilstatus?
- | Svært utilfreds          | Utilfreds                | Verken /eller            | Tilfreds                 | Svært tilfreds           |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1                        | 2                        | 3                        | 4                        | 5                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
6. Hvem er du seksuelt tiltrukket av? ⇒
- | Bare menn                | Mest menn                | Menn og kvinner like mye | Mest kvinner             | Bare kvinner             | Ingen                    | Vet ikke                 |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1                        | 2                        | 3                        | 4                        | 5                        | 6                        | 7                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |







## D. SEX OG SEKSUELL AKTIVITET

1. Vennligst svar så ærlig som mulig på de følgende spørsmålene:

- |   |                          |                          |                          |                          |                          |                          |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Hvor mange forskjellige partnere har du hatt sex (samleie) med de siste 12 månedene? .....   | 0                        | 1                        | 2                        | 3                        | 4                        | 5-6                      | 7-9                      | 10-19                    | 20+                      |
|   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Hvor mange forskjellige partnere har du hatt samleie med én og kun én gang? .....  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Hvor mange forskjellige partnere har du hatt samleie med uten at du har hatt interesse for et langvarig, forpliktende forhold med personen?..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. På skalaen fra 1 til 9, hvor enig eller uenig er du i følgende utsagn?

- |   |                          |                          |                          |                          |                          |                          |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|   | Veldig uenig             |                          |                          |                          |                          |                          |                          |                          | Veldig enig              |
|   | 1                        | 2                        | 3                        | 4                        | 5                        | 6                        | 7                        | 8                        | 9                        |
| 1. Sex uten kjærlighet er OK.....   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Jeg er komfortabel med tanken på å ha tilfeldig sex med forskjellige partnere .....                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Jeg vil ikke ha sex med en person før jeg er sikker på at forholdet kommer til å være seriøst og varig ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3. Hvor ofte opplever du følgende?

- |  |                          |                          |                          |                          |                          |                          |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|  | Aldri                    | Veldig sjelden           | En gang hver 2-3 mnd.    | Ca. en gang pr. mnd.     | Ca. en gang hver 2. uke  | Ca. en gang i uka        | Flere ganger i uka       | Nesten daglig            | Minst en gang daglig     |
|  | 1                        | 2                        | 3                        | 4                        | 5                        | 6                        | 7                        | 8                        | 9                        |
| 1. Hvor ofte fantaserer du om å ha sex med noen du ikke er i et forpliktende kjærlighetsforhold til? .....                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Hvor ofte opplever du seksuell opphisselse når du er i kontakt med noen du ikke har i et forpliktende kjærlighetsforhold til? ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. I det daglige, hvor ofte opplever du spontane fantasier om sex med noen du nettopp har møtt? .....                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

4. Sammenlignet med andre du kjenner på din egen alder og av ditt eget kjønn, ...

- |   |                            |                          |                          |                          |                          |                          |                          |                           |
|---|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|
|   | Klart under gjennomsnittet |                          |                          |                          |                          |                          |                          | Klart over gjennomsnittet |
|   | 1                          | 2                        | 3                        | 4                        | 5                        | 6                        | 7                        |                           |
| 1. ... hvor generelt fysisk attraktiv mener du selv at du er? .....   | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                           |
| 2. ... hvor attraktivt mener du ansiktet ditt er? .....   | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                           |
| 3. ... hvor attraktiv mener du kroppen din er? .....  | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                           |
| 4. ... hvor attraktiv mener du selv at du er som partner i et langvarig og seriøst forhold (ekteskap)? .....              | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                           |
| 5. ... hvor attraktiv mener du selv at du er som partner i et kortvarig, mer tilfeldig forhold («one-night stand»)? ..... | <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                           |

5. Hvor enig eller uenig er du i hvert av disse utsagnene om deg selv?

- |   |                          |                          |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|   | Svært uenig              | Uenig                    | Verken /eller            | Enig                     | Svært enig               |
|   | 1                        | 2                        | 3                        | 4                        | 5                        |
| 1. Av og til føler jeg meg virkelig unyttig .....                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Jeg mener jeg er verdt noe, i alle fall like mye som andre .....   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Stort sett har jeg en tendens til å føle at jeg er mislykket ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I det store og hele er jeg fornøyd med meg selv .....              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

