

# **Measurement and Evaluation of Sexual Objectification**

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### Abstract

Despite a steadily growing number of social psychological studies on the sexual objectification of others, two essential aspects have been neglected, so far: First, research lacks a thoroughly validated instrument to assess individuals' proclivity to sexually objectify others. Second, little evidence is available on how people evaluate individuals who engage in sexual objectification as well as individuals who are objectified. With a total of eight empirical studies, this dissertation seeks to close both research gaps.

Empirical Part I of this thesis describes the development and validation of the *Sexual Objectification of Others Inventory (SOOI)* within five studies ( $N_{Study\ 1} = 213$ ,  $N_{Study\ 2} = 219$ ,  $N_{Study\ 3} = 95$ ,  $N_{Study\ 4} = 139$ ,  $N_{Study\ 5} = 116$ ). The scale consists of 11 items which were selected by applying exploratory factor analyses (see Study 1 and Study 2). The factor analyses identified two factors: Instrumental Objectification and Visual Objectification. Confirmatory factor analyses confirmed the two-factor model in most studies conducted. However, poor internal consistencies for the factor Instrumental Objectification throughout the studies indicated that it is recommendable to only draw on the overall SOOI score as a measure of sexual objectification proclivity. Reliability analysis showed largely good internal consistencies and evidenced a good test-retest reliability of the SOOI. Correlational analyses provided compelling evidence for the SOOI's convergent validity. Moreover, demonstrating criterion validity, the scale was able to predict men's outcomes on behavioral measures after a manipulation of their masculinity (see Study 5). By applying the SOOI to a sample from the LGBTQ\* community, this thesis, moreover, demonstrates that the scale is able to assess sexual objectification proclivity of people of any gender and various sexual orientations (see Study 3). Additionally, Study 4 successfully administered an English version of the SOOI. To summarize, the SOOI is the first reliable and thoroughly validated measure of people's sexual objectification proclivity. Future studies may want to improve the reliability of the two factors by item modification. Item modification

would allow for creating an updated SOOI version with two functional subscales. The current SOOI is available in German and English and comes in three analogously worded versions, assessing sexual objectification toward women, men, and people in general.

With Empirical Part II, this thesis seeks to answer the open question of how people evaluate perpetrators and targets of sexual objectification. Three online studies were conducted ( $N_{Study\ 1} = 290$ ,  $N_{Study\ 2} = 338$ ,  $N_{Study\ 3} = 245$ ) assessing attributed power, warmth, competence to as well as preferred social distance toward targets and perpetrators of sexual objectification. Furthermore, Study 2 and Study 3 investigated to what extent sexual objectification was perceived as an ethical issue in comparison to sexual harassment and control behaviors. Although social norm violation can lead to an increased attribution of power (see van Kleef et al., 2011), Studies 1-3 showed that perpetrators of sexual objectification were not perceived as more powerful due to their behavior. Correspondingly, targets of sexual objectification were not evaluated as less powerful. Results indicated that this outcome might reflect a bias similar to rape victim blame (e.g., Grubb & Turner, 2012). Furthermore, as hypothesized, sexual objectification was perceived as a less severe ethical issue than sexual harassment. Remarkably, however, sexual objectification was perceived on the same level of severity as the control behaviors. Research on ethical decision-making (Jones, 1991) suggests that participants might have attributed little negative consequences to sexual objectification, resulting in a reduced perception of severity. Studies 1-3 moreover demonstrated that male perpetrators were perceived as being less warm and competent than female perpetrators. Furthermore, people preferred more social distance toward male perpetrators than female ones. Attribution theory (Pryor, 1985) offers an explanation for this outcome: While objectifying and harassing behaviors by men can be attributed to their presumed misogyny, people lack an analogous schema to integrate and explain the same behavior by female perpetrators. However, future studies need to investigate why also male perpetrators of the control behaviors were evaluated more negatively compared to women.

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## Introduction

Sexual objectification is commonly understood as the reduction of a person to his or\*<sup>1</sup> her body, body parts and/or the instrumentalization of the person as a sexual resource (e.g., Bartky, 1990). The topic of sexual objectification has been investigated by various research disciplines, for instance, media studies, philosophy, and psychology.

This social-psychological thesis describes the development and validation of a tool to measure people's proclivity to sexually objectify others and, moreover, investigates how people evaluate individuals who show sexually objectifying behavior. In doing so, it attempts to take a comprehensive perspective by regarding findings from various disciplines, beginning with earlier scientific work on sexual objectification.

## Theoretical Overview: Sexual Objectification

### **Sexual objectification research from non-psychological perspectives.**

In 1975, Laura Mulvey<sup>2</sup> laid one of the stepping stones for modern sexual objectification research with an article on the so-called "male gaze". The seminal research on the male gaze analyzed how the representation of women in movies—like the slow camera movement across a women's pair of legs—is created to serve the satisfaction of a presumably heterosexual male viewer (for a reworked version of the original article see Mulvey, 1999). An increasing number of scientists joined the cause and started to research the sexual representation of women in media and advertisements. In their research on the representation of women in pornography, feminist scholars Catharine MacKinnon and Andrea Dworkin were amongst the first to use the term *sexual objectification* in the 80ies (e.g., Dworkin, 1985; MacKinnon, 1983).

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<sup>1</sup> Subsequently, the asterisk is used to refer to genders outside the gender binary.

<sup>2</sup> To make the gender and ethnic diversity of scholars more visible, this thesis frequently mentions authors' first names when citing their names within the text.

***Research on objectifying representations in media.***

The prevalence of sexual objectification in media is still remarkably high. In media and advertisements, people, especially women, are depicted in a sexualized manner with revealing clothing and suggestive body positions. In most cases, those sexualized depictions are not created to feature sexually active and confident human beings with their own sexual desires; they are created to be looked at—they are objectifying. In 2002, half of the advertisements in various popular US-magazines displayed women in an objectified manner (Stankiewicz & Rosselli, 2008). Several content analyses of media showed that women often appear sexualized; if they appear at all (Collins, 2011). Edward Downs and Stacy Smith (2010), for example, showed that only 14% of all analyzed video games contained female characters; of those, 43% were shown partially or fully naked (compared to 4% naked males). Applying a content analysis to music videos, Jennifer Stevens Aubrey and Cynthia Frisby (2011) found that women are depicted revealing four times more body-parts than men.

Looking just at the amount of body shown, Dane Archer and colleagues (1983) found out that images of men usually depict less body and more face in comparison to images of women. This so-called face-ism bias was based on the calculation of the ratio in size of depicted faces and bodies. The authors detected the face-ism bias in photos of national and international magazines, paintings drawings of six centuries as well as ad hoc drawings by research participants. Paving the way for future objectification research, they moreover found out that people associated a higher facial prominence with more intelligence and ambition, independent of the depicted sex.

***Sexual objectification in philosophical and feminist works.***

Not only researchers interested in media content found the topic of sexual objectification appealing. Taking a much general perspective on society, several renown philosophers researched into sexual objectification. The very first philosopher interested in sexual

objectification was no one else than Immanuel Kant himself (for discussion see Papadaki, 2007). In his lectures on ethics, which he held approximately between 1775 and 1785 (see Kant, 1990), he stated: “Sexual love makes of the loved person an Object of appetite; as soon as that appetite has been stilled, the person is cast aside as one casts away a lemon which has been sucked dry” (translation in Kant, 1963, p. 163 as cited by Papadaki, 2007)<sup>3</sup>.

Kant hence believed that a person who is treated just upon her function as a sexual resource, is not treated as a person, but as an object. This assumption has been refined by feminist scholars like Andrea Dworkin, Catharine MacKinnon, Sandra Lee Bartky, and Martha Nussbaum (i.a., Bartky, 1990; Dworkin, 1985; MacKinnon, 1983; Nussbaum, 1995). While Dworkin and MacKinnon assumed like Kant sexual objectification to be morally wrong in every instance, Bartky and Nussbaum took a more lenient stance (McLeod, 2002). For example, Nussbaum emphasized that the context in which sexual objectification occurs plays an essential role in the determination of whether the objectification is morally wrong. To illustrate her argument, she used an example of two people engaging in consensual sex. While the situation would hold several of the seven characteristics Nussbaum assumed to constitute objectification (i.e., instrumentality, fungibility, violability, ownership, autonomy, inertness, denial of subjectivity; Nussbaum, 1995), the occurring objectification could not be considered as morally wrong. Nussbaum asserted that the objectification in the context of consensual sexual encounters would be benign because it is happening in a symmetrical way and a context of mutual respect. Reviewing this argument, Carolyn McLeod (2002) disagreed with Nussbaum: She stated that even if one additionally assumes that the consenting sexual partners hold the same

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<sup>3</sup> The original paragraph reads as follows: “Wenn sie aus Geschlechtsneigung lieben, so machen sie die Person zum Objekt ihres Appetits; sobald sie nur die Person haben und ihr Appetit gestillt ist, so werfen sie dieselbe weg, ebenso wie man eine Zitrone wegwirft, wenn man den Saft aus ihr gezogen hat.“ (Kant, 1990, p. 177).

social power over each other, the occurring objectification might be considered malign if it is based on sexual preferences internalized from a sexist society. A different example for a source of such an internalization can be found in the erotic book and film series ‘Fifty Shades of Grey’, which sometimes is pejoratively referred to as postfeminist chic-lit (Dymock, 2013). With containing the fastest selling paperback of all time, the trilogy undoubtedly influenced people’s sexual behavior (e.g., Parry & Light, 2014). As the series is rife with depictions of intimate partner violence (Bonomi, Altenburger, & Walton, 2013) and sexual objectification (Permatasari, 2015), the recreation of the series content in people’s bedrooms might have—like postulated by McLeod (2002)—a malign effect on our society, even if happening consensually. Also, negative psychological consequences are likely. A vast body of psychological literature supports this notion of sexual objectification, especially research on self-objectification.

#### **Sexual objectification in the field of psychology.**

Sexual objectification was introduced into psychology by Barbara Fredrickson and Tomi-Ann Roberts in 1997. Their seminal paper on self-objectification inspired a vast amount of research on the attitudes, behaviors, and emotions of people who are targets of sexual objectification. More than one decade later, a few scholars started to research the perpetrators of sexual objectification and investigated the socio-cognitive processes underlying the sexual objectification of others. In order to acknowledge the importance of research on the perpetration side of sexual objectification, it is necessary to understand the massive impact of self-objectification.

#### ***Self-objectification.***

On a daily basis, we are confronted with media representations of good-looking people. Movies, magazines, and advertisements influence our perception of what is beautiful and what we should be striving for. For the purpose of profit, those images are, however, biased, and unnatural. Using Photoshop, skin impurities are being retouched, fat is being deleted, legs

extended, breasts enlarged, and muscles formed. Without being fully aware, we absorb those unrealistic body images and set them as an internal standard for our appearance.

With Objectification Theory, Fredrickson and Roberts (1997) were the first to highlight the devastating psychological and in turn, physiological consequences of living in a sexually objectifying culture. Their psychological framework postulates that especially girls and women learn to internalize an objectifying observer's perspective on their bodies. The authors assumed that self-objectifying persons constantly monitor and judge their bodies, which would lead to reduced well-being. Indeed, a large amount of research substantiated that self-objectification leads to higher body shame, greater anxiety, reduced flow experiences, lower internal bodily awareness, and reduced task performance in women (for an overview see Moradi & Huang, 2008). On the long run, constant self-objectification entails eating disorders and mental depressions.

Several researchers were, moreover, able to establish a direct link between media exposure and self-objectification. Using structural equation modeling Laura Vandebosch and Steven Eggermont (2012) showed that exposure to sexually objectifying fashion magazines, music shows, and social networking sites leads to a greater internalization of beauty ideals in adolescent girls which, in turn, leads to higher self-objectification and body surveillance. That the link between media exposure and self-objectification also prevails over time, was demonstrated by Jennifer Stevens Aubrey (2006). In a two-year longitudinal study on men and women, she obtained evidence that exposure to sexually objectifying media in the first year had a direct positive effect on the extent of self-objectification in the second. Interestingly, this effect was not different for men and women. Compared to men, however, women who consumed objectifying TV in the first year did not show increased body surveillance. The authors interpret the lack of this effect as an indication that body-surveillance is already so profoundly inscribed into femininity—being continuously reinforced by friends, families, and significant others—

that the influence of TV might be diminished. Further research consolidates that, though the way how media influences self-objectification and related constructs are different for men and women, the mere effect could be established for both genders (Daniel & Bridges, 2010; Morry & Staska, 2001).

But not only long-term exposure to objectifying media increases self-objectification: Several experimental studies showed that self-objectification could easily be primed (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; Roberts & Gettman, 2004; Stevens Aubrey, Henson, Hopper, & Smith, 2009). Furthermore, research has demonstrated that sexually objectifying behavior of others is an important predictor for self-objectification (Kozee, Tylka, Augustus-Horvath, & Denchik, 2007). A similar observation was also made by Janet Swim and colleagues (2001) who asked participants to note sexist incidents in a diary study. The researchers reported that female participants experienced on average circa one and a half objectifying incidents per week; male participants reported about one quarter of that amount. Moreover, the authors obtained evidence that the sexist events had adverse effects on the targets well-being, comfort, and self-esteem; moreover, an increasing number of events resulted in the experience of depression and anger. Applying a momentary assessment via smartphones, Elise Holland, and colleagues (Holland, Koval, Stratemeyer, Thomson, & Haslam, 2016) even obtained a higher number of objectifying incidents. In their study, the female participants reported being objectified approximately every other day, which in turn increased their state self-objectification. Further results on the intrapersonal effects of sexual objectification were obtained in an experiment by Sarah Gervais, Theresa Vescio, and Jill Allen (2011). They asked participants to do an interview, solve different math problems, and complete some psychological questionnaires in mixed-sex dyads. One of the two individuals in the dyads was, however, a confederate who was trained in enacting a sexually objectifying gaze to the participant during half of the interviews. Results showed that sexually objectified women, but not men, performed worse in

the math test than women who were not objectified. Moreover, results showed that women self-objectified to a greater extent than men, which was indicated by more body dissatisfaction, body shame, and body surveillance. Surprisingly, in the study by Gervais and colleagues (2011), women who experienced the objectifying gaze, showed a greater motivation to interact with their objectifying partner. The authors offer several explanations for this unanticipated result. First, a stereotype threat might have increased uncertainty. The chance of interacting with another person might have been regarded as a way to reduce uncertainty. Second, the objectifying gaze might have served as an indicator for interpersonal attraction, leading to a reciprocal response. Third, being exposed to an objectifying culture, some women might have been taught that their worth is dependent on how they look or their ability to please men. The objectifying gaze might, therefore, have confirmed their valuableness, which could have led to a greater interaction motivation. Indeed, the heterosexual social construct of romance, flirting behavior and the sexual objectification of women are culturally intertwined (Phillips, 2000). Some women and men, hence, might see sexually objectifying behavior as normal, adequate, and even desired flirting behavior.

To sum up, women, in particular, are affected by sexual objectification; either due to sexually objectifying depictions of women in media or due to behavioral sexual objectification by others. In either case, the consequences of sexual objectification—self-objectification, body surveillance, body shame, depression, anger, and others—are utterly harmful. Moreover, as Gervais, Vescio, and Allen (2011) could show, even if a woman does not have an aversion to be gazed at, she still might suffer from negative effects like an impaired performance. What is unclear is whether the objectifying others consciously or unconsciously intend those negative consequences. Just as sexist behavior and attitudes help to reinforce asymmetric power relations between men and women (Glick & Fiske, 1996, 1997, 2001b, 2001a), sexual objectification might be performed to serve the same function (e.g., Dahl, Vescio, & Weaver, 2015). At

the same time, just as sexist behavior often is, sexual objectification might be culturally adopted as everyday behavior for purposes other than intentionally harmful ones (e.g., as a mating strategy for men and women; Phillips, 2000). Against this background, research began to investigate how, why, and under what circumstances people objectify others.

*Sexually objectifying others.*

One of the most prominent approaches to investigate the sexual objectification of others comes from research on dehumanization. Dehumanization can be understood as the denial of human traits (e.g., mind and morality, warmth, and competence) to others. Furthermore, also the association of others with nonhuman entities (e.g., animals or objects) is regarded as a form of dehumanization (Loughnan, Haslam, & Kashima, 2009). Originally, dehumanization research investigated cognitions or behaviors toward outgroups (see also *infracommunication*; Leyens et al., 2000). In sexual objectification research, dehumanization is either interpreted as a consequence (e.g., Puvia & Vaes, 2013; Vaes, Paladino, & Puvia, 2011) or as an integrated part of sexual objectification (e.g., Haslam, 2006; Heflick et al., 2011; Nussbaum, 1995). Though the theoretical and empirical relations between both concepts are not fully resolved to this date, there is overall agreement that objectification and dehumanization work in a “tandem”, one influencing the other and vice versa (Gervais, Bernard, Klein, & Allen, 2013, p. 6). Evidence for the connection of dehumanization and sexual objectification comes from a remarkably diverse set of research approaches.

For instance, Philippe Bernard and colleagues (2012) were interested in the dissimilarities of object and person recognition. Usually, studies find that for objects it does not matter whether they are presented the way they are or upside down: the overall number of errors people make in a recognition task is roughly the same for both ways of presentation (see Reed, Stone, Bozova, & Tanaka, 2003). However, when people are asked to recognize human stimuli, they make significantly more mistakes when attending to inverted than non-inverted pictures

(Reed et al., 2003). As Bernard and his colleagues could show, this effect does hold for stimuli of sexualized men but not for stimuli of sexualized women: In their experiment, inverted stimuli of sexualized women were recognized just as well as right-side-up pictures of sexualized women; just like objects. The object-like recognition of sexualized women is commonly interpreted as evidence for the interplay of sexual objectification and dehumanization (see, e.g., Heflick & Goldenberg, 2014). Whether this so-called sexualized-body-inversion effect is universal, and therefore replicable, or rather an artificial result of the used stimuli is an ongoing debate (see Bernard, Gervais, Allen, & Klein, 2015; Schmidt, 2015; Schmidt & Kistemaker, 2015). However, using different paradigms, further evidence for the interplay between dehumanization and sexual objectification has been generated.

Nathan Heflick and Jamie Goldenberg (2009), for instance, asked participants to focus either on the appearance or the personality of Sarah Palin and Angelina Jolie. Afterward, the authors assessed attributed competence and humanness as an indicator of whether sexual objectification took place. Under the assumption that the change of focus would be a manipulation of objectification, they postulated that women who are seen as less human and less competent are seen as more object-like. Indeed, participants who focused on the celebrities' appearance saw them both less fully human as well as less competent than participants who focused on their personality. For Sarah Palin, the appearance-focus also reduced the intentions to vote for her in a political election. It remained, however, unclear under what circumstances, other than being told by an experimental instruction, people might be inclined to take an appearance focus and to engage in sexual objectification.

Evidence on people's motivation to sexually objectify others comes from research by Jeroen Vaes Paola Paladino and Elisa Puvia (2011). In an experiment, the authors manipulated the sex-goal of their heterosexual male and female participants by priming them with either neutral words or words related to sex. Afterward, the participants had to evaluate potential

female candidates, to work with in an alleged mathematical test. Finally, the participants performed a Single Category Implicit Association Test (SC-IAT), which measured the dehumanization of women in pictures. The results showed that male (but not female) participants who were primed with a sex goal preferred the candidates rather based on the women's looks than on their competence. As a competent team partner would clearly have been the better choice for succeeding the subsequent math test, this result indicates the influence of a sexual motive. Indeed, male participants who were not primed with a sex-goal, and female participants in general, chose the more competent partner. Concurrently, male participants primed with a sex-goal, dehumanized depictions of women in the SC-IAT to a greater extent than male participants not primed with a sex goal and female participants in general. The authors suggest that an activated sex goal can trigger an instrumentalizing mindset which, in order to fulfill the sex goal, leads to the sexual objectification of women. Whether the accompanying dehumanization serves the same goal or is instead a consequence of men's perceptual shift (see, e.g., Heflick & Goldenberg, 2009) is not clear. Hence, the association of sexual objectification and dehumanization remains uncertain. However, the assessment of dehumanization is not a necessity for sexual objectification research.

Many studies have engaged in sexual objectification research without focusing on dehumanization. For instance, based on the sexual objectification theory by the philosopher Martha Nussbaum (1995), Sarah Gervais, Theresa Vescio, and Jill Allen (2012) postulated that people are objectified when they are considered replaceable. Their so-called fungibility hypothesis assumes that a person, typically a woman, who is reduced to her sexualized body or functions, becomes interchangeable with other persons when they comprise the same simple set of attributes. Gervais and colleagues examined the hypothesis by asking participants to look at a set of photographed people with ideal and average body types. Afterward, the participants had to match the faces to the bodies of the persons they saw beforehand. The authors found

that the participants confused more heads and bodies of women with average bodies, ideal bodies, and of men with ideal bodies. Hence, applying an astute research paradigm, Gervais and colleagues were able to demonstrate that women in general, and people with more ideal body types were seen as relatively more replaceable; that is they were more sexually objectified.

Other research projects made use of eye-tracking technology to examine sexual objectification (e.g., Bareket, Shnabel, Abeles, Gervais, & Yuval-Greenberg, 2018; Gervais, Holland, & Dodd, 2013; Riemer et al., 2018). In eye-tracking studies, sexual objectification is usually operationalized as the dwell time on women's faces vs. their bodies. In an eye-tracking study, Abigail Riemer and colleagues (2018), for instance, found several factors contributing to the amount of visual objectification in men: they evidenced that an appearance focus, alcohol intoxication as well as attractiveness of the women increased the dwell time on depicted bodies of women and decreased the dwell time on the women's faces.

Altogether, the discussed studies reveal the vast variety of approaches to and methodological paradigms in sexual objectification research. This variety even extends beyond the studies shown (see Loughnan & Pacilli, 2014, for a summary). Many studies have demonstrated that sexual objectification is strongly connected to dehumanization. Whether it is part, or a direct result, of sexual objectification, has to be investigated more closely in future studies. Even though dehumanization seems to be a connecting element between the studies, it remains unclear whether the different manifestations of sexual objectification are a result of the same psychological construct, or not. If the paradigms indeed measure different facets of the same coin, one should be able to demonstrate that a person who shows more object-like recognition of sexualized others (cf., Bernard et al., 2012) is also prone to see others' body parts as interchangeable (cf., Gervais, Vescio, & Allen, 2012). In other words: a person with a greater proclivity to sexually objectify should show more sexual objectification on all the different measures, than a person with a smaller proclivity to sexually objectify. Unfortunately, until now,

sexual objectification research has lacked a thoroughly validated scale to measure a person's proclivity to sexually objectify others. Furthermore, despite the diversity of all the studies exploring sexual objectification, research has neglected one crucial aspect, possibly contributing to the amount of shown sexual objectification: the opinion of others. While a lot of research is available on the evaluation of sexual harassers (e.g., Castellow, Wuensch, & Moore, 1990; Cummings & Armenta, 2002; Gutek, Morasch, & Cohen, 1983), so far no one investigated how people evaluate others who take part in acts of sexual objectification.

This dissertation seeks to close both research gaps: Across five consecutive studies, Empirical Part I (pp. 19-144) describes the development and validation of the Sexual Objectification of Others Inventory (SOOI), an instrument to measure people's proclivity to sexually objectify others. Empirical Part II (pp. 145-251) features three experiments, which carefully examine how targets and perpetrators of sexual objectification are evaluated by observers.

## **Empirical Part I:**

### **Development and Validation of the Sexual Objectification of Others Inventory (SOOI), an Instrument to Measure the Proclivity to Sexually Objectify Others**

#### **General Introduction**

Since the first social psychological articles on other-objectification were released (e.g., Strelan & Hargreaves, 2005), research on this topic has received more and more attention. The subject objectification of others has attracted social psychologists from diverse research backgrounds with different foci on the topic. Hence, though still being quite small, the field is already very heterogeneous regarding the research performed. For instance, there are research projects, which have examined the basic cognitive underpinnings of other-objectification (Bernard et al., 2012), have explored motivational aspects of objectification (Orehek & Weaverling, 2017), have investigated the relations of objectification with dehumanization (Gervais et al., 2013) or even have taken a culturally comparative approach (Loughnan et al., 2015). Just as the field is diverse in its perspectives, it is heterogeneous in the applied methodologies used to measure sexual objectification. When manipulating the sexualized appearance of depicted persons or the appearance-focus of the observers, sexual objectification has been investigated measuring the strength of attributions of the human nature (Heflick & Goldenberg, 2009), mind (Loughnan et al., 2010) or competence and warmth (Heflick et al., 2011). Further research has measured objectification by applying implicit methods like the Implicit Association Test (IAT; Rudman & Mescher, 2012), methodologies from visual-recognition research (Bernard et al., 2012), eye-tracking (Gervais et al., 2013) or even neuroimaging (Cikara, Eberhardt, & Fiske, 2011). While those methods operationalize objectification in a rather abstract, less face-valid way, several scales try to gauge sexual objectification of others by explicitly assessing attitudes and behavior.

**Current scales to measure the sexual objectification of others.**

One of the first scales to assess the sexual objectification of others is the Other-Objectification Questionnaire (OOQ) introduced by Peter Strelan and Duane Hargreaves (2005). The OOQ is an adapted version of the Self-Objectification Questionnaire (SOQ) by Stephanie Noll and Barbara Fredrickson (1998). Both scales ask participants to rank five appearance-based attributes (e.g., weight or sex-appeal) and five competence-based attributes (e.g., strength or health). The SOQ aims at assessing the relative importance of both concepts for one's own body; the OOQ tries to determine the relative importance of both concepts for other people's bodies. Applying both scales, Strelan and Hargreaves (2005) have shown that people who objectify themselves also objectify other women and men. Interestingly, the associations between self- and other-objectification were high for female and low for male participants. It seems likely that the reasons why people objectify themselves, and others, are more similar for women (e.g., the overall importance of beauty-standards) than for men. Because of its content, the OOQ is typically used in research focusing on the assessment of bodies. For instance, recent research from sports science investigated whether mirrors undermine the positive effect of yoga on women's body images (Frayeh & Lewis, 2018); which they do not. Another example of its application is research by Meghan Davidson, Sarah Gervais, and Lindsey Sherd (2013), who investigated the mediating role of body surveillance in the effect of verbal harassment on other-objectification. The scale's most prominent advantage of focusing on the objectification of bodies also represents its most significant shortcoming: it has a narrow view on sexual objectification. For instance, the scale neither addresses objectification as seeing another person as a resource to fulfill one's own desire (Bartky, 1990) nor entails features, which are seen as fundamental properties of objectification like instrumentality, ownership or denial of subjectivity (Nussbaum, 1995). Moreover, it is far from measuring everyday sexually objectifying

behavior, like, for example, the objectifying gaze, which is found to be the most common sexually objectifying behavior (Holland et al., 2016).

A scale assessing sexually objectifying behavior is the interpersonal sexual objectification perpetration scale (ISOS-P; Gervais, Davidson, Styck, Canivez, & DiLillo, 2018; Gervais, DiLillo, & McChargue, 2014), which is an adapted version of the interpersonal sexual objectification scale (ISOS; Kozee et al., 2007). The scale asks participants how often they have shown certain objectifying behaviors. Items include behaviors, which aim at the evaluation of bodies (e.g., “How often have you whistled at a woman [man] while she [he] was walking down the street?”) and behaviors depicting unwanted explicit sexual advances (e.g., “How often have you grabbed or pinched one of a woman's [man's] body areas against her [his] will?”). The original study (Gervais et al., 2014) found out that college men's alcohol consumption is associated with the amount of reported sexually objectifying behaviors. Though the study demonstrated the scale's validity, the scale has been applied just a few times. One example is research by Sarah Gervais, Philippe Bernard and Abigail Riemer (2015): They showed that people high on vertical individualism—i.e., people who perceive themselves as autonomous individuals who are moreover fine with inequality among individuals—show more sexually objectifying behaviors. The effect was mediated by the amount people tend to compare themselves to others. Moreover, the authors were able to show that the outcomes for men and women are not entirely different. This lack of differences appears surprising, as the scale names a lot of behaviors, which can be considered as stereotypically masculine (e.g., whistling at a woman). However, people's answers on the subscales ‘body evaluation’ and ‘explicit sexual advances’ are usually located at the scale-points *rarely* and *never*, which indicates that a floor effect produced the small gender difference. The reason for the floor effect can be found in the item configuration, which overall assesses rather blunt behaviors. Consequently, the floor effect entails small statistical variance, which diminishes the applicability of the scale itself.

Further scales aiming to assess sexual objectification of others are the Sexual Objectification Scale Revised introduced by Tracey Morse (SOS-R; 2007) and an objectification scale by Paul Curran (2004) without a name. While the first scale exclusively assesses the sexual objectification of men toward women, the latter measures the sexual objectification of men toward women, and with a distinct set of items, also the sexual objectification of women toward men. Reviewing the scales' items, one can detect facets of objectification like instrumentality or denial of subjectivity, which have been postulated by researchers like Nussbaum (1995). The scales, however, also contain items, which entail low face validity (e.g., "I get irritated when foreplay does not lead to my orgasm"; Morse, 2007). Both scales were implemented in just very few cases (e.g., Bareket, Kahalon, Shnabel, & Glick, 2018; Bartak, 2015).

To sum up, none of the introduced scales has been validated and applied thoroughly. This lack of thorough investigation is partly due to the small size of the research field but also might stem from the fact that the scales come with methodological restrictions like a narrow or unprecise understanding of sexual objectification, low variance, or a missing possibility to assess the sexual objectification toward men. With the Sexual Objectification of Others Inventory, (SOOI) this thesis proposes a thoroughly validated measure of other-objectification, which has been developed to assess commonplace sexually objectifying behavior and attitudes, incorporating an elaborate understanding of sexual objectification. In contrast to other scales, the SOOI has been developed to assess sexual objectification toward women as well as toward men and other genders of various sexual orientations.

### **Conceptual approach toward the Sexual Objectification of Others Inventory.**

The Sexual Objectification of Others Inventory (SOOI) was developed to measure sexual objectification proclivity, integrating several theoretical considerations, stemming from research on sexual objectification, sexual harassment, and the social psychology of gender.

First, Carolyn McLeod (2002) theorized that objectifying attitudes do not necessarily entail interpersonal acts of other-objectification and vice versa. For instance, people could possess clearly sexually objectifying attitudes toward individuals without showing sexually objectifying behavior toward them. Conversely, people can behave in a sexually objectifying way without objectifying others cognitively. For example, the behavior of a person engaging in a one-night stand can be considered as objectifying; but he or she does not necessarily have to have objectifying attitudes toward the one-night stand partner. Moreover, decades of research in social psychology showed that attitudes and behavior can, but do not have to correlate with each other (for an overview see Ajzen & Fishbein, 2005). Hence, to get a comprehensive estimate of sexual objectification proclivity, for the SOOI, we decided to assess both, sexually objectifying behavior and sexually objectifying attitudes together.

Second, sexually objectifying behaviors and attitudes are thoroughly intertwined with patriarchy. According to Bartky (1990), sexual objectification, in general, does contribute to a sexist, oppressive system, as it systematically targets oppressed groups like women. What does that entail for the development of a sexual objectification scale? One could conclude to create a scale, which targets only the sexual objectification proclivity of the alleged oppressors: men. Yet, the opposite is the case. To provide an estimate on the relative amount of sexual objectification, a questionnaire should be able to assess men's, women's, and other gender's sexual objectification proclivity. This aim was pursued during the development of the SOOI.

Third, following Bartky (1990), Nussbaum (1995) and McLeod (2002) it was assumed that sexual objectification cannot be considered morally wrong in every instance (e.g., consensual objectification during sex). Against this background, and for the sake of reducing the possibility for social desirability biases, the SOOI's items were created to include sexual objectification, which was morally milder and more socially acceptable than sexual objectification in other scales (e.g., the ISOS-P; Gervais et al., 2018, 2014).

In total, five studies were conducted to develop and investigate the SOOI. Study 1 and Study 2 selected the SOOI's items using exploratory factor analyses. The scale's factor structure was subsequently investigated in Studies 2-5. Moreover, besides validating the scale, each of those studies examined various aspects of the scale's properties: Study 2 analyzed the SOOI's test-retests reliability. Study 3 applied the SOOI to people who identify as lesbian, gay, bisexual, trans, or queer\*. Study 4 examined an English translation of the SOOI items. Study 5 applied the SOOI in an experimental setting and assessed whether the SOOI predicts men's sexually objectifying behavior after a manipulation of their masculinity.

### **Study 1 and Study 2: Development, Validation, and Assessment of the SOOI's Test-Retest Reliability**

The first two studies were designed to determine the set of items that form the basis of the Sexual Objectification of Others Inventory (SOOI). For the determination of the final item pool, we wanted to ascertain the best possible outcome for the factor structure. To that end, we post hoc decided to analyze and report Study 1 and Study 2 together.

The final set of items was selected using exploratory and confirmatory factor analyses on the data of Study 1 and Study 2. No specific factor structure was presumed beforehand because the factors which are discussed to comprise sexual objectification (see Nussbaum, 1995) overlap to a great extent. For example, the attitude that one's partner should always be ready for sex comprises at least two of Nussbaum's characteristics: instrumentality and denial of subjectivity. Hence, we figured that a data-driven approach to the factor structure would be most appropriate.

Study 1 and Study 2 were furthermore expected to provide first results on the scale's psychometric properties. To investigate test-retest reliability, in Study 2, we asked participants to fill out the SOOI twice, with a two-week interval in between. Moreover, Study 1 and Study 2 applied several instruments to examine the SOOI's validity.

The SOOI's convergent validity was investigated using the interpersonal sexual objectification perpetration measure (ISOS-P; Gervais et al., 2014; Gervais, Davidson, Styck, Canivez, & Dilillo, 2018) as well as the Other-Objectification Questionnaire (OOQ; Strelan & Hargreaves, 2005). As the items of the ISOS-P describe blatant and stereotypically male objectifying behavior, just a medium-sized positive correlation with the SOOI was hypothesized. A similar low expectation was formulated for the OOQ: Though the OOQ taps into the sexual objectification of others, its focus is only on how other's bodies should look (and not, e.g., on own objectifying behaviors). The final item pool of the SOOI, however, revealed a much

broader concept of other-objectification, not just focusing on others' bodies. Hence, we expected a positive but low to medium correlation of the OOQ with the SOOI.

The SOOI's construct validity was tested in accordance with results from research on sexual aggression: Deborah Capaldi, Thomas Dishion, Mike Stoolmiller, and Karen Yoerger (2001) showed that young men, who talk about women in a hostile way, show more physiological and psychological aggression toward their partners. Angela Jacques-Tiura and colleagues (2015) demonstrated that men who talk to other men in a sexually objectifying way about women engage in significantly more sexual aggression. In our study, we wanted to explore the relationship between sexual objectification proclivity and evaluation of objectifying language. We hypothesized that men and women with a greater objectification proclivity, measured with the SOOI, evaluate objectifying language more positively. For this purpose, the so-called Objectifying Word Positivity Index (OWPI) was created.

A further instrument to generate evidence for the SOOI's construct validity was based on research on sex robots. Sex robots and their use are discussed to contribute to the sexual objectification of women (Richardson, 2016). Furthermore, sex robots are considered to entail the risk of cultivating dehumanization within sexual encounters between humans (Gutiu, 2012; Sparrow, 2017). Against this background, we hypothesized that people with a high SOOI score should be more interested in sex robots.

Furthermore, to assess discriminant validity, we implemented several validation scales from related research fields. Those scales were expected to be associated with the SOOI, but not to a major degree.

First, we had the best reason to assume that people who tend to objectify others should also tend to sexually objectify themselves. This effect has been shown for women objectifying other women (Strelan & Hargreaves, 2005) and women objectifying men (Davidson et al., 2013). Because no contradicting information was available, the same finding was anticipated

regarding the self-objectification of men and their objectification of women. Thus, a positive correlation between the SOOI and self-objectification was assumed.

Other validation scales to assess discriminant validity were chosen on the basis of results from related research fields like sexual aggression: People who endorse myths about sexual aggression believe that the (female) victims of sexual aggression are themselves partially or completely responsible for the violent acts. The (male) perpetrators are seen as less or not guilty, and the negative consequences of the aggressive acts are denied or belittled. Studies indicated that sexual objectification of others is associated with sexual aggression in men (e.g., Rudman & Mescher, 2012). Steve Loughnan, Afroditi Pina, Eduardo Vasquez and Elisa Puvia (2013) showed that looking at sexualized women increased male and female participants' rape victim blame and decreased moral concern for, and perceived suffering of, a female victim. For sexually objectifying women, a higher endorsement of rape myths might additionally serve as an anxiety buffer, which allows them to believe that just certain types of women fall victim to sexual aggression by men (cf., Bohner & Lampridis, 2004). This would allow them to engage more freely in sexual activities with different persons. Against this background, we hypothesized that men and women with a greater proclivity to objectify women would more strongly endorse myths on rape as well as sexual harassment. But would they also tend to show more sexually harassing behavior themselves? Indeed can sexually objectifying behavior be considered sexually harassing if the objectified person is aware of being objectified (for further discussion see Empirical Part II, p. 145). Hence, we hypothesized that people with a high sexual objectification proclivity, measured with the SOOI, should also be more inclined to show sexually harassing behavior.

Sexual-harassment research by Charlotte Diehl and colleagues (2016) showed that unwanted sexual attention—which is the interest in brief sexual encounters—is predicted by short-term mating orientation. Moreover, an experimental study by Jaime Confer, Carin

Perilloux, and David Buss (2010) showed that men, whose short-term mating goal is activated, choose to sexually objectify women more. Hence, the SOOI was expected to correlate positively with short-term mating orientation and desire for sex at a low to medium level. For long-term mating orientation, which is the interest in long-term romantic relationships, we anticipated no significant statistical relationship as none of the reviewed findings on sexual objectification and harassment did indicate a potential association between the constructs. However, assuming that a high sexual objectification proclivity leads to more sexual encounters, a positive correlation of sexual objectification proclivity with previous sexual behavior was expected additionally.

Furthermore, we expected the SOOI to be associated with people's attitudes on sexism. The most prominent theory on sexism is the Ambivalent sexism theory (Glick & Fiske, 1996, 1997, 2001b, 2011). It states that two complementing forms of sexist attitudes, hostile sexism and benevolent sexism, systematically contribute to the maintenance of gender inequality around the world. Hostile sexist attitudes comprise strong resentments toward women, especially toward those women who question patriarchal norms of the society (e.g., feminists). Benevolent sexist attitudes depict women as wonderful, pure, but fragile beings who need protection by men. There is some evidence that highly hostile (but not benevolent) sexist men show greater sexual objectification (see Cikara et al., 2011; Morse, 2007). However, we predicted moderate positive correlations with hostile as well as benevolent sexism for men and women. We saw that the final item pool of the SOOI study not only included harassing or hostile forms of sexual objectification (like the ones illustrated by Swim, Cohen, Hyers, and Ferguson; 2001). The item pool contained several items, which seemed akin to benevolent items of the Ambivalent Sexism Inventory factor which Peter Glick and Susan Fiske (1996) termed *heterosexual intimacy*, describing the idea that people are incomplete without a heterosexual partner.

The final two validation scales were chosen with regard to findings on attitudes toward group-based dominance and inequality: Christopher Bartak (2015) found that for men and women, social dominance orientation, which is the support of myths that legitimize the superiority of high-status and the inferiority of low-status groups (see Pratto, Sidanius, & Levin, 2006; Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 2001), was lowly to moderately associated with sexual objectification assessed with the Sexual Objectification Scale Revised by Morse (SOS-R; 2007). Hence, similar correlational patterns between social dominance orientation and the SOOI were expected. Conversely, we anticipated that people who are aware of the fact that men currently hold more privileges in society than women, measured with the Male Privilege Awareness Scale (Case, 2007), would show less sexual objectification proclivity.

During item development for the SOOI, we wanted to give the highest priority to the generation of items, which do not evoke socially desirable response tendencies. Hence, the SOOI was expected to show no statistically significant association with people's proclivity to respond in a socially desirable way. For the same reason, we hypothesized no relationship of the SOOI with people's external motivation to respond without sexism, which is the desire to appear nonsexist in front of others (Klonis, Plant, & Devine, 2005). Because positive correlations with ambivalent sexism were assumed, a negative correlation with the internal motivation to respond without sexism was expected: participants with lower SOOI scores should indicate a greater internal motivation to be nonsexist.

**Method.*****Scale development.****Item generation.*

The initial item pool of the SOOI was created by both social psychologists and lay people (i.e., primarily students). Everyone was given a short oral definition of sexual objectification beforehand: “The term sexual objectification is commonly understood as the reduction of a person to his or her body, body parts or the instrumentalization of the person as a sexual resource.” This procedure aimed at ensuring a broad spectrum of items describing various commonplace sexually objectifying attitudes and behaviors. In the following, several items were omitted because they did not describe sexual objectification (e.g., “I always hold the door open for women”). Other items were rephrased to emphasize characteristics, which are considered to be typical for objectification (e.g., instrumentality, fungibility, violability, ownership, denial of autonomy, inertness, denial of subjectivity; Nussbaum, 1995). An initial attempt to rephrase the items in such a way that each item assesses just one of those characteristics was stopped early as several characteristics often appeared together in one item. Altogether, the initial item pool consisted of 64 items.

*Analyses of the initial item pool – Pretest 1.*

First, we investigated, which items of the initial pool were seen as socially undesirable and should be revised (e.g., rephrased less bluntly) or dropped. In exchange for course credit, 29 students (age:  $M = 21.45$ ,  $SD = 3.20$ ; 26 women, 3 men) were asked to give an estimate of the items' social acceptability. The participants rated all 64 items of the initial item pool on a 6-point-scale ranging from 1 (*socially acceptable*) to 6 (*socially unacceptable*). We decided for a 6-point-scale and therefore did not offer a middle option, because we wanted the participants to decide between rather socially acceptable or unacceptable. With an overall average of 4.27 ( $SD = 1.03$ ) the items were rated as rather unacceptable compared to the scale midpoint,

$t(28) = 4.03, p < .001$ . Based on the item means, and wording, we dropped and revised some of the more unacceptable items. Novel items were created additionally, which lead to an updated item pool of 79 items.

*Analyses of the revised item pool – Pretest 2.*

The revised item pool was examined using an online sample recruited via social media ( $N = 82$ ; age:  $M = 26.55, SD = 5.16$ , gender: 60 women, 13 men, 2 non-binary, 7 without indication). Again, the social acceptance of the items was investigated using a 6-point-scale ranging from 1 (*socially acceptable*) to 6 (*socially unacceptable*). The average social acceptance of all item means was 3.82 ( $SD = 1.43$ ) and turned out as significantly above the scale midpoint,  $t(81) = 2.03, p = .046$ . The overall mean of Pretest 1 did not differ significantly from Pretest 2,  $t(109) = 1.56$ . Again, some items had to be dropped or revised. In addition, several additional items were created, which lead to a number of 90 items in the revised item pool.

*Final scale refinement – reducing gender differences.*

Having a large item pool of 90 items, we pursued the goal to create a questionnaire, which can be used to assess sexual objectification toward female and male persons. As the developed items only assessed sexual objectification of women, respective counterparts of each item were created to assess the sexual objectification of men. However, more than half of the rephrased items turned out to be inapplicable because their meaning differed from the female items or depicted improbable behavior (e.g., “Men should regularly check if their make-up is still fine” or “If a woman whistles at a man on the street, he is pleased about the compliment”). For Study 1, those items were assessed only in their female form, but not included in further analyses. The final and subsequently analyzed item pool consisted of 74 items depicting the acceptance of sexual objectification toward women: 37 items measuring the proclivity to sexually objectify women and 37 equivalent items measuring the proclivity to sexually objectify men (see Appendix A, Table A1, pp. 271-274). Study 2 only included the 74 male and female

items, developed to measure sexual objectification proclivity. As both items sets only differed regarding the words marking gender (e.g., ‘men’ or ‘women’) and every participant only got one item set depending on his\* or her\* sexual orientation, the equivalent items were collapsed and treated as the same items for the subsequent analyses.

### *Participants of Study 1.*

Two hundred forty-three participants, who were recruited mainly on campus or via social media, took part in the main study. Five participants dropped out at the beginning of the study because they did not classify themselves on a scale assessing their sexual orientation. Two participants decided to leave during the study after seeing a trigger warning (see Appendix A, p. 274) announcing content, which might evoke negative memories in people who have suffered traumatic experiences from gender-based violence (for information on trigger warnings, see Godderis & Root, 2016). All participants who wanted to leave were guaranteed the full reimbursement of sweets and course credits (for psychology students) and had the immediate possibility to take part in another computer study so they could avoid an unwanted coming out to the research assistant or other participants. Before data analysis, it was decided to remove homo- and bisexual subjects for this very first study. Though some research papers have reported no differences between homo- and heterosexual people regarding sexual objectification (e.g., Hill & Fischer, 2008), others, however, did (e.g., Kozak, Frankenhauser, & Roberts, 2009). To get a better understanding of the differences between heterosexual and homosexual participants, we decided to dedicate a future study to people who identify within the LGBTQ\* spectrum (see Study 3) and to remove non-heterosexuals from Study 1. In total, 14 homo- and bisexual women and 9 homo- and bisexual men were removed from the sample. A multivariate outlier analysis did not indicate any irregularities in the participants’ response patterns.

The final sample consisted of 213 participants (109 heterosexual women and 104 heterosexual men) who were on average 23.17 years old ( $SD = 6.18$ ). Half of them were in a monogamous relationship (52.1 %), less than a half were single (46.0 %), and a small fraction reported being in another form of relationship like multi-partner relationships (1.9 %). Regarding the highest level of education, the majority of the participants had a high school diploma (81.7 %) or a bachelor's degree (13.6 %).

### ***Participants of Study 2.***

Participants for Study 2 were also recruited via social media and on campus. One hundred ninety-one participants completed both, the first part and, two weeks later, the second part of the study. Sixty-three participants completed only the first part. A t-test for age and chi-squared tests for all other demographics showed that the samples of Time 1 and Time 2 did not differ from each other (all  $ps > .05$ ). Like in Study 1, we decided to remove individuals who not identified as being heterosexual. Consequently, we removed 14 homosexuals (10 men, 3 women), 13 bisexuals (3 men, 8 women) and 8 participants who specified another sexual orientation (e.g., asexual or pansexual; 2 men, 4 women). By doing this, the five participants who specified their gender outside the gender binary were also removed, as they did not identify as heterosexual. A multivariate outlier analysis indicated no outliers.

The final sample consisted of 219 heterosexual participants, of which 164 completed both parts. One hundred six participants identified as female and 113 as male. Eighty-one women and 83 men took part in part 2. On average, all participants were 24.06 years old ( $SD = 5.20$ ). 59.9% were in a monogamous relationship, 38.4% specified being single, and 2.8% indicated being in another form of relationship. Most participants indicated a high-school diploma (64.4%) or a bachelor's degree (21.0%) as the highest level of education.

### *Measures of Study 1.*

If not reported otherwise, all of the following measures were applied using a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The internal consistencies can be obtained from Table 1 on page 38.

#### *Acceptance of Modern Myths About Sexual Aggression Scale (AMMSA).*

Endorsement of myths about sexual aggression was assessed with 11 German items of the Acceptance of Modern Myths About Sexual Aggression Scale (AMMSA; Gerger, H., Kley, H., Bohner, G., & Siebler, 2007). An example item is “A lot of women strongly complain about sexual infringements for no real reason, just to appear emancipated.”

#### *Ambivalent Sexism Inventory (ASI).*

Ambivalent sexism (Glick & Fiske, 1996, 1997, 2001b, 2011) was assessed with the German version of the Ambivalent Sexism Inventory (ASI; Eckes & Six-Materna, 1999). The scale contains 11 items measuring hostile sexism (e.g., “Most women interpret innocent remarks or acts as being sexist”) and 11 items measuring benevolent sexism (e.g., “No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman”).

#### *Interpersonal Sexual Objectification Perpetration Measure (ISOS-P).*

The interpersonal sexual objectification perpetration measure (ISOS-P; Gervais et al., 2014; Gervais, Davidson, Styck, Canivez, & Dilillo, 2018) is an adapted version of the Interpersonal Sexual Objectification Scale by Holly Kozee, Tracy Tylka, Casey Augustus-Horvath and Angela Denchik (2007). As part of this measure, participants report how often they engaged in 15 sexually objectifying behaviors within the last 12 months (e.g., “How often have you whistled at a woman [man] while she [he] was walking down the street?”). We used the 5-point Likert scale ranging from 1 (*never*) to 5 (*almost always*), which is typically implemented together with the ISOS-P items. Participants answered items, which measured the sexual

objectification of either men or women, depending on the participants' sexual orientation (see above). The ISOS-P was assessed with 15 items, which were carefully translated into German in collaboration with several English speakers (see Appendix A, Table A2, p. 275).

*Likelihood to Sexually Harass (LSH).*

To assess people's likelihood to sexually harass, the German version of the Likelihood to Sexually Harass Scale was implemented (Vanselow, Bohner, Becher, & Siebler, 2010), which was originally developed by John B. Pryor (1987). The measure contains four critical text scenarios in which a man could sexually harass a subordinated woman; furthermore, it includes five scenarios not related to harassment in order to disguise the scale's purpose. For the critical scenarios, participants have to respond the likelihood of their performing a mild sexually harassing behavior, a strong sexually harassing behavior, and a neutral behavior on a scale from 1 = *not at all* likely to 5 = *very likely*. The resulting score was calculated by averaging all eight likelihood values for the harassing behaviors. The scale was only provided for participants (of any gender) with a sexual desire toward women.

*Male Privilege Awareness (MPA).*

To assess male privilege awareness, the Male Privilege Awareness Scale by Case (MPA; 2007) was translated into German and implemented. An example item of the original scale read: "Men have privileges that women do not have in [Germany]". To conclude, a negative association of the SOOI items with the MPA was expected for men. The MPA was assessed with 7 items, which were carefully translated into German in collaboration with several English speakers (see Appendix A, Table A3, p. 276).

*Motivation to Respond Without Sexism (IMS/EMS).*

Internal and External Motivation to Respond Without Sexism (IMS-S; EMS-S) was assessed with a scale by Suzanne Klonis, Ashby Plant, and Patricia Devine (2005). A German version of the scale was administered (Eyssel, 2010), containing 10 IMS-S items (e.g., "Being

nonsexist toward women is important to my self- concept-concept”) and 10 EMS-S items (e.g., “I attempt to appear nonsexist toward women in order to avoid disapproval from others”).

*Self-Objectification Questionnaire and Other-Objectification Questionnaire (SOQ/OOQ).*

Self-Objectification was assessed using the Self-Objectification Questionnaire (SOQ) developed by Noll and Fredrickson (1998). Participants were asked to rank five appearance-based attributes (e.g., weight and sex-appeal) and five competence-based attributes (e.g., strength and health) in order of the perceived significance for their own bodies.

To assess the sexual objectification of others, Peter Strelan and Duane Hargreaves (2005) have adapted the Self-Objectification Questionnaire by Stephanie Noll and Barbara Fredrickson (1998) and have created the Other-Objectification Questionnaire (OOQ). Here, participants were asked to rank five appearance-based and five competence-based attributes regarding their significance in the perception of other people’s bodies. Depending on the participants’ sexual orientation, the OOQ focused on women’s or men’s bodies, whereas people who desire men and women likewise, answered the OOQ depicting women. Homosexual and bisexual participants were, however, excluded before the analysis (see above). The final measures of self- and other-objectification were calculated as the difference between the ranking of all appearance-and all competence-based items. The presented scales were unpublished German translations (Applied Social Psychology and Gender Research Lab, 2016; see Appendix A, Table A4, p. 277). Items were presented in randomized order.

#### *Sexual Orientation.*

To assess participants’ sexual orientation, an adapted version of the Heterosexual-Homosexual Rating Scale, first published by Alfred Kinsey and colleagues in 1948 (see Kinsey, Pomeroy, & Martin, 1963), was used: participants were asked to indicate their sexual preference within the last two years using a Likert-scale ranging from 1 (*exclusively men*) to 7

(*exclusively women*). Depending on cultural norms, having a desire for same-sex sexual contact is not always accompanied by the identification as homosexual (Martinez & Hosek, 2005). In contrast to the original Kinsey scale, sexual identification was not assessed within a spectrum of *exclusively homosexual* to *exclusively heterosexual*, but rather the desire for sexual activity with either sex, which was thought to be associated with sexual objectification proclivity. Additionally, to the question on sexual preferences, the participants were asked if this item is sufficient to measure their preferences in the first place. For example, asexual people would be unable to classify themselves on the male-female spectrum. For participants who rated this item as insufficient, the survey ended subsequently after filling out a short demography questionnaire.

*Social Dominance Orientation (SDO).*

To assess social dominance orientation, the sixth version of the SDO scale (SDO<sub>6</sub>) was used (Sidanius & Pratto, 2001). A German version of the scale was administered (Six, Wolfradt, & Zick, 2001). The scale contained 16 items (e.g., “It’s OK if some groups have more of a chance in life than others.”).

*Sociosexual Orientation (SOI).*

To assess participants’ short- and long-term mating orientation, the German version of the multidimensional model of James Jackson and Lee Kirkpatrick (2007) of sociosexuality was applied (Diehl, Vanselow, & Bohner, 2010). Compared to other measures of sociosexuality (e.g., the SOI-R by Penke and Asendorpf, 2008), the multidimensional model of sociosexuality assesses short-term mating orientation (STMO; e.g., “I can imagine myself enjoying a brief sexual encounter with someone I find very attractive”; 10 items), long-term mating orientation (LTMO; e.g., “I am interested in maintaining a long-term romantic relationship with someone special.”; 10 items) and previous sexual behavior (PSB; e.g., “During your entire life, with how many partners of the opposite sex have you had sexual intercourse?”; 5 items) on independent

dimensions. The PSB-score was calculated as the average of all five z-transformed numerical answers.

*Internal consistencies of the measures in Study 1.*

Table 1 presents the internal consistencies for each scale in Study 1. For some scales, the coefficient is missing because its calculation was not possible since the scales were rank ordered scales. The internal consistencies for the scales ranged from acceptable to excellent.

Table 1  
*Cronbach's Alphas of the Measures in Study 1*

Scale	$\alpha$
AMMSA	.90
ASI-B	.88
ASI-H	.92
EMS-S	.80
IMS-S	.85
ISOS-P	.82
LSH	.83
MPA	.80
OOQ	–
SDO <sub>6</sub>	.82
SOI: LTMO	.73
SOI: PSB	.73
SOI: STMO	.93
SOQ	-

*Measures of Study 2.*

In Study 2, we intended to use a different set of validation scales than in Study 1 in order to broaden our knowledge of the SOOI's validity. However, because preliminary analyses of Study 1 emphasized the importance of ISOS-P and SOI as predictors for the SOOI (Anslinger & Eyssel, 2017), we reused both scales in Study 2. The description of the ISOS-P and the SOI can be found in the chapter describing measures of Study 1 (p. 34, resp. p. 37). Participants' sexual orientation was also assessed again in order to administer that version of SOOI, which was suitable for the sexual orientation of the respective participants (see p. 36 for a description). If not reported otherwise, all of the following measures were applied using a

seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The internal consistencies can be obtained from Table 2 on page 41.

*Balanced Inventory of Desirable Responding (BIDR).*

People's proclivity to respond in a socially desirable way was assessed with the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1994 cited by Musch, Brockhaus, & Bröder, 2002). The scale's subscale *Impression Management (IM)* captures people's inclination to create a socially desirable image ("I never curse"). The subscale *Self-Deceptive Enhancement (SD)* assesses how much people tend to perceive themselves favorable ("I am a completely rational person"). Whereas the first subscale describes a conscious tendency to describe oneself more socially desirable, the latter represents a non-conscious predisposition to portrait oneself in a positively biased way (Hart, Ritchie, Hepper, & Gebauer, 2015). People's proclivity to respond in a socially desirable way was assessed German version of the BIDR (Musch et al., 2002), consisting of 20 items.

*Desire for Sex (DFS).*

In order to assess people's desire for sex, we asked the participants how much sex they would desire in general, during the last year, during the last thirty days, during the last seven days, today and in this moment. The implemented Likert scale ranged from 1 (*little desire*) to 7 (*lot of desire*).

*Interest in Sex Robots (ISR).*

In order to assess the interest in sex robots, we adapted a scale that was previously used to assess the acceptance of the social robot NAO (Kuchenbrandt & Eyssel, 2012). The adapted scale was comprised of 14 items. The scale assessed people's interest in, for instance, owning, using, testing, or buying a sex robot (e.g., "I could imagine to buy a sex robot"). The full scale can be found in Appendix A, Table A5, on page 278.

*Sexual Harassment Myth Acceptance (ISHMA).*

The endorsement of sexual harassment myths was measured with the the Illinois Sexual Harassment Myth Acceptance Scale (ISHMA; Lonsway, Cortina, & Magley, 2008). The authors define sexual harassment myths as “attitudes and beliefs that are generally false but are widely and persistently held, and that serve to deny and justify male sexual harassment of women” (p. 611). An example item is: “If a woman is sexually harassed, she must have done something to invite it.”. As we recruited our participants in Germany, we used the German version of the ISHMA (Diehl, 2014) consisting of 24 items.

*Objectifying Word Positivity Index (OWPI).*

To create the Objectifying Word Positivity Index (OWPI), participants were asked to rate 69 verbs from the realm of sex and partnership with regard to their valence and their degree of sexual objectification. Since we were interested in the objectifying words, we selected items that were rated higher than the scale midpoint of four (e.g., “to fuck”). This way, we obtained 32 sexually objectifying verbs and calculated the Objectifying Word Positivity Index (OWPI) for each participant by averaging the evaluations of how positive the words were regarded. Higher values indicate a more positive assessment of objectifying verbs from the realm sex and partnership. A complete list of all 69 words and respective means and standard deviations can be found in Appendix A, Table A6 on pages 278-280.

*Internal consistencies of the measures in Study 2.*

Table 2 shows the internal consistencies of the validation scales in Study 2. Most internal consistencies ranged from good to excellent. The internal consistency of the BIDR subscales was questionable, but in line with the results of the scale developers (see Musch et al., 2002). Indicating poor reliability, the internal consistency of the Sociosexual Orientation subscale Previous Sexual Behavior was also questionable.

Table 2  
*Cronbach's Alphas of the Measures in Study 2*

Scale	$\alpha$
BIDR: IM	.65
BIDR: SD	.66
DFS Time 1	.89
DFS Time 2	.90
ISHMA	.91
ISOS-P	.81
ISR	.91
OWPI	.92
SOI: LTMO	.82
SOI: PSB	.66
SOI: STMO	.93

### ***Procedure of Study 1.***

The study was conducted in group sessions of maximum eight persons in a laboratory and took approximately 45 minutes. After being welcomed, the participant sat down at a computer and could immediately begin with the study. On the computer screen, they read the general introduction and the informed consent, which they had to agree to before filling out the questionnaires. The order in which the scales were administered is presented in Table 3.

Table 3  
*Procedure of Study 1*

Nr.	Part
1.	General instruction and informed consent
2.	Sexual orientation
3.	SOQ
4.	OOQ
5.	SDO <sub>6</sub>
6.	LSH
7.	Trigger warning
8.	Grouped questionnaires with randomized item order: SOOI AMMSA ASI SOI: LTMO & STMO EMS-S & IMS-S MPA
9.	SOI: PSB
10.	ISOS-P
11.	Demographic questions
12.	Participant's comments
13.	Generation of anonymous participant number
14.	Debriefing

### ***Procedure of Study 2.***

The first part of the study was conducted in mixed-gender group sessions with a maximum of eight persons in a laboratory and took approximately 30 minutes. The participants were welcomed and sat down at a computer. After reading the general introduction and the informed consent, they were able to start with the study immediately. Two weeks later, the same participants received an e-mail with a link to the second part of the study, which took approximately 20 minutes. If participants did not fill out the survey within three days, they received a reminder every three days up to a maximum of 15 times. On average, the time between the completion of Time 1 and the completion of Time 2 was 17.46 days ( $SD = 5.24$ ). The drop-out rate was 25%. The order of the administered instruments can be found in Table 4.

Table 4  
*Procedure of Study 2*

	Nr.	Part
Time 1	1.	General instruction and informed consent
	2.	Sexual orientation
	3.	BIDR
	4.	Grouped questionnaires with randomized item order: SOOI ISHMA SOI: LTMO & STMO
	5.	SOI: PSB
	6.	DSF
	7.	ISOS-P
	8.	Demographic questions
	9.	Generation of anonymous participant number
Time 2	1.	Instruction
	2.	Sexual orientation
	3.	SOOI
	4.	Interest in Sex-Robots
	5.	OWPI: Evaluation of positivity
	6.	OWPI: Evaluation of objectification
	7.	Demographic questions
	8.	Debriefing

### *Preparations for factor analyses.*

Before conducting exploratory factor analyses (EFA) on the 37 objectification proclivity items, the datasets of Study 1 and data from the first part of Study 2 were combined for the EFAs. Thereby we wanted to make sure to reduce the chance of item-factor misclassifications and to obtain a more accurate and stable item structure (see Costello & Osborne, 2005). The combination of datasets required, however, that the data of Study 1 and the first part of Study 2 was not different, which we assumed, as the recruitment strategies for both studies were the same. To be certain, it was planned to check for an influence of the respective sample in a subsequent confirmatory factor analysis (CFA). The combined sample consisted of 432 participants (215 women and 217 men) and resulted in a participant-to-item ratio of approximately 12:1. After combining the samples, we checked for items with extraordinary high

intercorrelations. The correlations pointed to two items (item 10 and item 17; cf. Appendix A, Table A1, pp. 271-274), which were deleted before the exploratory factor analyses because they shared the same meaning and a similar wording with two other items (item 25, resp. item 18). Additionally, one item (item 16) had to be removed because it was not assessed in Study 2, due to experimenter error.

**Results.**

If not reported otherwise, the statistical assumptions of the following analyses were met. An alpha level of .05 was used for all statistical tests.

***Exploratory factor analyses.***

To assess the underlying factor structure of the collected items, we conducted a series of exploratory factor analyses with the remaining 34-items on the combined sample of Study 1 and the first part of Study 2 ( $N = 432$ ). The Kaiser-Meyer-Olkin measure (KMO) of sampling adequacy for the first EFA was .88 and suggested that the data was adequate to run the EFA. Moreover, a significant Bartlett's Test of Sphericity indicated that the data were suitable,  $\chi^2(561) = 3828.63, p < .001$ . Results of the KMO and Bartlett's test stayed roughly the same for all subsequent EFAs. However, an energy test (Székely & Rizzo, 2005) with 999 bootstrap samples revealed a lack of multivariate normality of all items ( $\mathcal{E} = 4.46, p < .001$ ). Following suggestions from Markus Bühner (2011), we, therefore, decided to use principal axis factoring instead of the maximum likelihood method for the exploratory factor analyses. For factor extraction, we investigated the values of the Kaisers' criterion, the scree plots, as well as the results of parallel analyses. As we aimed at developing a compound measure of sexual objectification proclivity, we applied Promax factor rotation, which allows the factors to correlate with each other.

The first EFA resulted in 9 factors with eigenvalues over 1 (Kaisers' criterion); accounting for 40.38% of the variance. The scree-plot—which “is inspected to determine the last substantial decline in the magnitude of the eigenvalues” (Brown, 2015; p. 24)—was non-distinct. The parallel-analysis—which is a comparison between the real eigenvalues and eigenvalues created from random data—also pointed to nine factors. However, inspecting the factor loadings in the rotated matrix revealed that several items fell under the threshold of .32, indicating less than 10% overlapping variance. We chose this threshold in accordance with the rule of

thumb outlined by Barbara Tabachnick and Linda Fidell (2014, p. 702). Items falling under the threshold were removed sequentially, beginning with the item with the poorest loading and initiating subsequent EFAs after each removal. Within the same procedure, we moreover removed items constituting factors with less than three variables and items with cross-loadings larger than .32 (Tabachnick & Fidell, 2014). In total, we discarded eight items (items 5, 6, 12, 15, 25, 26, 33, 34; cf. Appendix A, Table A1, pp. 271-274), which resulted in an item pool of 26 items. The last exploratory factor analysis produced seven factors, indicated by the Kaiser criterion. However, the scree-plot pointed to six factors or eight (see Figure 1), and the parallel analysis indicated seven or eight factors (see Figure 2). Researchers concur that theoretical reasoning is the most reliable way to decide, which factors to include in a questionnaire (e.g., Brown, 2015; Bühner, 2011). Accordingly, we calculated two further EFAs in which we constricted the number of factors to six and eight factors and compared in the following the results of the six- seven and eight-factor models. Then we thoroughly investigated the items constituting each factor. Both the six- and the eight-factor model were comprised of factors which items did not convey consistent meanings. The seven-factor model, however, identified clear and concise factors. We named those factors 1. *Instrumental Objectification* 2. *Visual Objectification* 3. *Perceiving Ownership of Intimate Partners* 4. *Perceiving Intimate Partners as Sexual Resource* 5. *Perceiving Sexual Partners as Sexual Resource* 6. *Reducing Partners to their Appearance* 7. *Interpersonal Objectification*. Altogether, the seven factors accounted for 39.23% of the variance, whereas the first two factors covered more than half of the accounted variance. For the subsequent confirmatory factor analyses, we, therefore, decided to compare the seven-factor solution with the more parsimonious two-factor solution. A summary of the final exploratory factor analysis can be found in Table 5.

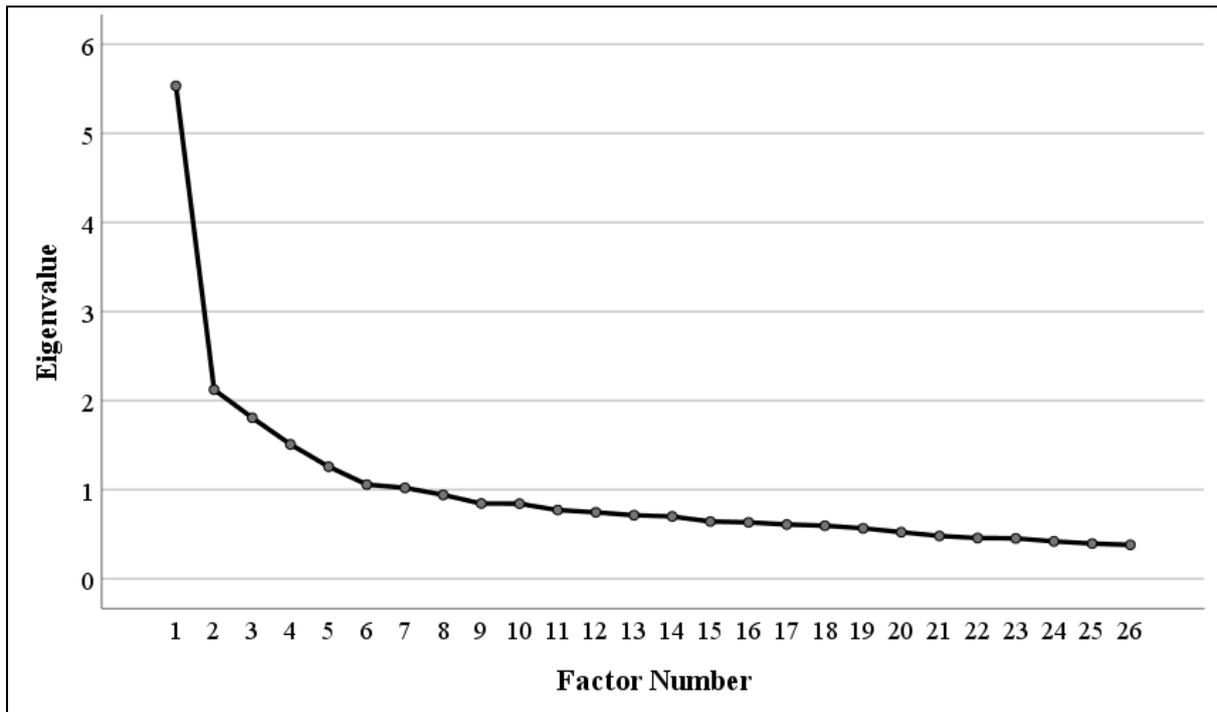


Figure 1. Scree-plot of exploratory factor analysis with 26 items.

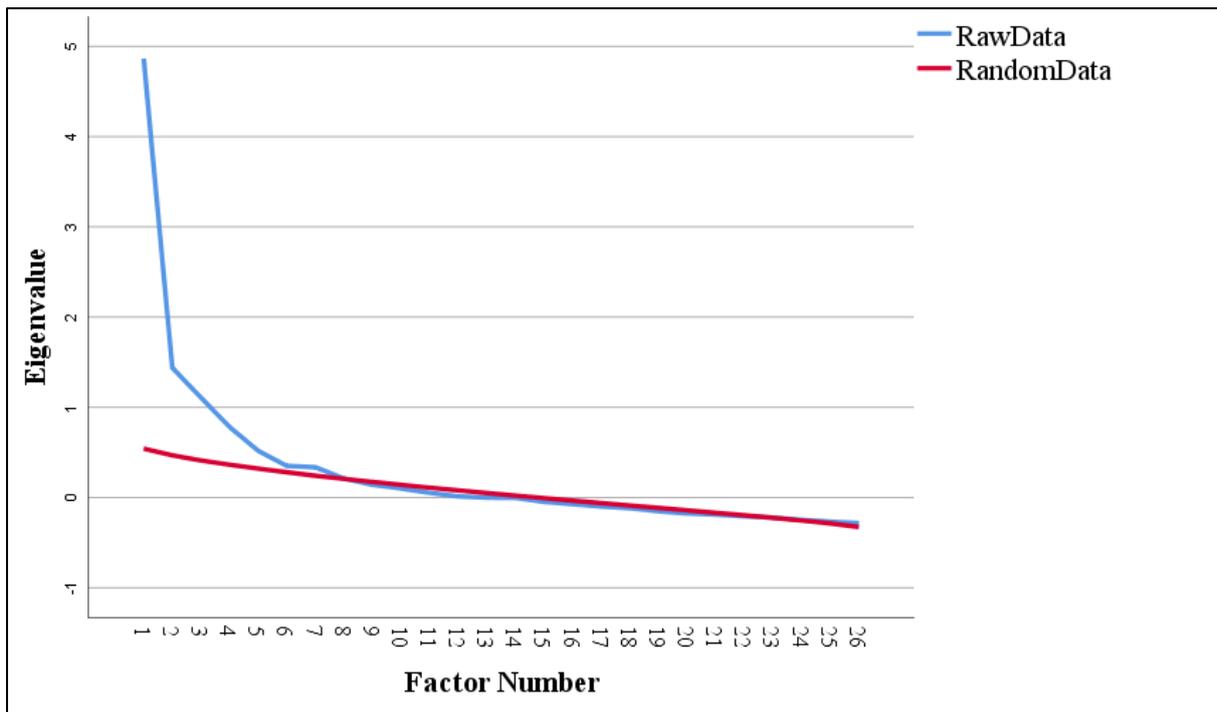


Figure 2. Results of a parallel analysis based on 26 items.

Table 5

*Summary of Final Exploratory Factor Analysis Results Using Principal Axis Factoring and Promax Rotation*

Item	Factors						
	1	2	3	4	5	6	7
14. In Urlaubsländern wie Thailand gibt es ein großes Angebot an sehr günstigen weiblichen [männlichen] Prostituierten. Insgeheim kann ich mir vorstellen, dass ich im Urlaub von diesem Angebot Gebrauch machen würde.	<b>.66</b>	.00	-.03	-.05	-.08	-.04	.07
22. Meine Präferenz für eine bestimmte Altersgruppe von Frauen [Männern] bleibt gleich, auch wenn ich selbst älter werde.	<b>.64</b>	-.14	.02	.02	-.13	.08	.07
13. Ich würde einer Frau [einem Mann] stärkere Gefühle vorspielen als tatsächlich da sind, wenn sich dadurch die Chance erhöhen würde, mit ihr [ihm] im Bett zu landen.	<b>.49</b>	-.04	-.03	.07	.11	.15	.00
27. Wenn ich keine Aussichten auf Sex habe, bin ich eher weniger interessiert am Kontakt zu Frauen [Männern].	<b>.49</b>	-.04	.02	.05	.13	.10	-.03
24. Stünde ich vor der Entscheidung, würde ich eher in eine gemischt-geschlechtliche Sauna gehen, weil es da mal etwas zu sehen gibt.	<b>.46</b>	.23	.06	-.02	.04	-.20	-.01
32. Ich finde es überhaupt nicht ansprechend, wenn sich eine Frau [ein Mann] als Sexobjekt präsentiert. (R)	<b>.34</b>	.28	-.13	-.09	-.02	-.09	-.03
23. Wenn sie es nicht bemerken, schaue ich schönen Frauen gern ausgiebig auf die Brüste, den Po oder die Beine. [Wenn sie es nicht bemerken, schaue ich schönen Männern gern ausgiebig auf den Po, den Schritt oder die Muskeln.]	.19	<b>.68</b>	.06	.02	-.06	-.01	-.07
29. Wenn meine Blicke durch eine Sonnenbrille versteckt sind, betrachte ich die Körper von Frauen [Männern] gerne länger.	.10	<b>.58</b>	.01	.05	-.09	.07	-.01
8. Fremden Frauen [Männern] schaue ich nie hinterher. (R)	-.16	<b>.58</b>	-.21	-.01	.03	.08	.06

(continued)

Table 5

*Summary of Final Exploratory Factor Analysis Results Using Principal Axis Factoring and Promax Rotation (continued)*

Item	Factors						
	1	2	3	4	5	6	7
7. Es würde mir Spaß machen, mit Freunden [Freundinnen] Frauen [Männer] nach ihrem Aussehen und ihrer "Verführbarkeit" zu bewerten.	-.01	<b>.47</b>	.11	.08	.09	.05	-.07
38. Ich schäme mich nicht dafür, wenn mir Werbung gefällt, in denen Frauen [Männer] sexy dargestellt sind.	-.06	<b>.45</b>	-.04	.10	-.03	-.03	.06
1. Meine Partnerin [Mein Partner] soll sich für mich schön machen und sonst für niemand anderen.	.03	-.09	<b>.89</b>	.04	-.10	-.10	.10
18. Meine Partnerin [Mein Partner] gehört mir.	-.18	-.03	<b>.55</b>	.24	-.04	.07	-.08
28. Wenn ich nicht aufpasse, nimmt mir jemand anders meine Partnerin [meinen Partner] weg.	.08	-.07	<b>.46</b>	-.14	.17	.11	-.06
21. Meine Partnerin [Mein Partner] sollte bereit sein, immer wenn ich möchte Sex mit mir zu haben.	.20	-.04	.00	<b>.69</b>	.01	-.04	.06
19. Meine Partnerin [Mein Partner] sollte auch für die Erfüllung meiner sexuellen Wünsche sorgen.	-.23	.22	.04	<b>.52</b>	-.06	.02	-.03
20. Meine Partnerin [Mein Partner] sollte meine sexuellen Bedürfnisse erfüllen, auch wenn es ihr [ihm] zunächst vielleicht widerstrebt.	.00	.08	.05	<b>.50</b>	.18	-.02	.01
3. Bei einem One-Night-Stand ist mir relativ egal, ob meiner Sexualpartnerin [meinem Sexualpartner] gefällt was ich mache.	-.11	-.04	.01	.00	<b>.84</b>	-.11	-.01
35. Beim Sex denke ich vor allem an meine eigenen Bedürfnisse.	.07	-.07	-.14	.17	<b>.45</b>	-.08	.11
2. Bei einem One-Night-Stand ist mir das Aussehen meiner Sexualpartnerin [meines Sexualpartners] am wichtigsten, Persönlichkeit und Einstellungen sind ziemlich egal.	.06	.23	.15	-.18	<b>.41</b>	.12	.05

(continued)

Table 5

*Summary of Final Exploratory Factor Analysis Results Using Principal Axis Factoring and Promax Rotation (continued)*

Item	Factors						
	1	2	3	4	5	6	7
4. Das Aussehen meiner Sexualpartnerinnen [meiner Sexualpartner] ist mir mindestens genauso wichtig wie ihre Persönlichkeit.	.00	.13	.03	-.12	-.24	<b>.63</b>	.13
11. Das Aussehen meiner Partnerin [meines Partners] ist mir sehr wichtig, weil es sich positiv auf mein Ansehen auswirkt.	.21	-.07	-.05	.15	.00	<b>.59</b>	-.19
9. Manchmal gebe ich vor Freunden [Freundinnen] mit dem guten Aussehen meiner Partnerin [meines Partners] an.	-.16	.02	.00	.02	.13	<b>.45</b>	.20
30. Wenn mir eine Frau [ein Mann] auf der Straße gefällt, mache ich ihr [ihm] schon mal ein Kompliment.	-.02	.00	-.03	-.01	.02	.14	<b>.60</b>
31. Wenn mir eine Frau [ein Mann] auf der Straße gefällt, pfeife ich ihr [ihm] schon mal hinterher.	.17	-.04	.08	-.03	.07	-.01	<b>.46</b>
36. Es ist mir egal, dass ich meine Augen nicht abwenden kann, wenn eine aufreizende Frau [ein aufreizender Mann] in meiner Nähe ist.	.06	.20	.03	.17	.00	-.01	<b>.37</b>
Eigenvalues	5.53	2.12	1.81	1.51	1.26	1.06	1.02
% of variance	19.07	5.97	4.61	3.44	2.46	1.92	1.75

*Note.* Brackets indicate alternative wording for objectification toward men. Factor loadings over .32 are written in bold. Factors: 1. Instrumental Objectification 2. Visual Objectification 3. Perceiving Ownership of Intimate Partners 4. Perceiving Intimate Partners as Sexual Resource 5. Perceiving Sexual Partners as Sexual Resource 6. Reducing Partners to their Appearance 7. Interpersonal Objectification.

### ***Confirmatory factor analyses.***

All confirmatory factor analyses (CFA) were calculated using the *lavaan* package (Rosseel, 2012) in R. Another energy test (Székely & Rizzo, 2005) with 999 bootstrap samples on the remaining items revealed that multivariate normality was still not achieved ( $\mathcal{E} = 4.37$ ,  $p < .001$ ). Against this background, we decided to perform subsequent confirmatory factor analyses using the maximum likelihood estimator with robust standard errors (see Brown, 2015). To determine model fit, we decided on a combination of fit indices and cut-off values,

which are widely used and recommended (for overviews see Brown, 2015; Hooper, Coughlan, & Mullen, 2008): The Standardized Root-Mean-Square Residual (SRMR;  $< .08$ ), the Root-Mean-Square Error of Approximation (RMSEA;  $< .06$ ), the Comparative Fit Index (CFI;  $> .90$ ) and the Tucker-Lewis Index (TLI;  $> .90$ ). Because of the violated assumption regarding multivariate normality, we relied on the recently proposed updated robust versions of the latter three indices (Brosseau-Liard & Savalei, 2014; Brosseau-Liard, Savalei, & Li, 2012), which are implemented in R's *lavaan* package (Rosseel, 2012). Those robust indices will subsequently be indicated by a subscripted R (e.g.,  $RMSEA_R$ ).

We were confident that the data aggregation of Study 1 and the first part of Study 2 for the performed exploratory factor analyses was acceptable, as in both studies, the participants were recruited in the same way. However, we wanted to be absolutely certain and investigated whether the factor structures differed between both datasets by implementing *MIMIC modeling* (MIMIC stands for “multiple indicators, multiple causes”; Brown, 2015). Essentially, *MIMIC modeling* equals performing a confirmatory factor analysis with covariates. To inspect any potential biasing influence of the data aggregation, we performed a CFA with the dummy coded data source as covariate (0 = Study 1, 1 = Study 2, Time 1). Usually, performing a confirmatory factor analysis on the same dataset with which the preceding exploratory factor analysis was executed, is not very expedient (Brown, 2015). In this case, however, the performed confirmatory factor analyses served to approve of the data aggregation preceding the exploratory factor analysis.

The first step of *MIMIC modeling* is to perform the planned CFI without including the covariate in order to ensure that the model is reasonable and good fitting. We calculated two CFAs by implementing the seven-factor and the two-factor model. The variances and covariances of all factors were freely estimated. The fit indices for the seven-factor model were not optimal:  $SRMR = .06$ ,  $RMSEA_R = .05$ ,  $CFI_R = .89$ ,  $TLI_R = 0.87$ . The parameter estimates were

statistically significant and reasonable (i.e., contained no Heywood cases and were in the expected direction; Brown, 2015). The fit indices for the two-factor model were good: SRMR = .04, RMSEA<sub>R</sub> = .04, CFI<sub>R</sub> = .97, TLI<sub>R</sub> = 0.97. Again, the parameter estimates were statistically significant and reasonable. The next step was to add the data source (Study 1 vs. Study 2, Time 1) as a dummy-coded covariate. As the data source cannot be deemed responsible for the overlap between the factors, the residual variances of all factors had to be specified to correlate in order to run the *MIMIC* models. The fit indices for the confirmatory factor analysis for the seven-factor model with the data source as covariate were again not optimal: SRMR = .06, RMSEA<sub>R</sub> = .05, CFI<sub>R</sub> = .88, TLI<sub>R</sub> = 0.85. The fit indices of CFA for the two-factor model were still acceptable: SRMR = .05, RMSEA<sub>R</sub> = .05, CFI<sub>R</sub> = .94, TLI<sub>R</sub> = 0.92. For both CFAs, parameter estimates were reasonable and statistically significant. What is more important, in both models there was no significant effect from the covariate data source onto any of the latent variables (all *ps*  $\geq$  .05); the two samples did not differ from each other. Consequently, one can assert that the data aggregation of Study 1 with the first part of Study 2 was perfectly acceptable.

Knowing that the results of the exploratory factor analyses were based on a valid data set, we were able to continue our task to develop a scale measuring sexual objectification proclivity by applying confirmatory factor analyses on a different data set: the second part of Study 2 ( $n = 164$ ). Hence, we followed the recommendations of trying to confirm the exploratory obtained factor structures with new data (Brown, 2015). However, we were fully aware that for both sets of analyses, the underlying sample was partly the same, and the data sets consequently not fully independent. Thus, we rendered it essential to interpret the obtained results with caution and moreover to run further confirmatory factor analyses based on other samples (see Studies 3-5). At first, we calculated confirmatory factor analyses with the seven- and the two-factor model. The fit indices of the seven-factor model were not satisfactory: SRMR = .09, RMSEA<sub>R</sub> = .06, CFI<sub>R</sub> = .85, TLI<sub>R</sub> = 0.82. The fit indices for the two-factor model

were particularly good:  $SRMR = .05$ ,  $RMSEA_R = .03$ ,  $CFI_R = .98$ ,  $TLI_R = 0.98$ . As we were interested in creating a compound measure of sexual objectification proclivity, the next logical step was to introduce one or several higher-order factors into the seven-factor model, in order to confirm that averaging across factors was feasible. For the two-factor model, introducing a higher-factor model would not have been possible. In order to be fully identified, a higher-order model must contain at least three first-order factors (Kline, 2016). However, as both factors of the two-factor model correlated with  $r = .52$  ( $p < .001$ ), averaging the factor means in order to create a compound measure seemed acceptable. For the seven-factor model, implementing a second-order factor, lead to even worse results in the fit indices:  $SRMR = .10$ ,  $RMSEA_R = .07$ ,  $CFI_R = .78$ ,  $TLI_R = 0.75$ . A further investigation of the results revealed that the factors Instrumental Objectification, Visual Objectification, and Interpersonal Objectification shared covariances above .50. Against this background, we decided to run another hierarchical CFA with those factors as first-order factors and one second-order factor. The fit indices of this hierarchical three-factor solution were at the borderline of being acceptable:  $SRMR = .08$ ,  $RMSEA_R = .06$ ,  $CFI_R = .92$ ,  $TLI_R = 0.90$ . To conclude, although the seven-factor solution comprised interesting and theoretically sound factors, we chose not to investigate it further, as the confirmatory factor analyses disclosed factor structures with a bad fit. Therefore, we decided to investigate further, improve, and compare the simple two-factor solution and the hierarchical three-factor solution.

We inspected the modification indices for the simple two-factor and the hierarchical three-factor model, which suggested some model improvements. For the two-factor model, no relevant changes were suggested by the modification indices. For the three-factor model, two of proposed changes were theoretically sound, which is why we adopted them into the model: We allowed item 36 of the factor Interpersonal Objectification to cross-load on the factor Visual Objectification, as the item describes objectification by looking at someone. Moreover, we

allowed the residuals of item 30 and item 31 to covary. This approach is reasonable because the item wording of both items overlapped greatly, allowing for an overestimated covariation, if not corrected. The modified version of the three-factor model lead to fit indices, which were satisfactory:  $SRMR = .06$ ,  $RMSEA_R = .04$ ,  $CFI_R = .95$ ,  $TLI_R = 0.94$ .

***Descriptive statistics and gender comparison.***

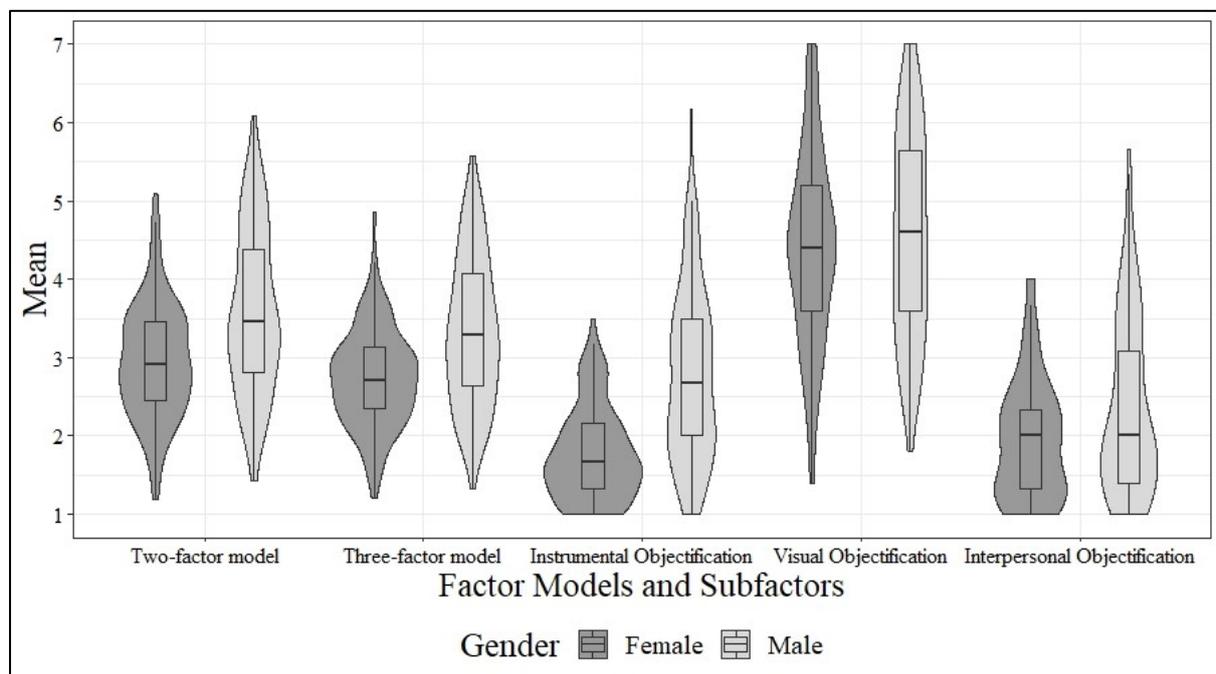
After deciding to further investigate the two- and the three-factor model, we calculated the means and standard deviations for both models and their subfactors for Study 1 and Study 2, Time 1, and Time 2. Because we wanted to create a scale, which could be administered to persons of all\* genders, we additionally compared the means of male and female participants. Descriptive statistics and gender comparisons can be found in Table 6 (Study 1) and Table 7 (Study 2, Time 1, and Time 2). A visual representation of the distributions for men and women can be found in Figure 3 (Study 1), Figure 4 (Study 2, Time 1) and Figure 5 (Study 2, Time 2). Means and gender comparison for the validation scales of Study 1 and Study 2 can be found in Appendix A, Table A7, p. 280, and Table A8, p. 281.

Table 6

*Means, Standard Deviations and Gender Comparison of the Two- and Three-Factor Model and their Subfactors with Validation Scales in Study 1*

Fact.	Overall		Women		Men		Gender Comparison			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
2-F	3.26	0.95	2.95	0.74	3.58	1.04	5.08	184.64	< .001	0.70
3-F	3.02	0.85	2.73	0.63	3.32	0.94	5.32	178.58	< .001	0.74
IO	2.25	1.01	1.76	0.60	2.77	1.09	8.37	158.31	< .001	1.16
VO	4.46	1.26	4.38	1.22	4.55	1.31	1.00	211.00	.319	0.13
PO	2.16	0.97	1.95	0.76	2.37	1.12	3.22	180.00	< .001	0.44

*Note.* Fact. = Factor models and factors, 2-F = Two-factor model, 3-F = Three-factor model, IO = Instrumental Objectification, VO = Visual Objectification, PO = Interpersonal Objectification. For some variables, Levene's tests revealed unequal variances for men and women. As a consequence, we calculated Welch's t-tests instead of Student's t-tests. Corresponding cases can be identified by degrees of freedom unequal to 211.



*Figure 3.* Violin- and Boxplots for the Two- and the Three-Factor Model and their Subfactors separated by Gender of Study 1.

Table 7  
*Means, Standard Deviations and Gender Comparison of the Two- and Three-Factor Model and their Subfactors with Validation Scales for Time 1 and Time 2 in Study 2*

Fact.	Overall		Women		Men		Gender Comparison			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
Time 1										
2-F	3.35	0.99	3.07	0.78	3.60	1.09	4.12	203.83	< .001	0.56
3-F	3.07	0.86	2.85	0.71	3.27	0.94	3.72	207.37	< .001	0.50
IO	2.47	1.07	1.91	0.72	3.00	1.07	8.89	196.30	< .001	1.19
VO	4.39	1.30	4.47	1.24	4.32	1.36	0.88	217.00	.380	0.12
PO	2.04	0.91	2.03	0.91	2.05	0.90	0.15	217.00	.880	0.02
Time 2										
2-F	3.14	0.95	2.82	0.75	3.45	1.02	4.53	150.75	< .001	0.70
3-F	2.86	0.82	2.60	0.66	3.12	0.88	4.28	152.66	< .001	0.67
IO	2.40	1.00	1.85	0.63	2.93	1.02	8.21	137.27	< .001	1.26
VO	4.03	1.18	3.99	1.14	4.08	1.23	0.50	162.00	.621	0.08
PO	1.84	0.74	1.78	0.75	1.89	0.74	0.94	162.00	.347	0.15

*Note.* Fact. = Factor models and factors, 2-F = Two-factor model, 3-F = Three-factor model, IO = Instrumental Objectification, VO = Visual Objectification, PO = Interpersonal Objectification. For some variables, Levene's tests revealed unequal variances for men and women. As a consequence, we calculated Welch's t-tests instead of Student's t-tests. Corresponding cases can be identified by degrees of freedom unequal to 217 for Time 1 and 162 for Time 2.

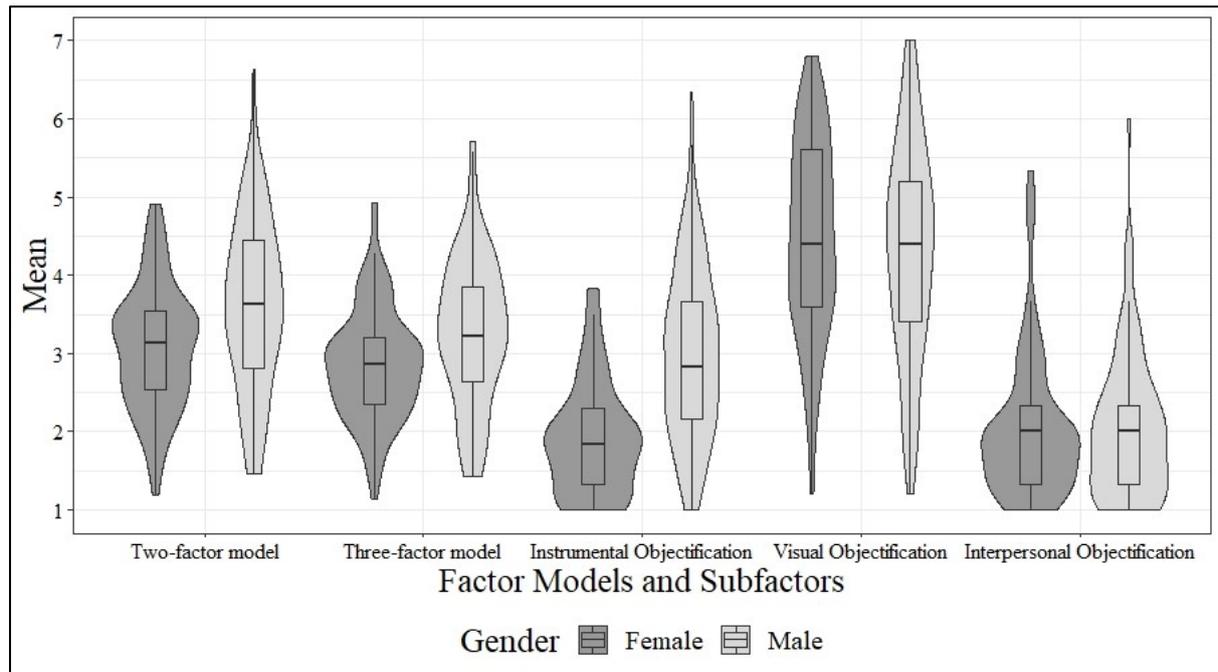


Figure 4. Violin- and Boxplots for the Two- and the Three-Factor Model and their Subfactors separated by Gender of Study 2 Time 1.

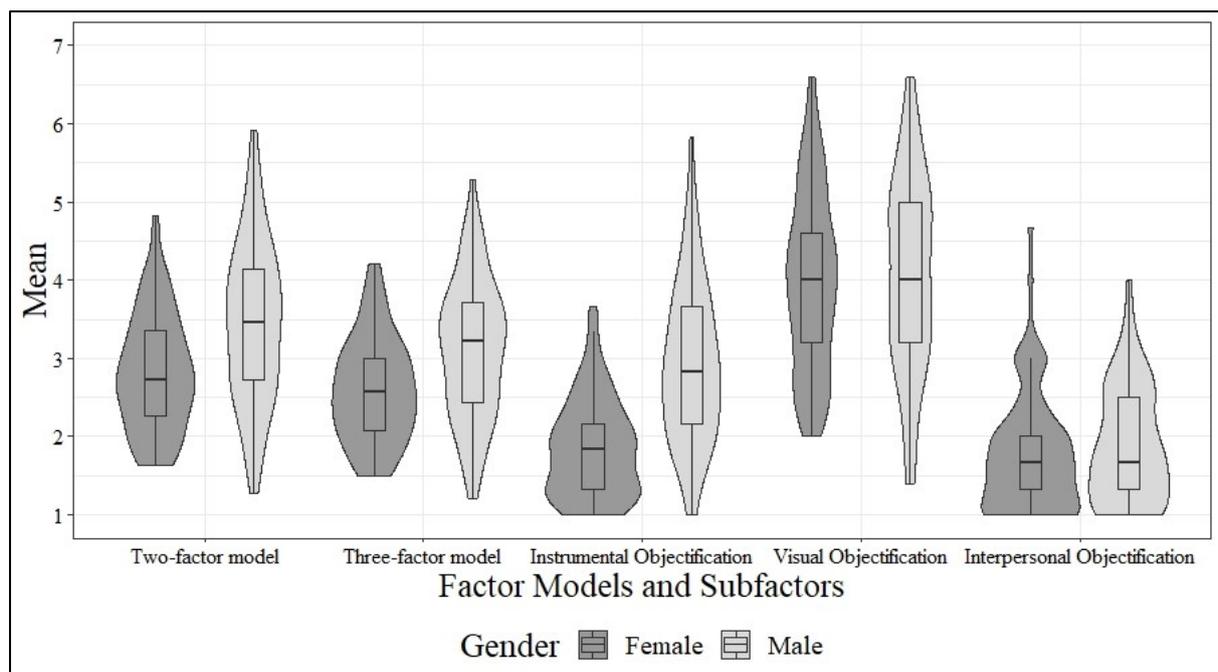


Figure 5. Violin- and Boxplots for the Two- and the Three-Factor Model and their Subfactors separated by Gender of Study 2 Time 2.

Results of the comparisons between men and women indicated that men showed higher ratings on the factor Instrumental Objectification across all three samples. With effect size above  $d = 0.80$ , the effects were large (see Cohen, 1988). Furthermore, in Study 1, but not in Time 1 and Time 2 of Study 2, men showed significantly higher scores of a small effect size

(greater than 0.20 and smaller than 0.50; Cohen, 1988) than women on the factor Interpersonal Objectification. A visual inspection of the factors' distributions moreover indicated floor effects for women on the factors Instrumental Objectification and Interpersonal Objectification. On the factor Visual Objectification, men and women did not differ. The distributions of Visual Objectification showed no indications of floor effects in both studies. In the overall values of the two-factor and the three-factor model, men also showed higher ratings, which were of a medium effect size. The distributions showed, however, no indication of floor effects for both overall scores.

*Correlational analyses of the factor models and subfactors.*

Table 8 and Table 9 present the factor correlations of Study 1 and Study 2. Overall, the factor Instrumental Objectification correlated moderately to strongly with the factor Visual Objectification. The correlations of the factor Interpersonal Objectification with the factors Instrumental Objectification and Visual Objectification were of small to moderate size.

Table 8

*Pearson Correlations of the Two- and Three-Factor Model and their Subfactors in Study 1*

	Two-factor model overall	Three- factor model overall	Instrumental Objectifi- cation	Visual Objectifi- cation	Interpersonal Objectifi- cation
Two-factor model	—				
Three-factor model	.97**	—			
Instrumental Objectification	.84**	.83**	—		
Visual Objectification	.85**	.81**	.43**	—	
Interpersonal Objectification	.38**	.58**	.39**	.25**	—

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

Table 9

*Pearson Correlations of the Two- and Three-Factor Model and their Subfactors in Study 2 Time 1 and Time 2*

	Two-factor model	Three-factor model	Instrum. Objectif.	Visual Objectif.	Interper. Objectif.
Time 1					
Two-factor model	—				
Three-factor model	.98**	—			
Instrumental Objectification	.84**	.81**	—		
Visual Objectification	.84**	.83**	.41**	—	
Interpersonal Objectification	.33**	.53**	.26**	.30**	—
Time 2					
Two-factor model	—				
Three-factor model	.98**	—			
Instrumental Objectification	.88**	.85**	—		
Visual Objectification	.87**	.86**	.52**	—	
Interpersonal Objectification	.39**	.55**	.31**	.37**	—

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

#### ***Reliability analyses.***

Next, to investigate whether the newly created scale was a reliable measure, we performed reliability analyses. Internal consistencies for Study 1 and Study 2 can be found in Table 10, resp. Table 11. The Cronbach's alphas suggested that the internal consistencies were better for male than for female participants. Moreover, the scales' subfactors showed less reliability than the overall two- or the three-factor model. As measures of test-retest reliability, Pearson correlations of the overall means and the factor means between Time 1 and Time 2 of Study 2 were calculated. Results can be obtained from Table 12. With values much higher than .70, test-retest reliability can overall be evaluated as very satisfactory (cf., Kline, 2015). However, test-retest reliability for women on the factor Instrumental Objectification did not meet our expectations as it was below the threshold of .70.

Table 10

*Cronbach's Alphas of the Two- and Three-Factor Model and their Subfactors for Male, Female and All Participants in Study 1*

	Female ( <i>n</i> = 109)	Male ( <i>n</i> = 104)	Overall ( <i>N</i> = 213)
Two-factor model	.63	.80	.76
Three-factor model	.64	.81	.78
Instrumental Objectification	.20	.69	.68
Visual Objectification	.68	.73	.70
Interpersonal Objectification	.38	.53	.49

Table 11

*Cronbach's Alphas of the Two- and Three-factor Model and their Subfactors for Male, Female and All Participants in Time 1 and Time 2 of Study 2*

	Time 1			Time 2		
	Female ( <i>n</i> = 106)	Male ( <i>n</i> = 113)	Overall ( <i>N</i> = 219)	Female ( <i>n</i> = 81)	Male ( <i>n</i> = 83)	Overall ( <i>N</i> = 164)
Two-factor model	.70	.80	.77	.72	.81	.80
Three-factor model	.73	.80	.78	.74	.82	.80
Instrumental Objectif.	.49	.62	.67	.43	.67	.71
Visual Objectif.	.73	.75	.73	.67	.71	.69
Interpersonal Objectif.	.52	.36	.44	.48	.26	.38

Table 12

*Test-Retest Reliability of the Two- and Three-Factor Model and their Subfactors for Male, Female and All Participants in Study 2*

	Female ( <i>n</i> = 81)	Male ( <i>n</i> = 83)	Overall ( <i>N</i> = 164)
Two-factor model	.76**	.89**	.86**
Three-factor model	.78**	.89**	.86**
Instrumental Objectification	.61**	.83**	.84**
Visual Objectification	.77**	.84**	.80**
Interpersonal Objectification	.75**	.71**	.73**

\*\*  $p < .01$ .

*Validity analyses.*

To investigate the validity of the overall factor models and their subfactors, we calculated correlations with the validation scales for Study 1 (see Table 13 to Table 15). The correlations were calculated in two ways: with combined and separated genders. The results of Study 1 indicated that the correlations of the SOOI with the validation scales were almost always stronger for men than women. Correlations between the validation scales of Study 1 can be found in Appendix A, Table A9 on pages 281-283.

Table 13

*Pearson Correlations of the Two- and Three-Factor Model and their Subfactors and the Validation Scales in Study 1*

	Two-factor model	Three- factor model	Instrumental Objectif.	Visual Objectif.	Interpersonal Objectif.
AMMSA	.47**	.49**	.41**	.38**	.33**
ASI-B	.22**	.25**	.21**	.16*	.23**
ASI-H	.42**	.44**	.39**	.32**	.29**
EMS-S	.01	-.01	.12	-.10	-.09
IMS-S	-.34**	-.35**	-.31**	-.27**	-.21**
ISOS-P	.60**	.60**	.46**	.55**	.28**
LSH	—	—	—	—	—
MPA	-.18**	-.19**	-.18**	-.12	-.14*
OOQ	.37**	.37**	.36**	.28**	.17*
SDO <sub>6</sub>	.29**	.31**	.31**	.18**	.24**
SOI: LTMO	-.12	-.14*	-.20**	.00	-.13
SOI: PSB	.36**	.40**	.36**	.25**	.34**
SOI: STMO	.56**	.55**	.47**	.47**	.24**
SOQ	.23**	.21**	.11	.28**	.04

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

Table 14

*Pearson Correlations of the Two- and Three-Factor Model and their Subfactors with Validation Scales in Study 1 for Female Participants*

	Two-factor model	Three-factor model	Instrumental Objectif.	Visual Objectif.	Interpersonal Objectif.
AMMSA	.24*	.23*	.14	.23*	.06
ASI-B	.07	.09	-.04	.12	.11
ASI-H	.20*	.19*	.15	.18	.04
EMS-S	-.08	-.09	-.02	-.09	-.06
IMS-S	-.04	-.02	.06	-.08	.05
ISOS-P	.53**	.53**	.40**	.47**	.16
LSH	—	—	—	—	—
MPA	-.08	-.07	-.09	-.05	-.01
OOQ	.26**	.25**	.17	.24*	.06
SDO <sub>6</sub>	-.03	-.05	.00	-.05	-.05
SOI: LTMO	-.10	-.11	-.08	-.09	-.06
SOI: PSB	.51**	.54**	.42**	.43**	.27**
SOI: STMO	.58**	.57**	.42**	.52**	.16
SOQ	.21*	.17	.04	.26**	-.08

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

Table 15

*Pearson Correlations of the Two- and Three-Factor Model and their Subfactors with Validation Scales in Study 1 for Male Participants*

	Two-factor model	Three-factor model	Instrumental Objectif.	Visual Objectif.	Interpersonal Objectif.
AMMSA	.58**	.62**	.52**	.50**	.45**
ASI-B	.25*	.28**	.25*	.19	.26**
ASI-H	.54**	.58**	.52**	.43**	.43**
EMS-S	-.05	-.09	.05	-.14	-.19
IMS-S	-.50**	-.51**	-.47**	-.40**	-.33**
ISOS-P	.64**	.64**	.51**	.61**	.32**
LSH	.61**	.63**	.66**	.42**	.38**
MPA	-.22*	-.25*	-.22*	-.17	-.20*
OOQ	.34**	.34**	.31**	.30**	.16
SDO <sub>6</sub>	.38**	.42**	.35**	.32**	.34**
SOI: LTMO	-.07	-.10	-.22*	.09	-.14
SOI: PSB	.24*	.29**	.24*	.18	.32**
SOI: STMO	.47**	.47**	.40**	.44**	.21*
SOQ	.27**	.26**	.17	.30**	.12

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

We included the Interpersonal Sexual Objectification Perpetration scale (ISOS-P; Gervais et al., 2014) as a measure of convergent validity. As the ISOS-P contains rather blatant

items, we anticipated, however, a low to medium correlation with the SOOI items. Contrary to our expectations, the ISOS-P correlated strongly with the overall models of our scale—for men and women as well as overall. What has to be highlighted is the low correlation of the Interpersonal Sexual Objectification Perpetration scale with the factor Interpersonal Objectification.

The second measure to assess convergent validity was the Other Objectification Scale (OOQ; Strelan & Hargreaves, 2005). Due to its sole focus on other's bodies, we expected low to medium correlations with the SOOI models. The results met our expectations. Intriguingly, the overall correlation with the factor Visual Objectification was smaller than the correlation with the factor Instrumental Objectification. However, a comparison of dependent correlations following the suggested statistical approach by James Hittner, Kim May and Clayton Silver (2003) revealed no significant difference between the correlations of both factors with the OOQ ( $z = 1.17, p = 0.24$ ).

For the Self-Objectification Questionnaire (SOQ; Noll & Fredrickson, 1998), we expected positive correlations with the SOOI models. As predicted, people who showed a greater tendency to self-objectify had a greater proclivity to objectify others. The effect was mainly driven by the factor Visual Objectification, as the other two factors displayed non-significant relationships with the OOQ.

The strongest predictor of sexual objectification proclivity besides the ISOS-P was the likelihood to sexually harass (LSH; Pryor, 1987; Vanselow et al., 2010), which was only assessed for men. With a large effect size, the effect was greater than hypothesized and demonstrated that men who are more likely to sexually harass women, also tend to sexually objectify them. LSH correlated to a significantly greater extent with the subfactor Instrumental Objectification than with the subfactor Interpersonal Objectification, ( $z = 3.25, p = .001$ ).

For the acceptance of modern myths about sexual aggression (AMMSA; Gerger et al., 2007), we also predicted positive relationships with the SOOI items. Results showed that for

men the acceptance of modern myths about sexual aggression was a large predictor of the proclivity to sexually objectify others. For women, the association of the two constructs was small but, as predicted, significantly positive.

The same pattern of large effect sizes for men and small effect sizes for women could be found for the subscale Hostile Sexism but not for the subscale Benevolent Sexism of the Ambivalent Sexism Inventory (Glick & Fiske, 1996, 1997, 2001b, 2011). For benevolent sexism, the effects were small for men and not significant for women. Hence, our predictions, which had assumed moderate positive effects for both subscales and genders, were not met.

Following previous results (Bartak, 2015) we expected to find low to moderate associations of social dominance orientation (Pratto et al., 2006, 1994; Sidanius & Pratto, 2001) with the proclivity to sexually others for men and women. Contrary to our predictions, men, but not women with a higher social dominance orientation showed a greater tendency to sexually objectify others. The effect for men was medium sized.

We assumed that male participants scoring low on the proclivity to sexually objectify women would be more aware that men are more privileged in our society, which was measured with the Male Privilege Awareness Scale (MPA; Case, 2007). Indeed, the results showed a significant negative association of the MPA with the overall factor models of the SOOI items.

As predicted, participants who indicated more previous sexual behavior and participants who with a more pronounced short-term mating orientation (Jackson & Kirkpatrick, 2007) showed a greater proclivity to sexually objectify others. Previous sexual behavior was, moreover, the only construct for which the relationships with both factor models were greater for women than for men ( $z = 2.29, p = .022$ ;  $z = 2.20, p = .028$ ). Furthermore, for men, the factor Instrumental Objectification correlated significantly negative with long-term mating orientation. Initially, we did not expect any correlations with long term mating orientation.

As hypothesized, the SOOI items showed no significant relationship with the internal motivation to respond without sexism (Klonis et al., 2005). The predicted negative association of the SOOI items with the internal motivation to respond without sexism was only significant for men, but not for women.

For Study 2, correlations with the validation scales can be obtained from Table 16 to Table 18. Again, the correlations were calculated based on the complete sample as well as separately for men and women. Correlations between the validation scales of Study 2 can be found in Appendix A, Table A10 on page 283.

Table 16

*Pearson Correlations of the Two- and Three-Factor Model and their Subfactors and Validation Scales in Study 2, Time 1, and Time 2*

	1 - T1	1 - T2	2 - T1	2 - T2	3 - T1	3 - T2	4 - T1	4 - T2	5 - T1	5 - T2
BIDR: IM	-.19**	-.09	-.17	-.06	-.11	-.05	-.21	-.10	.05	.10
BIDR: SD	.06	.08	.12	.13	.06	.06	.04	.07	.28**	.28**
DFS Time 1	.39**	.36**	.40**	.37**	.34**	.32**	.32**	.31**	.21**	.23**
DFS Time 2	.32**	.32**	.34**	.33**	.36**	.32**	.18*	.23**	.18*	.22**
ISHMA	.34**	.33**	.38**	.35**	.31**	.27**	.25**	.31**	.33**	.25**
ISOS-P	.62**	.60**	.67**	.63**	.43**	.43**	.62**	.63**	.45**	.43**
ISR	.37**	.46**	.37**	.45**	.41**	.46**	.21**	.34**	.12	.15
OWPI	.24**	.36**	.27**	.37**	.30**	.42**	.09	.20**	.23**	.24**
SOI: LTMO	-.19**	-.18*	-.24**	-.19*	-.24**	-.22**	-.09	-.09	-.27**	-.17*
SOI: PSB	.29**	.23**	.33**	.24**	.25**	.20**	.24**	.19*	.28**	.15*
SOI: STMO	.61**	.59**	.60**	.59**	.55**	.58**	.48**	.45**	.24**	.26**

*Note.* 1 = Two-factor model overall, 2 = Three-factor model overall, 3 = Factor Instrumental Objectification, 4 = Factor Visual Objectification, 5 = Factor Interpersonal Objectification. T1 = Time 1, T2 = Time 2.

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

Table 17

*Pearson Correlations of the Two- and Three-Factor Model and their Subfactors with Validation Scales in Study 2, Time 1, and Time 2 for Female Participants*

	1 - T1	1 - T2	2 - T1	2 - T2	3 - T1	3 - T2	4 - T1	4 - T2	5 - T1	5 - T2
BIDR: IM	-.17	.06	-.15	.07	-.05	.12	-.19*	.02	-.01	.04
BIDR: SD	.00	.00	.07	.05	-.03	-.02	.02	.02	.25	.21
DFS Time 1	.17	.08	.18	.12	.09	.07	.17	.08	.12	.18
DFS Time 2	.02	.05	.08	.09	-.01	.04	.03	.04	.21	.18
ISHMA	.20*	.22*	.23*	.18	.14	.03	.19	.30**	.18	-.05
ISOS-P	.61**	.57**	.66**	.60**	.32**	.31**	.62**	.62**	.46**	.39**
ISR	.33**	.44**	.39**	.45**	.24*	.35**	.30**	.40**	.32**	.27*
OWPI	.10	.30**	.15	.30**	.26*	.40**	-.02	.17	.19	.16
SOI: LTMO	-.27**	-.13	-.35**	-.17	-.40**	-.28*	-.10	-.01	-.40**	-.22*
SOI: PSB	.35**	.26*	.42**	.29**	.36**	.32**	.24*	.16	.41**	.23*
SOI: STMO	.51**	.44**	.51**	.44**	.43**	.51**	.41**	.30**	.22*	.21

*Note.* 1 = Two-factor model overall, 2 = Three-factor model overall, 3 = Factor Instrumental Objectification, 4 = Factor Visual Objectification, 5 = Factor Interpersonal Objectification. T1 = Time 1, T2 = Time 2.

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

Table 18

*Pearson Correlations of the Two- and Three-Factor Model and their Subfactors with Validation Scales in Study 2, Time 1, and Time 2 for Male Participants*

	1 - T1	1 - T2	2 - T1	2 - T2	3 - T1	3 - T2	4 - T1	4 - T2	5 - T1	5 - T2
BIDR: IM	-.20*	-.20	-.16	-.15	-.11	-.17	-.25**	-.20	.10	.16
BIDR: SD	.06	.10	.12	.15	.04	.07	.07	.11	.30**	.34**
DFS Time 1	.47**	.47**	.49**	.48**	.34**	.35**	.50**	.51**	.30**	.26**
DFS Time 2	.43**	.39**	.44**	.40**	.42**	.33**	.37**	.39**	.17	.23*
ISHMA	.38**	.36**	.44**	.41**	.37**	.33**	.31**	.32**	.45**	.47**
ISOS-P	.63**	.61**	.67**	.64**	.50**	.48**	.64**	.64**	.45**	.45**
ISR	.29**	.37**	.27*	.34**	.27*	.34**	.25*	.33**	.02	.06
OWPI	.24*	.33**	.28**	.35**	.22*	.37**	.22*	.23*	.29**	.29**
SOI: LTMO	-.11	-.13	-.13	-.13	-.10	-.07	-.10	-.16	-.14	-.09
SOI: PSB	.24*	.19	.25**	.19	.17	.14	.25**	.21	.17	.08
SOI: STMO	.63**	.64**	.63**	.64**	.54**	.57**	.60**	.60**	.27**	.29**

*Note.* 1 = Two-factor model overall, 2 = Three-factor model overall, 3 = Factor Instrumental Objectification, 4 = Factor Visual Objectification, 5 = Factor Interpersonal Objectification. T1 = Time 1, T2 = Time 2.

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

As in Study 1, ISOS-P was one of the largest predictors of the SOOI models and their subfactors. The correlations were on the same level for men and women. At Time 1 and Time 2, the scale's correlations with the subfactor Interpersonal Objectification were like in Study 1 lower than with the subfactor Instrumental Objectification ( $z = -2.65$ ,  $p = .008$ ;  $z = -2.77$ ,  $p = .006$ ).

Indicating criterion validity, the interest in sex robots was a significant predictor of the two SOOI models for both, men, and women: People with a greater interest in sex robots did also show a greater proclivity to sexually objectify others.

As hypothesized, also the Objectifying Word Positivity Index (OWPI) positively predicted sexual objectification proclivity: People who evaluated sexually objectifying words

more positively showed a greater proclivity to sexually objectify others. For women, however, the effect of the two factor models was only significant at Time 2.

We predicted that people who endorse sexual harassment myths would show a greater proclivity to sexually objectify others. Indeed, results showed significant positive correlations of the factor models with the Illinois Sexual Harassment Myth Acceptance Scale (ISHMA; Lonsway, Cortina, & Magley, 2008). For men, the effect was medium-sized; and for women, small.

Like in Study 1, in Study 2, short-term mating orientation (Jackson & Kirkpatrick 2007), was a major predictor of the SOOI factor models. In contrast to Study 2, the association of the two factor models with previous sexual behavior was not greater for women than for men at Time 1 ( $z = 0.88, p = .379; z = 1.21, p = .227$ ) and at Time 2 ( $z = 0.54, p = .591; z = 0.67, p = .504$ ). In distinction to Study 1, in Study 2 not only the factor Instrumental Objectification but also the factor Interpersonal Objectification as well as the overall factor models showed a significant negative association with long-term orientation: People who were more interested in long term relationships showed a smaller proclivity to sexually objectify others.

As predicted, people with a greater short-term but not long-term mating orientation generally had a greater desire for sex at Time 1 and at Time 2 (see Appendix A, Table A10, p. 283). However, desire for sex predicted sexual objectification proclivity, represented by the two factor models, only for men, but not for women.

Contrary to what was predicted, a significant correlation was obtained between men's inclination to create a socially desirable image (impression management; Musch et al., 2002) for the two-factor model at Time 1: Men who showed greater impression management tendencies (which were measured at Time 1), also demonstrated a greater sexual objectification proclivity at Time 1, but not at Time 2. Contradictorily, men with greater values on the factor

Interpersonal Objectification indicated a greater tendency to perceive themselves favorable in terms of self-deception (self-deceptive enhancement; Musch et al., 2002).

**Discussion.**

The Sexual Objectification of Others Inventory (SOOI) was developed based on an item pool, which was created by lay people and social psychologists. By involving lay people, we intended to find items describing commonplace sexually objectifying attitudes and behaviors. Drawing on the results of two pretests, we refined the items in order to emphasize characteristics, which are considered to be typical for objectification like instrumentality and ownership (Nussbaum, 1995). The final item pool consisted of 74 items, which measured the sexual objectification of men and women. In order to determine the final set of items with its underlying factor, two extensive studies were conducted (Study 1 and Study 2). The collected data were subjected to exploratory and confirmatory factor analyses. The exploratory factor analyses reduced the number of items to 26 items per gender and indicated a two- and a seven-factor solution. Subsequent confirmatory factor analyses pointed to two factor solutions with a good fit: A two-factor solution with the factors Instrumental Objectification and Visual Objectification and a hierarchical three-factor solution with the factors Instrumental Objectification, Visual Objectification, and Interpersonal Objectification.

The factor Instrumental Objectification encompasses six items describing the instrumental sexual objectification of others. Instrumentalization—the act of people objectifying others by treating them as tools for their purposes—has already been described by Martha Nussbaum (1995) as an important and the “most morally exigent notion” of objectification (p. 261). Jessica LaCroix and Felicia Pratto (2015) understood the instrumentalization of others even as the root of objectification. They described instrumentalization as a necessary condition of objectification, which would, in turn, lead to the other notions of objectification initially described by Nussbaum (1995; i.e., instrumentality, fungibility, violability, ownership, autonomy, inertness, denial of subjectivity). The items of the factor Instrumental Objectification reflect the importance of instrumentalization for objectification. Most of the items directly describe the

instrumentalization of others as the reduction of men or women to mere tools of sex and sexual pleasure. Interestingly, this concurs with Bartky's definition of sexual objectification, which features the instrumentalization of others as sexual resources (Bartky, 1990). Only item 22 ("Meine Präferenz für eine bestimmte Altersgruppe von Frauen [Männern] bleibt gleich, auch wenn ich selbst älter werde")<sup>4</sup> seems unfitting at first sight, as it does not contain a direct reference of seeing others as a sexual resource. However, a mating<sup>5</sup> interest exclusively in people of the same, young age, precludes the possibility of long-term relationships. It seems reasonable that people agreeing to this item might instrumentalize others within short-term mating relationships. Future studies must provide evidence whether this item remains a good representative of the factor Instrumental Objectification. Moreover, future studies must investigate whether it is indeed instrumentality what is captured by the factor. After all, two factors, which emerged during the exploratory factor analyses shared a semantic, but a rather low empirical overlap with the factor Instrumental Objectification: the factors Perceiving Intimate Partners as Sexual Resource and Perceiving Sexual Partners as Sexual Resource. Both factors describe instrumentalization within intimate and short-term relationships (e.g., item 35: "Beim Sex denke ich vor allem an meine eigenen Bedürfnisse"). In contrast, the factor Instrumental Objectification describes a form of instrumental objectification, which renders strangers as potential sources of sex and sexual pleasure.

The factor Visual Objectification consists of five items describing the objectification of others by looking at them. The emergence of this factor is very striking. Although Visual Objectification is not an immediate part of the characteristics of objectification described by

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<sup>4</sup> English translations of the German items are provided in the Appendix of Study 4: Appendix C, Table C1 on page 292.

<sup>5</sup> The item is not precise, as the connotation of mating is only derived from the context provided by the other items. Future versions of the SOOI should rephrase the item to make the mating context explicit.

Nussbaum (1995), it is a form of objectification, which has been thoroughly investigated by many objectification researchers studying the so-called objectifying gaze (Bernard et al., 2012; Gervais et al., 2013; Riemer et al., 2017). Like the factor Instrumental Objectification, the factor Visual Objectification focuses more on the objectification of strangers.

The factor Interpersonal Objectification consists of three items. It describes objectifying incidents where the objectified person notices that he or\* she is being objectified (e.g., item 30: “Wenn mir eine Frau [ein Mann] auf der Straße gefällt, mache ich ihr [ihm] schon mal ein Kompliment”).

In order to ascertain whether a scale built from the two established factor solutions (and their subfactors) would reliably measure the sexual objectification of others, we thoroughly examined the results of Study 1 and Study 2: First, we assessed descriptive statistics and factor distributions. In doing so, we also compared the results of men and women. Second, we inspected the factor correlations. Third, we performed reliability analyses by calculating internal consistencies and test-retest reliabilities. Fourth, we conducted validity analyses by computing correlations with scales measuring sexual objectification and related constructs. At the same time, we moreover investigated whether the factors and subfactors would be affected by social desirability biases.

In total, the overall assessment of the descriptive values and factor distributions was satisfactory, as the factor models altogether demonstrated sufficient variance. However, the analyses of the studies' descriptive values and factor distributions revealed that the factors Instrumental Objectification and Interpersonal Objectification were affected by floor effects. While the floor effects of the factor Instrumental Objectification mainly concerned women, the floor effects of the factor Interpersonal Objectification also affected the outcomes for men. Floor effects did, however, not show up in the mean distributions of the overall factors, which combine the subfactors. Hence, while the factors Instrumental Objectification and

Interpersonal Objectification are probably not very capable of distinguishing between participants, the overall scores are.

A comparison of means between men and women revealed that the values were greater for men than women for the factor Instrumental Objectification. For Visual Objectification and Interpersonal Objectification, no gender differences emerged in most samples. The lack of differences in the latter factor was most likely due to the existing floor effects, which were suggested by visual inspection of the distributions. In the overall models, a gender difference of a medium effect size appeared: men showed a significantly greater sexual objectification proclivity than women. In comparison, for the OOQ and the ISOS-P results indicated medium and small gender differences (see Appendix A, Table A7, p. 280 and Table A8, p. 281). However, further research has to provide evidence on whether gender differences are stable across studies.

Analyses of internal consistencies revealed acceptable and good Cronbach's alphas for the overall factor models. The internal consistencies for the subfactors ranged from unacceptable to good, whereas women showed usually worse values than men. Especially the factor Interpersonal Objectification demonstrated a lack of internal consistency. Of course, with only three to six items per factor, the internal consistencies of the subfactors were prone to be low. Consequently, one has to be aware that the subfactors of this SOOI version do not result in exceptionally reliable outcomes, and one ought to rely on an overall mean. Fortunately, test-retest reliabilities were satisfactory, also for the subfactors: Even after a span of two weeks, at Time 2 participants answered very similarly to Time 1. Hence, the proclivity to sexually objectify, measured by the established factors and subfactors appears to be stable over time.

The correlations with the assessed validation scales revealed several important scale characteristics and implications. First, there was not much of a difference between the correlational values of the two- and the three-factor model. Hence, compared to the two-factor model, the three-factor model, which additionally includes the factor Interpersonal Objectification, did

not seem to provide much of an additional benefit in explaining variances of the validation scales. Moreover, the factor Interpersonal Objectification correlated to a smaller extent with the Interpersonal Sexual Objectification Perpetration scale ISOS-P (Gervais et al., 2014) than the other SOOI subfactors. Ergo, the factor Interpersonal Objectification not only entailed low explanatory power, it moreover did not measure what its items and name suggested for it to measure. Together with the previously discovered floor effects and the insufficient internal consistencies of the factor, the results suggested that it was not expedient hold onto the three-factor model. Hence, the final SOOI version consists of the two factors Instrumental Objectification and Visual Objectification.

The correlations of the factors Instrumental Objectification and Visual Objectification with the validation scales were rather similar for both factors. However, people's proclivity to sexually objectify themselves was, as one would expect, only associated with the factor Visual Objectification. Hence, people who focus on the appearance of their own bodies, also focus on the appearances of other bodies but do not necessarily instrumentalize them as sexual resources. Moreover, the ISOS-P correlated more strongly with the factor Visual Objectification than the factor Instrumental Objectification, whereas the likelihood to sexually harass was more strongly associated with the latter. This is particularly interesting, as both scales deal with harassment. However, while the ISOS-P describes objectifying behavior of a harassing nature ("How often have you made inappropriate sexual comments about someone's body?"), the LSH scale assesses so-called quid-pro-quo harassment, which is essentially the forceful instrumentalization of others as sexual resources: A person who engages in quid-pro-quo harassment uses his or\* her position of power in order to coerce others into providing them sexual pleasure. Altogether, the differences between the subscales' correlations provided initial evidence for the construct validity of the subscales. In summary, the results of the validation analyses showed that the factors Instrumental Objectification and Visual Objectification demonstrated distinct

qualities, jointly contributing to a comprehensive sexual objectification proclivity scale. The results, however, do not seem to legitimize the construction of a scale with two different indices. Two indices require factors, which are even more discriminative, or in other words, are less similar and explain distinct aspects of sexual objectification. Future studies have to investigate whether the subscales really assess distinct features. For instance, applying an eye-tracking paradigm, one could investigate whether the factor Visual Objectification is better in explaining objectifying gazes than the factor Instrumental Objectification.

The assessment of the scale's validity was mostly satisfying. High and medium correlations of the overall models with the ISOS-P (Gervais et al., 2014) and the OIQ (Strelan & Hargreaves, 2005)—two scales, which also measure sexual objectification of others—provided evidence for convergent validity. As intended, the SOOI measured the sexual objectification of others. Moreover, demonstrating criterion validity of the SOOI, Study 2 evidenced that people with a greater proclivity to sexually objectify others also indicated a greater interest in sex robots and evaluated sexually objectifying words more positively. The validation analyses also showed medium but also as high correlations with the SOOI for: the likelihood to sexual harass (LSH; Pryor, 1987; Vanselow et al., 2010; assessed only for men), the acceptance of modern myths about sexual aggression (AMMSA; Gerger et al., 2007), sexual harassment myth acceptance (ISHMA; Lonsway, Cortina, & Magley, 2008), ambivalent sexism (ASI-H and ASI-B; Glick & Fiske, 1996), self-objectification (SOQ; Noll & Fredrickson, 1998), social dominance orientation (Sidanius & Pratto, 2001; only for men) as well as the desire for sex, short-term mating orientation and previous sexual behavior (SOI: STMO, PSB; Jackson & Kirkpatrick, 2007). Especially LSH and SOI: STMO correlated to a similar extent with the SOOI than the ISOS-P. This finding does not support the notion of discriminant validity as the association of the SOOI with the ISOS-P should be the most pronounced. On the other hand, the large-sized correlations with those scales point to the importance of the constructs for the

proclivity to sexually objectify others. So how do short-term mating orientation, sexual harassment, and sexual objectification relate to each other? While short-term mating orientation has shown to be associated with sexual harassment (e.g., Diehl et al., 2018), sexual objectification might pose as a link between those constructs. To test this assumption, we calculated a post hoc mediation analysis (see Appendix A, Table A11, p. 284). The analysis revealed a full mediation effect of short-term mating orientation on the likelihood to sexually harass via sexual objectification proclivity. It remains, however, unclear whether having a higher sexual objectification proclivity is a requirement to sexually harass: On the one hand the mediation analysis' outcome could suggest that people with a greater short-term mating orientation, but a lower sexual objectification proclivity, would not possess a higher likelihood to sexually harass someone. On the other hand, several other relationships between the variables seem likely (e.g., a common higher factor or no dissimilarity of SOOI and LSH). Only experimental research based on well-founded theories (see Fiedler, Harris, & Schott, 2018) can give more clarity on the compelling relationship between STMO, SOOI, and LSH.

Finally, the SOOI showed little to no correlations with the external motivation to respond without sexism (EMS-S; Klonis, Plant, & Devine, 2005) and the proclivity to respond in a socially desirable way (BIDR; Paulhus, 1994 cited by Musch, Brockhaus, & Bröder, 2002). Hence, we were able to meet our goal to create a scale, which is not affected by social desirability biases.

To sum up, the development and validation of the Sexual Objectification of Others Inventory (SOOI), was a success. The final version consists of 11 items, constituting the two factors Instrumental Objectification and Visual Objectification. However, further studies were needed to demonstrate whether the factor structure remains stable under varying conditions. In the following studies, we applied the SOOI to an LGBTQ\* and an English-speaking sample.

### **Study 3: Applying the SOOI to People who Identify as Lesbian, Gay, Bisexual, Trans or Queer\***

Several researchers working on sexual objectification have investigated self- and other-objectification in homosexual individuals. Melanie Hill and Ann Fischer (2008), for example, have demonstrated that homosexual women experienced the same amount of sexual objectification by others and showed similar magnitudes of self-objectification as heterosexual women. Holly Kozee and Tracy Tylka (2006), however, have observed that the tenets of objectification theory cannot be entirely generalized from heterosexual to homosexual women. Apparently, the consequences of self-objectification are different for lesbian women, given an increased body surveillance but less proneness for eating disorders (Kozee & Tylka, 2006). Research focusing on men has discovered that gay men suffer from more body dissatisfaction than heterosexual men (Davids, Watson, Nilsson, & Marszalek, 2015; Siever, 1994; Tiggemann, Martins, & Kirkbride, 2007). Christopher Davids and colleagues (2015) established a path model, which demonstrated that the more homosexual men are involved in gay community activities, the more they experience sexual objectification from others, which, in turn, resulted in greater body dissatisfaction. Even though the findings on sexual objectification of homosexual individuals remain inconclusive, the results emphasize the importance of people's sexual orientation in sexual objectification research. Consequently, we wanted to make sure that the SOOI also measures sexual objectification proclivity of non-heterosexual individuals. Besides gathering more general and precise knowledge, the approach of including non-heterosexual individuals into psychological research moreover counteracts the pronounced heteronormativity in psychology (Clarke & Peel, 2007).

In order to investigate whether the SOOI measured sexual objectification by non-heterosexual people, we decided to address the LGBTQ\* community. The term LGBTQ\* describes people who identify as lesbian, gay, bisexual, trans and/or queer. The asterisk (\*) means

to highlight the diversity and variability of the terminology covering sexual orientation and gender. Although previous sexual objectification research only focused on hetero- and homosexual individuals, identifying as men or women, we chose to incorporate a broader view on sexual orientation and gender as we aimed to create a questionnaire that would be inclusive of all forms of sexual orientation and gender. Study 3 investigated the psychometric properties of the SOOI measuring sexual objectification of individuals identifying as part of the LGBTQ\* community.<sup>6</sup> In the following, those individuals will be referred to as LGBTQ\* people.

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<sup>6</sup> A bachelor's thesis on the same data set investigated people's involvement in the LGBTQ\* community as a potential predictor for sexual objectification of others (see Prömper, 2018). The study was preregistered at [osf.io/kajqf](https://osf.io/kajqf).

**Method.*****Participants.***

In order to recruit LGBTQ\* people we contacted 105 associations, which work within or for the LGBTQ\* community, and asked them to distribute the link to our online study. In total, 162 participants completed the study. Unfortunately, due to an error in the programming, the datasets of 67 people lacked three items of the SOOI. For the subsequent analysis, those datasets were removed completely. Of the remaining 95 participants, most people learned about the study via social media (48.4 %), mailing lists (21.1 %) or recommendations by others (18.3 %). On average, the participants were 27.90 years old ( $SD = 8.70$ ). Forty-six participants (48.4 %) identified as male, 29 participants (30.5 %) as female, 16 participants (16.8 %) identified with other forms of gender using one or several of the following terms: agender, demiguy, genderfluid, genderqueer, non-binary, queer, trans\*, transmasculine. Four participants (4.2 %) chose not to indicate any gender. Forty-three participants (45.3 %) specified their sexual orientation as homosexual and 16 participants (16.8%) as bisexual. The remaining 36 participants (37.9 %) indicated one or several of the following terms for their sexual orientation: allo-heterosexual, androphil, asexual, bi-curious, chub4chub, gray-asexual, pan-asexual, pansexual, polysexual, queer, quoisexual, sexual. Finally, we asked the participants with what part of the initialism LGBTQ they would identify the most. Answers can be found in Table 19.

Table 19

*Frequencies and Percentages of the Identification with the Different parts of the LGBTQ Initialism*

Part	Meaning	Frequency	Percent
L	Lesbian	7	7.4
G	Gay	38	40.0
B	Bisexual	13	13.7
T	Trans	7	7.4
Q	Queer	18	18.9
LGBTQ	<i>All of the above</i>	12	12.6

### ***Measures.***

If not reported otherwise, all measures implemented in Study 3 were applied using a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

#### *Sexual Objectification of Others Inventory (SOOI).*

In order to address people whose sexual orientation is not confined within the boundaries of the gender-binary, we developed a gender-neutral version SOOI additionally to the existing male and female form of the scale. Most gender-neutral items featured asterisks in order to indicate gender-neutrality of the German words, which generally imply the gender of a person (e.g., mein\*e Partner\*in). As in Study 1 and Study 2, the equivalent items of the different SOOI versions (male, female, and gender-neutral) were collapsed and treated as the same items for the subsequent analyses. The study was conducted before the analyses of Study 1 and Study 2 were completed and the final SOOI version was identified. Hence, participants filled out all 41 items of the prior SOOI version. However, the subsequent analyses only included the 11 items of the final SOOI version. Item 7, 8, and 27 were slightly rephrased to increase readability. Moreover, Item 24 had to be rephrased from “Stünde ich vor der Entscheidung, würde ich eher in eine gemischt-geschlechtliche Sauna gehen, weil es da mal etwas zu sehen gibt“ into „Ich schaue mir gerne fremde nackte Männer an (z.B. in der Sauna)“ because the initial

item wording was heteronormative. As a result of changed meaning, the item was transferred from the subscale Instrumental Objectification to Visual Objectification. All final scale items can be obtained from Appendix B, Table B1 on pages 285-287. The subscale Instrumental Objectification had a poor Cronbach's alpha of .46. The internal consistencies for the subscale Visual Objectification and the total scale were good ( $\alpha = .80$ ,  $\alpha = .80$ ). Internal consistencies were not calculated for subgroups of people, as the sample sizes would have been much lower than the required sample sizes for the calculation of Cronbach's alphas of  $n = 50$  (see Javali, Gudaganavar, & Shodan, 2011).

#### *Sexual Orientation.*

In order to display the best-fitting version of the SOOI (male, female or gender-neutral) to each participant, we used the same adaption of the Heterosexual-Homosexual Rating Scale (see Kinsey, Pomeroy, & Martin, 1963) already described in Study 1 (see page 36). Participants who had indicated that the adapted version of Kinsey's scale did not suffice, were asked to fill out the gender-neutral version of the SOOI. Bisexual participants answered the male and the female SOOI version. However, for simplifying the analysis and as both versions did not differ significantly between those participants (all  $ps$  for the subscales and overall scale version  $> .175$ ), only the values of the same-sex SOOI version were used in the subsequent analyses.

#### *Sociosexual Orientation (SOI).*

To assess participants' sociosexual orientation, we once more implemented the SOI (Jackson & Kirkpatrick, 2007), which was already described in Study 1 (see p. 37). However, for Study 3, we slightly adapted the items' wordings in order to fit the respective male, female, or gender-neutral form of the SOOI (e.g., Partner, Partnerin, or Partner\*in). The subscale LTMO had a Cronbach's alpha of .87, the subscale STMO an alpha of .92.

*Identification with the different parts of the LGBTQ initialism.*

In order to ascertain whether the participants mostly identified as lesbian, gay, bisexual, trans or queer we asked them to either chose the category they identified with the most, or to indicate that they would identify with the whole LGBTQ\* spectrum.

*Further scales.*

Additionally, three other scales were implemented: an adapted version of the ISOS-P (ISOS-N; Gervais et al., 2014; Gervais, Davidson, Styck, Canivez, & Dilillo, 2018) assessing the experienced normality of sexual objectification, the Gay Community Participation Scale (GCPS; Davids et al., 2015), as well as an adapted version of the Lesbian Internalized Homophobia Scale (LIHS; Ms & Chung, 2008). The scales are beyond the scope of this thesis and will not be discussed further (for further discussion see Prömper, 2018).

*Procedure.*

The online-study's procedure is presented in Table 20.

Table 20  
*Procedure of Study 3*

Nr.	Part
1.	General instruction and informed consent
2.	Sexual orientation and gender
3.	Grouped questionnaires with randomized item order: SOOI SOI: LTMO & STMO
4.	GCPS
5.	Identification with the different parts of the LGBTQ initialism
6.	ISOS-N
7.	LIHS
8.	Demographic questions
9.	Participant's comments
10.	Debriefing and participation in a raffle

**Results.**

If not reported otherwise, the statistical assumptions of the following analyses were met. An alpha level of .05 was used for all statistical tests.

***Confirmatory factor analysis.***

An energy test (Székely & Rizzo, 2005) with 999 bootstrap samples revealed that multivariate normality was also not achieved for this sample of LGBTQ\* people ( $\epsilon = 2.12$ ,  $p < .001$ ). Thus, the confirmatory factor analysis was performed using the maximum likelihood estimator with robust standard errors (see Brown, 2015).

The confirmatory factor analysis of the two-factor model consisting of Instrumental Objectification and Visual Objectification yielded satisfying results:  $SRMR = .06$ ,  $RMSEA_R = .03$ ,  $CFI_R = .98$ ,  $TLI_R = .97$ .

***Descriptive statistics and comparison of means.***

The average score of the overall SOOI was  $M = 3.53$  ( $SD = 0.97$ ). Instrumental Objectification had a mean value of  $M = 2.52$  ( $SD = 0.83$ ) and Visual Objectification a mean value of  $M = 4.37$  ( $SD = 1.29$ ).

As before, we were interested in the gender differences of the SOOI. Therefore, we compared participants of female, male, and other genders by calculating three ANOVAs. The ANOVAs' results indicated that the men, women, and people of other genders differed on the factors Instrumental Objectification, Visual Objectification as well as the overall SOOI score,  $F(2,88) = 10.32$ ,  $p < .001$ ,  $\eta^2 = .19$ ;  $F(2,88) = 20.76$ ,  $p < .001$ ,  $\eta^2 = .32$ ;  $F(2,88) = 22.87$ ,  $p < .001$ ,  $\eta^2 = .34$ . Post hoc tests showed that on all three scales, Instrumental Objectification, Visual Objectification as well as the overall SOOI score, men ( $M = 2.83$ ,  $SD = 0.82$ ;  $M = 5.05$ ,  $SD = 1.15$ ;  $M = 4.04$ ,  $SD = 0.83$ ) demonstrated significantly higher values than women ( $M = 2.12$ ,  $SD = 0.68$ ,  $p < .001$ ;  $M = 3.59$ ,  $SD = 0.92$ ,  $p < .001$ ;  $M = 2.92$ ,  $SD = 0.70$ ,  $p < .001$ ) and other genders ( $M = 2.14$ ,  $SD = 0.57$ ,  $p = .005$ ;  $M = 3.63$ ,  $SD = 1.09$ ,  $p < .001$ ;

$M = 2.95$ ,  $SD = 0.79$ ,  $p < .001$ ). Women and other genders did not differ significantly from each other (all  $ps = 1$ ). Figure 6 depicts these results.

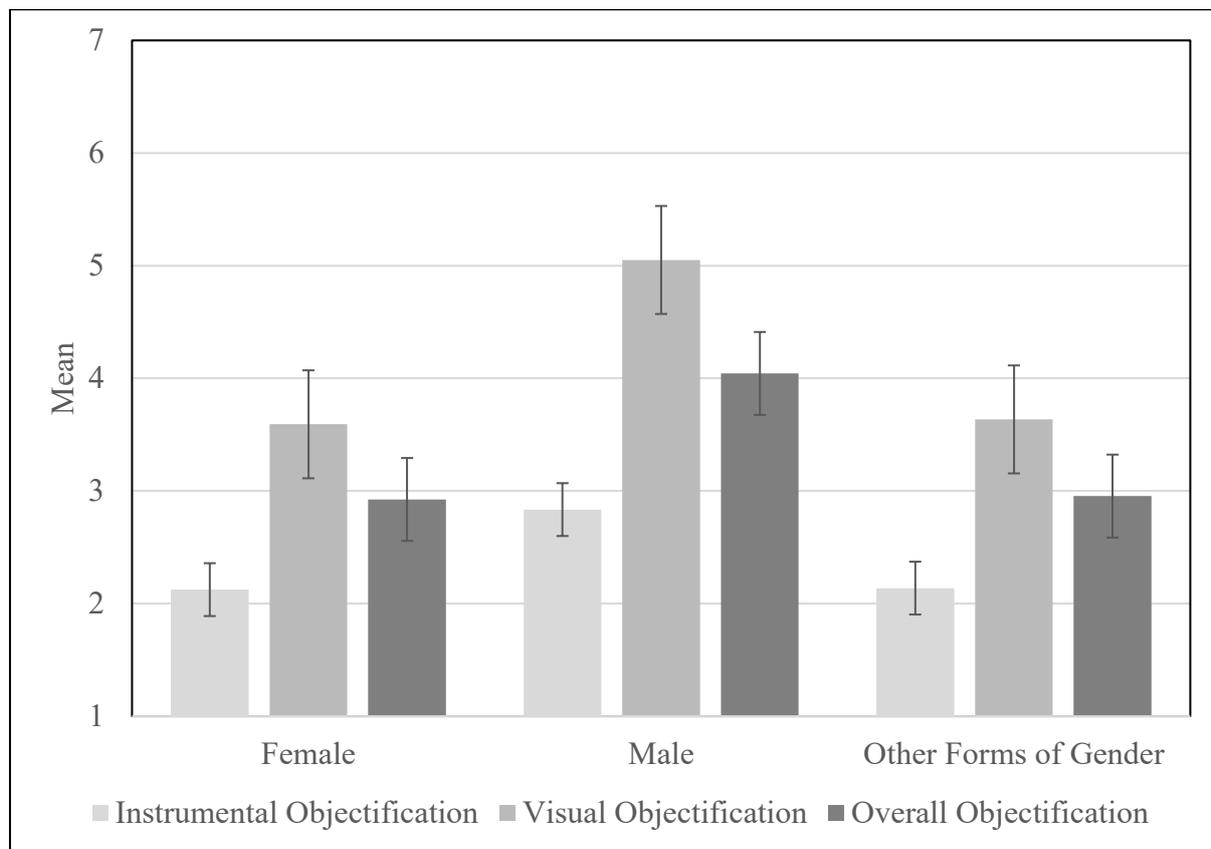


Figure 6. Means of the overall SOOI and its subscales for male, female, and other genders. Error bars represent *SDs*.

To examine whether people who identify most as lesbian, gay, bisexual, trans, queer or with the whole LGBTQ-term would differ from each other on the SOOI and its subscales, we ran three ANOVAs.<sup>7</sup> The respective group means are depicted in Table 21 and visualized in Figure 7. The ANOVAs' results revealed that people differed on Instrumental and Visual Objectification as well as on the overall SOOI as a function of which part of the LGBTQ initialism they identified with the most,  $F(5,89) = 4.38$ ,  $p = .001$ ,  $\eta^2 = .20$ ;  $F(5,89) = 14.71$ ,  $p < .001$ ,  $\eta^2 = .45$ ;  $F(5,89) = 36.59$ ,  $p < .001$ ,  $\eta^2 = .41$ . Post hoc tests indicated that individuals who

<sup>7</sup> A combination of two independent variables identification with the different parts of the LGBT-term and participant's gender in one or more analyses was not possible, as the variables are most likely not independent from one another.

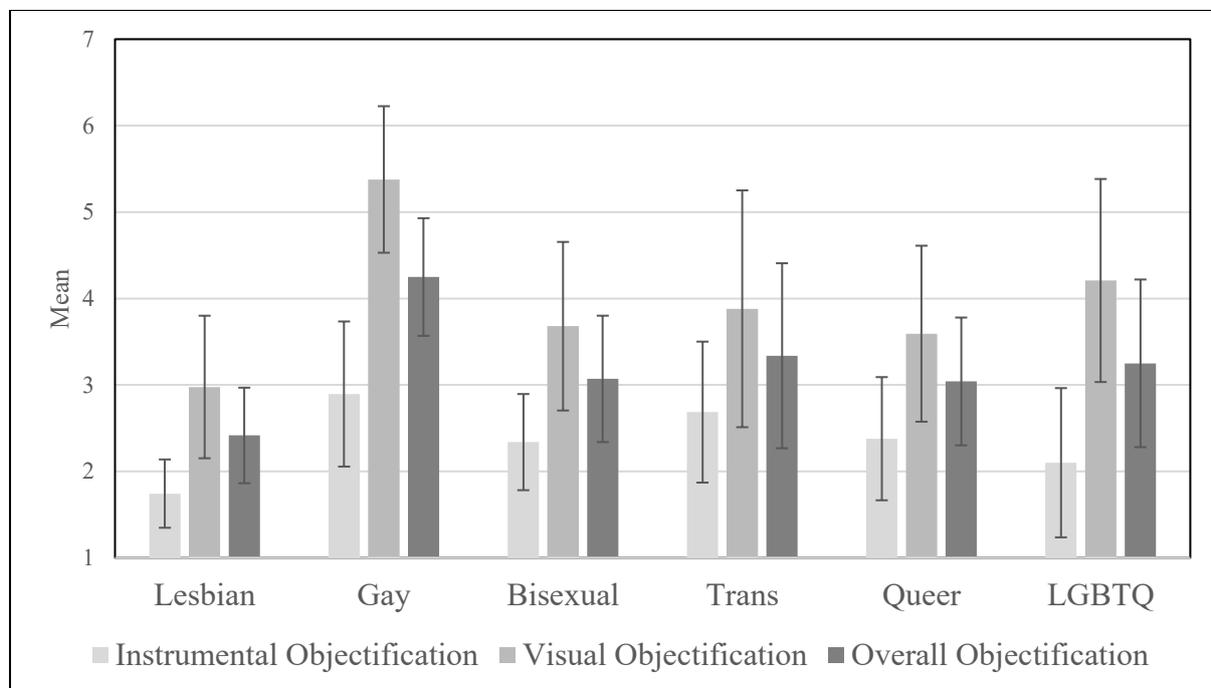
identified as gay showed significantly more Instrumental Objectification than lesbian individuals ( $p = .006$ ). Moreover, gay people showed significantly more Visual Objectification than every other group of individuals (all  $ps \leq .009$ ). Nearly the same pattern was obtained for the overall objectification score: people who identified as gay showed more proclivity to sexually objectify others than people who identified as lesbian, bisexual, queer or with the whole LGBTQ term (all  $ps \leq .002$ ). All other comparisons were non-significant (all  $ps \geq .070$ ).

Table 21

*Means and Standard Deviations for Participants Who Identified Most as Either Lesbian, Gay, Bisexual, Trans, Queer or With the Whole LGBTQ-Term*

	Lesbian		Gay		Bisexual		Trans		Queer		LGBTQ*	
	<i>M</i>	<i>SD</i>										
IO	1.74	0.40	2.89	0.84	2.34	0.56	2.69	0.82	2.38	0.71	2.10	0.86
VO	2.98	0.82	5.38	0.85	3.68	0.98	3.88	1.37	3.59	1.02	4.21	1.17
Overall SOOI	2.42	0.55	4.25	0.68	3.07	0.73	3.34	1.07	3.04	0.74	3.25	0.97

*Note.* IO = Instrumental Objectification, VO = Visual Objectification.



*Figure 7.* Means of the overall SOOI and its subscales for individuals who identify with different parts of the LGBTQ initialism. Error bars represent *SDs*.

Descriptive values of sociosexual orientation for different genders and people for participants who identified most as either lesbian, gay, bisexual, trans, queer or with the whole LGBTQ-term can be found in Appendix B, Table B2 and Table B3 on page 287.

***Correlational analyses.***

Instrumental, Visual and Overall Objectification correlated moderately to highly with short-term mating orientation ( $r = .45$ ,  $r = .54$ ,  $r = .57$ ; all  $ps < .001$ ) but not with long-term mating orientation ( $r = -.05$ ,  $r = .05$ ,  $r = .20$ ; all  $ps \geq .616$ ).

**Discussion.**

Several studies have highlighted the importance of sexual objectification research within the LGBTQ\* community (e.g., Davids et al., 2015; Hill & Fischer, 2008; Tiggemann et al., 2007). Study 3 was implemented to examine whether the SOOI would be applicable to individuals who do identify as part of the LGBTQ\* community. Therefore, a gender-neutral version of the SOOI was developed and displayed to all participant whose sexual orientation was not limited to the interest in men and/or women.

The confirmatory factor analysis confirmed the factor structure found in Study 1 and Study 2, consisting of Instrumental and Visual Objectification. However, even though the internal consistency of the overall SOOI score and likewise, the internal consistency of the factor Visual Objectification was satisfying, the Cronbach's alpha of the factor Instrumental Objectification was poor. It seems that the items of the factor Instrumental Objectification did not consistently measure the same construct in people identifying with the LGBTQ\* spectrum. Against the background that Study 1 evinced low internal consistencies for women but not for men, the results suggest that Instrumental Objectification might be a factor only prevailing in heterosexual men.

In accordance with previous findings (Davids et al., 2015; Kozak et al., 2009), individuals who identified as gay displayed the highest values of sexual objectification. They differed from all other groups, particularly with regard to Visual Objectification. Moreover, people who identified as men showed a higher sexual objectification proclivity (instrumental, visual, and overall) than individuals who identified as women and other genders. This result corresponds only partially with the results of Study 1 and Study 2, where men showed greater instrumental and overall but not visual sexual objectification proclivity than women. To find out whether the different outcome was an effect of relatively higher values for men or relatively smaller results for women, we exploratorily compared the results of Study 3 with the previous results.

A post hoc comparison between a weighted average of the means for Visual Objectification of Study 1 and Study 2, Time 1 with the means of this Study 3 showed that women of this sample demonstrated a smaller visual objectification proclivity than women of the two previous samples (see Appendix B, Post hoc Comparisons, p. 287). In contrast, men from this sample showed more Visual Objectification than men from Study 1 and Study 2, Time 1. The results lead to the assumption that women who identify within the LGBTQ\* spectrum might tend less to visually objectify than women who do not identify within the LGBTQ\* spectrum. In contrast, seem men who identify within the LGBTQ\* spectrum to show a greater visual objectification proclivity than men who do not identify as part of the LGBTQ\* spectrum. As 82.6 % of all men identified as gay, it seems plausible that the latter result is due to a cultivation of sexual objectification within the gay community. Christopher Davids and colleagues (2015), for instance, demonstrated that the more gay men were involved in the gay community, the more sexual objectification experiences they reported. Why the women of our study (of which only 17.2 % identified as a lesbian) did show less sexual objectification than heterosexual women of Study 1 and Study 2, needs to be investigated in future studies, for instance by researching the motivations behind sexual objectification.

The correlational pattern of Study 3 was similar to the patterns in Study 1 and Study 2: the overall scale and its subscales correlated with short-term mating orientation, no significant correlation with long-term mating orientation could be obtained.

Concisely, the results demonstrate that the SOOI (notably the subscale Visual Objectification and the overall scale) can be applied to a non-heterosexual sample. Especially the gender-neutral version of the SOOI facilitates data collection by including targets of all genders. Finally, the differences between this sample and the previous heterosexual samples confirmed moreover that the investigation of sexual objectification with regard to peoples' sexualities is worthwhile.

#### **Study 4: Validation of an English SOOI Version**

Up to this point, the SOOI's factor structure and scale quality were investigated with the help of three different German-speaking samples. Study 4 was developed in order to examine whether the SOOI is also applicable to an English sample. Therefore, English speaking participants were presented with English SOOI items and several validation scales. The study was preregistered at [osf.io/6jcrx/](https://osf.io/6jcrx/).

The relationships of the SOOI with the implemented validation scales were expected to be equally large than in Studies 1-3. Thus, we predicted a positive, medium to strong correlation of the SOOI with sexual objectification, measured with the ISOS-P. For the SOOI's association with sexual objectification, measured with the OOOQ, we expected positive, a small to moderate correlational effect size. For short-term mating orientation, measured with SOI: STMO we anticipated a positive, medium to strong correlation; and for sexual harassment myth acceptance, measured with the ISHMA, we assumed the correlations to be positive and of a small to moderate size. The SOOI's association with self-objectification, measured with the SOQ, was predicted to be positive and small. Self-deception, measured with the BIDR, was expected to correlate weakly positively with the SOOI, if at all. Impression management, measured with the BIDR, as well as LTMO, were expected to correlate weakly negatively with the SOOI, if at all.

Additionally, to the previously implemented scales, we applied an objectification measure developed in 2004 as an honor's project (Curran, 2004). The measure was never sufficiently validated and published. As the original publication offers no name for the instrument, it is called Curran Objectification Measure (COM) in the following. The COM's items are similar to the SOOI, because they also describe objectifying behaviors as well as attitudes. Even some items share similar meanings (e.g., SOOI: "I would like to evaluate men [women] with my friends based on their appearance and 'beddability'", and COM: "My friends and I talk about the way men look or how attractive they are"). Contrary to the SOOI, the COM offers different

subscales for the objectification of women and the objectification of men (COM-W and COM-M). However, because of the scales shared meaning with the SOOI, it was hypothesized that both scales would correlate on a moderate to strong level with the SOOI.

**Method.*****Participants.***

In total, we tested 160 participants, who were recruited via Prolific Academic, an online participant recruitment forum. Seventeen participants were removed from the sample as they did not answer the attention check (“Please answer this item with *completely disagree*”) correctly. Moreover, we removed four participants who indicated being homosexual. Of the remaining 139 participants, 73 identified as female and 66 as male. As the highest level of education, 21.6 % indicated secondary school, 28.8 % further education colleges, 38.1 % higher education institutions (undergraduate level), 10.1 % higher education institutions (graduate level) and 1.4 % higher education institutions (doctoral level). Regarding language skills, 92.8 % indicated being native English speakers, 0.7 % described their skills as business-fluent, and 6.5 % stated they were fluent.

***Measures.***

If not reported otherwise, all measures implemented in Study 4 were applied using a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

For the English-language validation of the SOOI, we implemented several scales we had used before: the Balanced Inventory of Desirable Responding (BIDR; see p. 39), the Interpersonal Sexual Objectification Perpetration Measure (ISOS-P; see p. 34), the Self- and Other-Objectification Questionnaire (SOQ and OOQ; see p. 36), the Sexual Harassment Myth Acceptance Scale (ISHMA; see p. 40), the Sociosexual Orientation Inventory (SOI; see p. 37), and a measure of sexual orientation (see p. 36). Additionally, to the previously implemented scales, we applied the Curran Objectification Measure.

***Curran Objectification Measure (COM).***

The Curran Objectification Measure (Curran, 2004) consists of two scales. The COM-W measures heterosexual men’s objectification of women (e.g., “The first thing I notice

about a woman is her body”). It consists of 41 items. The COM-W consists of 47 items and captures sexual objectification proclivity of heterosexual women (e.g., “My friends and I talk about the way men look or how attractive they are”). In Study 4, the respective scales were displayed depending on the participants’ sexual orientation.

*Sexual Objectification of Others Inventory (SOOI).*

The SOOI was translated from German into English by a professional interpreter. The translations were based on the item wording in Study 3. Afterward, the translations were inspected by native and non-native speakers of English. Some items were slightly adapted in order to guarantee a congruent meaning of the German and English SOOI items. Like in Study 1 and Study 2 participants received either a male or a female version of the SOOI items. Again, both item versions were treated as the same scale. As beforehand, the participants received all items from the original item pool; however, only the 11 final SOOI items were forwarded to the subsequent analyses. All final English items can be obtained from Appendix C, Table C1 on pages 289-290.

*Internal consistencies for each scale.*

The Cronbach’s alphas for each scale can be found in Table 22. For some scales, this coefficient is missing because its calculation was not possible because the scales were rank ordered scales. The Cronbach’s alphas ranged from questionable to excellent.

Table 22  
*Cronbach's Alphas of each (sub)scale in Study 4*

Scale	$\alpha$
BIDR: IM	.76
BIDR: SD	.77
COM-M	.85
COM-W	.95
ISHMA	.93
ISOS-P	.86
OOQ	-
SOI: LTMO	.91
SOI: STMO	.92
SOOI: Instrumental Objectification	.64
SOOI: Visual Objectification	.83
SOOI: Overall Objectification	.85
SOQ	-

***Procedure.***

The procedure of the online study can be found in Table 23.

Table 23  
*Procedure of Study 4*

Nr.	Part
1.	General Instruction and informed consent
2.	Sexual orientation
3.	SOQ
4.	OOQ
5.	BIDR
6.	Grouped questionnaires with randomized item order: COM-W & COM-M ISHMA SOI: LTMO & STMO SOOI
7.	ISOS-P
8.	Demographic questions
9.	Participant's comments
10.	Debriefing

**Results.**

If not reported otherwise, the statistical assumptions of the following analyses were met. An alpha level of .05 was used for all statistical tests.

***Confirmatory factor analysis.***

An energy test (Székely & Rizzo, 2005) with 999 bootstrap samples indicated that multivariate normality was not achieved ( $\epsilon = 2.77, p < .001$ ). The confirmatory factor analysis was therefore performed using the maximum likelihood estimator with robust standard errors (see Brown, 2015).

The confirmatory factor analysis of the two-factor model consisting of Instrumental Objectification and Visual Objectification yielded satisfying results:  $SRMR = .05$ ,  $RMSEA_R = .06$ ,  $CFI_R = .96$ ,  $TLI_R = .94$ . Hence, the empirical relationship between the variables was correctly represented by the hypothesized factor structure consisting of Instrumental Objectification and Visual Objectification.

***Descriptive statistics and comparison of means.***

Descriptive statistics and the statistical comparison of men's and women's sexual objectification proclivity can be found in Table 24. Like in Study 1-3, men demonstrated a greater amount of instrumental and overall objectification than women. In contrast to Study 1 and Study 2, but similar to Study 3, men also showed a greater amount of Visual Objectification than women. The descriptive values and gender comparisons for the validation scales can be obtained from Appendix C, Table C2, page 291.

Table 24

*Means, Standard Deviations and Gender Comparison of the SOOI and its Subscales*

	Overall		Women		Men		Gender Comparison			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
IO	2.51	0.99	2.13	0.75	2.94	1.06	5.17	116.22	< .001	0.89
VO	3.36	1.34	2.97	1.16	3.79	1.42	3.76	137.00	< .001	0.64
Overall	2.98	1.08	2.59	0.85	3.41	1.14	4.82	118.92	< .001	0.82

*Note.* IO = Instrumental Objectification, VO = Visual Objectification. For Instrumental and Overall Objectification Levene's tests revealed unequal variances for men and women. Consequently, we calculated Welch's t-tests instead of Student's t-tests.

### ***Validity analyses.***

To investigate the convergent and discriminant validity of the English version of the SOOI and its subscales, we calculated correlations with the implemented validation scales. The results can be found in Table 25. All obtained correlations corresponded with our predictions. Just the negative correlation of BIDR-IM with overall objectification as well as the negative correlation SOI: LTMO with Instrumental Objectification were more pronounced than expected.

Table 25

*Pearson Correlations of the English SOOI and its Subscales With the Validation Scales*

	Instrumental Objectification	Visual Objectification	Overall Objectification
BIDR: IM	-.29**	-.26**	-.30**
BIDR: SD	-.05	-.03	-.04
COM-M	.58**	.75**	.73**
COM-W	.73**	.84**	.88**
ISHMA	.28**	.43**	.41**
ISOS-P	.48**	.63**	.63**
OOQ	.26**	.37**	.36**
SOI: LTMO	-.35**	-.15	-.25**
SOI: STMO	.60**	.53**	.61**
SOQ	.21*	.24**	.25**

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

**Discussion.**

Study 4 was designed to test the English SOOI version. The analyses were based on test results from a sample of 139 English-speaking participants. Confirmatory factor analysis confirmed the factor structure reflecting the factors Instrumental Objectification and Visual Objectification.

Like in Study 3, the Cronbach's alpha of the factor Instrumental Objectification was, however, poor. Hence, at this point, it cannot be recommended to use the five-item factor Instrumental Objectification of the English scale as a single measure.

Contrary to the heterosexual German samples (Study 1-2), in Study 4, men showed more Visual Objectification than women. Further studies must investigate whether this difference is due to a different interpretation of the English items or whether English and German people show different levels of Visual Objectification. To investigate this question, a comparative Eye-Tracking-Study could be conducted.

Overall, the results of the validity analysis were as expected. Moderate to high correlations with scales measuring sexual objectification of others (COM, ISOS-P, but not OOQ) attest convergent validity of the English SOOI version. In contrast, demonstrating discriminant validity, scales which, do not measure the sexual objectification of others (BIDR, SOI: LTMO and SOQ), showed only small to moderate associations with the SOOI. Discriminant validity of the English SOOI was, though, questioned by a moderate relationship of short-term mating orientation (SOI: STMO) with the SOOI. This finding is, however, not surprising as similarly sized relationships of SOOI and STMO have been obtained in Studies 1-3. One can conclude that also the English SOOI version is susceptible to people's differences in short-term mating orientation, indicating a strong empirical overlap between sexual objectification proclivity and interest in sexual short-term relationships. Altogether, the results indicated that the English SOOI measures the same construct as the German SOOI.

So far, the SOOI was only validated using explicit measures. Study 5 was designed to assess the concurrent validity of the SOOI with the help of implicit and behavioral measures.

### **Study 5: Sexual Objectification as Means to Palliate Masculinity Threat**

#### **Introduction.**

The aims of Study 5 were manifold: Again, we wanted to verify the SOOI's factor structure and to validate the SOOI using scales measuring objectification and related constructs. This time, however, we also investigated whether the SOOI would be related to implicit sexual objectification measures. Moreover, we examined whether the SOOI would predict sexually objectifying behavior. The employment of both implicit and behavioral measures was expected to reveal more information on the SOOI's validity. Finally, it was our goal to examine further why people engage in sexually objectifying behavior. Specifically, we explored whether men counteract a masculinity threat by sexually objectifying women. The data of Study 5 was collected with the help of two students who wrote their bachelor theses on sexual objectification (see Manke, 2018 and Warkentin, 2017).

#### ***Implicit sexual objectification.***

Implicit social cognition, a term introduced by Anthony Greenwald and Mahzarin Banaji (1995), refers to the direct measurement of cognitive processes, which are outside of people's consciousness or control. In the last quarter of the century, various so-called implicit methods have been developed to implicitly assess psychological constructs (Nosek, Hawkins, & Frazier, 2011). The measurement of psychological constructs with the help of implicit methods allows for assessing phenomena, which are introspectively not fully accessible (Greenwald & Banaji, 1995). This is because implicit measures do not require people to introspect on the constructs in question. Moreover, contrary to self-report measures, implicit methods (partly) circumvent people's potential limits in ability (e.g., due to cognitive restraints) and motivation (e.g., due to social desirability biases) to report on the topic of interest (Nosek et al., 2011).

Implicit methods of measurement have also been employed in the research field of other-objectification. For instance, Vaes and colleagues (2011) have applied several Single-

Category Implicit Association Tests (SC-IATs) to investigate the dehumanization of women and men depicted in an "objectifying" vs. "personalizing" way. Dehumanization was measured as the relative strength of association of the photos with human vs. animal words. Results showed that photos of objectified women were relatively less associated with human words and hence, relatively more associated with animal words (Vaes et al., 2011, Study 1). Moreover, the authors were able to demonstrate that men primed with a sex goal, implicitly dehumanized target pictures of women to a greater extent than men in a neutral condition or women in general (Study 3). In the same vein, using Brief Implicit Association Tests (B-IATs) Rudman and Mescher (2012) showed that men who implicitly associated women more than men with animals (Study 1, Study 2) or objects (Study 2) rather than with humans, exhibited a greater rape proclivity on an explicit level. Although several other researchers applied implicit methods to assess dehumanization and objectification of others (e.g., Bernard et al., 2012; Cikara et al., 2011; Gervais, Vescio, Förster, Maass, & Suitner, 2012), up to now, it has not been explored whether implicit dehumanization and implicit sexual objectification are associated with sexual objectification proclivity assessed on an explicit level. Using Single-Target Implicit Association Tests (ST-IATs),<sup>8</sup> we aimed at exploring this question with Study 5. We assumed that implicit dehumanization and implicit objectification are statistically associated with men's objectification proclivity measured with the SOOI. We hypothesized that higher levels of implicit dehumanization (Hypothesis 1a) and implicit objectification (Hypothesis 1b) coincide with greater levels of sexual objectification proclivity.

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<sup>8</sup> In contrast to SC-IATs, ST-IATs do not apply a response window in which people are asked to respond quickly. This is the main feature in which the two tests differ (see Bluemke & Friese, 2008).

***Behavioral objectification.***

To our knowledge, just a few studies tried to assess sexually objectifying behavior: Almost all of the research on objectifying behavior uses eye-tracking as the method of choice (Abeles, Gervais, Shnabel, Yuval-Greenberg, & Bareket, 2018; Gervais et al., 2013; Riemer et al., 2017). Other-objectification in eye-tracking studies is usually operationalized as the relative time duration participants look at people's bodies vs. their faces. Eye-tracking brings the benefit of measuring behavior in a less explicit way, i.e., automatic behavior, which is rather outside of people's control and consciousness. However, objectifying behavior outside the laboratory often entails something for what the eye-tracking paradigm is not receptive: the objectifiers intended influence on the objectified person. For instance, objectifying behavior by men in public drinking settings is characterized by an expression of male dominance over women (Grazian, 2007; Tinkler, Becker, & Clayton, 2018). Furthermore, men who have been outperformed by a woman, use objectifying behavior in order to restore their male dominance over the woman (Dahl et al., 2015). Thus, people can be motivated enact objectifying behavior in order to exercise influence over another person. Within an eye-tracking paradigm, such motivations cannot be acted out, as the participants know that the photos are just mere representations of people. For Study 5, we developed two measures, which allow for objectifying men to think that their behavior has an actual influence on the female target persons.

In practice, participants were asked to select profile contents (photos and texts) for women's online dating platform profiles. The participants learned that the information on the women and the photos of the women were real and that the contents, which they would select, would allegedly be published on the dating platform. Similar to approaches where the signing of a petition was employed as a measurement of behavior (e.g., Chaiken, 1979), in this study the participants' choices of publication served as a behavioral measurement of sexual objectification.

We hypothesized that men with a greater proclivity to sexually objectify, measured with the SOOI, would be more inclined to publish texts (Hypothesis 2a) and photos (Hypothesis 2b) for women's dating platform profiles, which imply the objectification of those women.

*Motives to sexually objectify.*

Study 1, Study 2, and Study 4 already established that people with greater short-term-mating orientation tend to show a greater sexual objectification proclivity. This evidence leads to the assumption that people might sexually objectify others in order to enhance their prospects for short-term sexual contact. Indeed, for instance, Grazian (2007) was able to demonstrate that the objectification of women is an integral part of male college students courtship behavior, termed as "girl hunting". Interestingly, the author was able to demonstrate that the men's behavior did not only serve the purpose of fawning over women, but also provided essential means to boost the adolescent men's "confidence in [their] performance of masculinity" (Grazian, 2007, p. 224). Thus, a motivation for heterosexual men to objectify women is to feel masculine. This entails that sexual objectification is a part of how men conceptualize masculinity. As a matter of fact, Sharon Bird (1996) described sexual objectification as one of three central meanings of hegemonic masculinity, which are shared in homosocial interactions of men.<sup>9</sup> This assumption is corroborated by several other non-experimental studies, which showed that sexual objectification is strongly associated with masculinity (e.g., Quinn, 2002; Seabrook, Ward, & Giaccardi, 2018).

In Study 5, we sought to experimentally manipulate men's sense of masculinity prior to the behavioral measure. This was achieved by employing a masculinity confirmation to one half of the participants and a masculinity threat to the other half of the participants. In doing

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<sup>9</sup> The others are emotional detachment and competition.

so, we aimed at further investigating the theoretical significance of sexual objectification for men's masculinity using an experimental approach.

Masculinity threats threaten men's social identity as men. The threats can emerge due to different cognitive mechanisms, which can be derived from social identity theory (for more information see Maass, Cadinu, Guarnieri, & Grasselli, 2003). We decided on a prototypicality threat, which threatens men's masculinity by questioning their prototypicality within the ingroup of men (Maass, Cadinu, & Galdi, 2013). Typically, this is achieved by telling men that they deviate from the average male by being quite female (e.g., Glick, Gangl, Gibb, Klumpner, & Weinberg, 2007; Wever, 2013). Threatening men's masculinity, for instance, by questioning their prototypicality as men, has been shown to elicit a number of different reactions in men.

For instance, men under the influence of a masculinity threat, showed greater resentment of feminine traits by rejecting effeminate but not masculine gay men (Glick et al., 2007). Indicating further compensatory strategies, research showed that men demonstrated greater physical strength (Funk & Werhun, 2011) and expressed greater toughness (Fowler & Geers, 2017) after experiencing a masculinity threat. Masculinity threats have furthermore been shown to increase the likelihood of behavioral gender harassment, especially amongst men who identified with being male and for whom being male was an important trait (Maass et al., 2003). Hunt and Gonsalkorale (2014) have demonstrated that the influence of masculinity threat on the amount of sexual harassment diminished when threatened men with greater ingroup identification were discouraged in showing harassing behavior by a male peer. This result indicates that harassment after a masculinity threat might serve the purpose of bonding with the male ingroup in order to repair the threatened sense of masculinity.

We hypothesized that a similar interaction effect of threat and importance of masculinity should occur for sexually objectifying behavior: men who are threatened in their masculinity should react with more sexually objectifying behavior, the more critical their masculinity is

for their self-esteem. However, in Studies 1 to 4, we already demonstrated that the proclivity to sexually objectify varies greatly amongst heterosexual men. Hence, we furthermore hypothesized that threatened men would use the given opportunity to sexually objectify women within the dating platform scenario by publishing rather objectifying texts and photos of women, the greater their general proclivity to sexually objectify. We assumed that a certain (but unknown) level of both, sexual objectification proclivity (measured with the SOOI) and importance of masculinity (measured with the Masculinity Contingency Scale; MCS; Burkley, Wong, & Bell, 2015), would be necessary for a man to show more sexually objectifying behavior after a masculinity threat. We have made this assumption because, first, men with no sexual objectification proclivity should not be inclined to sexually objectify—with or without a threat. And second, because men, for whom masculinity is not essential, should not care much about hearing they would be typically masculine or not. Thus, we expected three-way interaction effects of masculinity manipulation, SOOI, and MCS indicating more sexually objectifying behavior for threatened men with greater sexual objectification proclivity and higher levels of masculinity contingency. Interaction effects were expected to occur for the behavioral measures, thus, the publication of objectifying profile content in written form (Hypothesis 3a) as well as the publication of objectifying profile photos (Hypothesis 3b).

By experimentally demonstrating that men engage in sexually objectifying behavior presumably to repair their threatened sense of masculinity, we intended to shed further light on the motives behind sexually objectifying behavior.

**Method.*****Participants and Design.***

To calculate the necessary sample size for the multiple regression analyses (Soper, 2017), we anticipated a medium effect of  $f^2 = .15$ , set the power to 0.9 and the number of predictors to four (masculinity manipulation, masculinity contingency, explicit sexual objectification proclivity, and implicit sexual objectification proclivity). The minimum required sample size was 108. In total, 122 men participated in the study. The participants were recruited mainly on campus. They were directly led to the laboratory in which the study took place and were led to believe that we would be developing a new dating platform.

Before data analysis, four participants were removed from further analyses because they self-identified as homosexual. Data of another person were deleted because he did not follow the experimenter's instructions. Another participant had to be removed as his data were incomplete due to experimenter error. The remaining 116 participants were on average 25.49 years old ( $SD = 5.60$ ). At the time of the study, 56.0 % of all remaining participants were single, 42.2 % were in a relationship, and 1.7 % did choose to make no clear statement regarding their relationship status. Of all remaining individuals participating in the study, 86.3 % had at least a high-school degree. Fifty-eight participants have been randomly assigned to the no-threat condition and 58 participants to the threat-condition.

***Pretests.***

Prior to the experiment, we ran two pretests, which were designed to help us select material for our two behavioral measures, the Attribute Ranking Task (BO-A) and the Photo Selection Task (BO-P).

The Attribute Ranking Task (BO-A) comprises twelve attributes, which could theoretically be featured in a woman's profile on a dating website (see measures section, p. 107 for more information). Half of the attributes were intended to be objectifying; the other half should

not be objectifying. In total, we pretested 32 attributes, which were primarily chosen upon a review of real profiles on online dating sites. The attributes were rated regarding their valence, humanization, and sexualization by 62 heterosexual men, recruited on campus ( $M_{\text{age}} = 25.21$ ,  $SD_{\text{age}} = 4.63$ ). For the final attribute configuration, only positive-valenced items were chosen. The six objectifying items were characterized by being rated as relatively sexualizing and being not humanizing. The six non-objectifying items were characterized by being rated as very humanizing and being not sexualizing. The complete list of pretested items and the average evaluations on valence, humanization, and sexualization can be obtained from Appendix D, Table D on page 292.

For the Photo Selection Task (BO-P; see p. 107), we initially planned to display three images, each featuring one sector (head-only, upper body, full body) of one woman's photograph. Based on previous research on the pronounced objectification of upper-body- vs. face-only photographs (Gray, Knobe, Sheskin, Bloom, & Barrett, 2011; see also Schwarz & Kurz, 1989) we aimed at selecting a set of images where the differences in people's objectification of the full body vs. the upper body vs. the head were the greatest. We chose to pretest a set of twelve images featuring four women displayed head-only, upper body, and full body (see Appendix D, Table D2, on page 293). One hundred fifty-six heterosexual men ( $M_{\text{age}} = 23.81$ ,  $SD_{\text{age}} = 5.25$ ) were recruited online and on campus and received a randomized set four pictures, each featuring another woman depicted with head-only, upper body or full body. Participants were asked to rate the pictures on 15 items. We intended to average the items to the factors agency (*intelligent, ehrgeizig, selbstsicher*; Engl.: *intelligent, ambitious, confident*), attractiveness, (*attraktiv, sexy, hübsch*; Engl.: *attractive, sexy, pretty*) experience (*begeisterungsfähig, emotional, schmerzempfindlich*; Engl.: *capable of feeling enthusiasm, emotional, sensitive to pain*), warmth (*sympathisch, gefühlvoll, warmherzig*; Engl.: *likable, sensitive, warmhearted*) and human uniqueness (*selbstbeherrscht, rational, höflich*; Engl.: *controlled, rational, polite*).

The respective constructs have been shown to be relevant in other-objectification and the processing of images (Gray et al., 2011; Haslam, 2006; Heflick & Goldenberg, 2014; Lammers & Stapel, 2011; Schwarz & Kurz, 1989). Exploratory factor analyses on the averaged items for each woman led to slight changes in the factor compositions: *rational* was transferred to agency and *selbstsicher* was removed. Moreover, the factor human uniqueness was discarded entirely as its items did not form a factor in the evaluations of any picture. Afterward, applying four MANOVAs and subsequent pairwise comparisons, we calculated whether the evaluations of each woman differed, whether they were displayed with the full body, the upper body, or head-only. Significant differences could only be obtained between the full body and the head-only versions of the pictures. Moreover, the results were very inconsistent (see Appendix D, Table D3, p. 294 for means and standard deviations): While the versions of Photo 1 only showed differences in agency (full body < head-only,  $p = .036$ ), the variants of Photo 3 differed in attractiveness (full body > head-only,  $p = .004$ ) and those of Photo 4 in warmth (full body < head-only,  $p = .032$ ). The variants of Photo 2 differed not at all. However, all significant effects were in the hypothesized direction. Consequently, instead of using only one picture for the Photo Selection Task (BO-P), we decided to apply all four pretested photos. By following this approach, we made sure to get the best outcome in terms of the measure's reliability.

### ***Measures.***

If not reported otherwise, all measures implemented in this experiment were applied using a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Reliability scores for each measure can be obtained from Table 27 on page 113. The experiment contained several measures, which were already discussed and used before: The Ambivalent Sexism Inventory (ASI; see p. 34), the Self- and Other-Objectification Questionnaire (SOQ and OQ; see p. 36) and sexual orientation (see p. 36). The Sexual Objectification of Others Inventory (SOOI) was implemented based on the SOOI-item version of Study 2. For Study 5,

only the female form of the SOOI was used. As before, although participants received 41 SOOI-items, only the final selection 11 items were forwarded to the analyses. Additional to the previously used instruments, the following measures were applied.

*Behavioral Objectification: Attribute Ranking Task (BO-A).*

The Attribute Ranking Task (BO-A) was developed in order to measure sexually objectifying behavior. During the recruitment and by reading the instructions, the participants were deceived into believing that the study aimed to create a new dating platform. The participants were instructed to evaluate the content of dating profiles and were very explicitly told that the profiles would be published following their own specifications. As the participants believed, their choice would be published, their selection of profile content reflects a form of behavior. A similar approach has been followed in studies, which used the signing of a petition as behavioral measurement (e.g., Chaiken, 1979).

Specifically, the BO-A asked the participants to rank 12 randomized attributes characteristic for a specific woman in order of importance to the participants. Without specifying a particular number, the participants were told that their 'highest-ranking answers' would be published. Half of the items were pretested to be sexualizing (e.g., *likes sex in the morning*), the other half to be humanizing (e.g., *would like to travel around the world*; see p. 104). All items were of positive valence. Moreover, to ascertain that the sexualizing items would not be perceived as overly sexually agentic, the participants were told that the featured woman had to state attributes, which described how her ex-boyfriend saw her. The degree of behavioral objectification measured by the BO-A was calculated by subtracting the ranking of all sexualizing from all humanizing items.

*Behavioral Objectification: Photo Selection Task (BO-P).*

The Photo Selection Task (BO-P) was based on the same concept as the BO-A: again, participants were asked to select profile content, which would allegedly be published. In the

case of the BO-P, the profile content was, however, the pretested profile pictures of four different women (see p. 104). For each woman, the participants were asked to select one of three randomized images: a full body picture, an upper body picture, or a head-only picture. The instruction stated that we were interested in which sectors of an image would be preferred as profile pictures. Moreover, we made it very explicit to the participant that each picture he would select would subsequently be displayed on the women's profiles on the dating platform. The degree of behavioral objectification measured by the BO-P was calculated by averaging selected responses for each woman, which were coded as 1 (head-only), 2 (upper body) or 3 (full body). Greater averaged scores represent greater behavior objectification. The measure was based on previous objectification research, which showed that photos, showing more body and less face, are dehumanized to a greater extent (Gray et al., 2011; see also Schwarz & Kurz, 1989).

*Implicit dehumanization and implicit objectification.*

To measure implicit dehumanization and implicit objectification, we applied four Single Target Implicit Association Tests (ST-IATs). The ST-IAT is based on the Implicit Association Test (IAT) by Anthony Greenwald, Debbie McGhee and Jordan Schwartz (1998), which measures the strength of implicit associations between two target concepts (e.g., flower and insect names) and two attributes (e.g., pleasant and unpleasant words) by assessing response latencies. While the IAT requires the simultaneous assessment of two counter-categorical target concepts, the ST-IAT allows for assessing the association of one concept with two attributes (see also Bluemke & Friese, 2008). For the purpose of Study 5, we adapted the ST-IAT script for Inquisit 5 from the millisecond library (Millisecond Software, 2016, 2017).

In all four implemented ST-IATs, the participants had to assign male and female names to the attribute categories female and male. The male and female names were counterbalanced with regard to the number of their syllables. The target concepts for the two ST-IATs assessing

dehumanization were animal words (e.g., instinct, wilderness) and human words (e.g., society, history). The items originated from Viki et al. (2006) and were translated into German by Schiffhauer (2015). All items were of the same valence and clearly identifiable as words relating to either animals or humans (see Schiffhauer, 2015). Moreover, for Study 5, gendered words were adapted into gender-neutral items. For the ST-IATs assessing dehumanization, parallelization of the number of syllables could not be achieved. The target concepts for the two ST-IATs assessing objectification were called strong sex-words and weak sex-words. The words originated from the Objectifying Word Positivity Index (OWPI) developed for Study 2 (see p. 40), which has been shown to correlate with sexual objectification. Non-objectifying words were selected for the weak sex-word category, objectifying words for the strong-words category. The number of syllables was almost parallel for both ST-IATs. As the sex-words' valence strongly correlated with the extent to which the words were regarded as sexually objectifying (see Study 2), it was, however, not possible to select words of the same valence for the ST-IATs assessing objectification. Against this background, the sex-words in both ST-IATs were parallelized based on the extent they deviated from the mean valence of all sex-words. For instance, a sex word being evaluated as extremely positive was counterbalanced by a sex-word, which was rated as extremely negative. This approach was followed to guarantee the comparability of both ST-IATs measuring objectification. In total, the four target concepts and both attribute categories were represented by eight items each and sampled with replacement.

In the beginning, each participant was trained to correctly sort the male and female names to the male and female category. Afterward, the ST-IAT sequences began. Each ST-IAT consisted of four blocks: 20 training trials and 40 final trials of the initial concept-attribute discrimination as well as 20 training trials and 40 final trials of the reversed concept-attribute discrimination. The order of all trials can be found in Table 26.

Table 26  
*ST-IAT Segments, Tasks, and Blocks.*

Segment	Task	Block
1. Initial sorting of attribute categories	Sorting names	20 trials attribute discrimination
2. Implicit Dehumanization <sup>a</sup>	Sorting names and animal words <sup>b</sup>	20 + 40 trials initial concept-attribute discrimination <sup>d</sup>
		20 + 40 trials reversed concept-attribute discrimination <sup>d</sup>
	Sorting names and human words <sup>b</sup>	20 + 40 trials initial concept-attribute discrimination <sup>e</sup>
		20 + 40 trials reversed concept-attribute discrimination <sup>e</sup>
3. Implicit Objectification <sup>a</sup>	Sorting names and strong sex words <sup>c</sup>	20 + 40 trials initial concept-attribute discrimination <sup>f</sup>
		20 + 40 trials reversed concept-attribute discrimination <sup>f</sup>
	Sorting names and weak sex words <sup>c</sup>	20 + 40 trials initial concept-attribute discrimination <sup>g</sup>
		20 + 40 trials reversed concept-attribute discrimination <sup>g</sup>

<sup>a-g</sup> Orders of segments, tasks, and blocks with the same initials were counterbalanced.

In each trial of the ST-IATs, the attribute categories were displayed in the upper left and right corner of the screen (see Appendix D, Figure D1, page 295). Each target concept was first displayed under one of the attribute categories, and then, after 20 + 40 trials, under the other attribute category. The names and words were displayed in the middle of the screen. Participants were asked to sort the appearing names and words to the left or right side by pressing the left blue or right yellow button. Participants were instructed to answer as quickly as possible without making mistakes. Wrong answers were indicated by a red cross and had to be corrected by pressing the correct button, as recommended by Greenwald, Nosek, and Banaji (2003).

The strengths of the associations between each concept with the attribute categories were calculated as standardized mean difference scores (d-scores) of the latencies for initial and reversed concept-attribute pairings. The d-scores were calculated using the improved scoring algorithm postulated by Greenwald, Nosek, and Banaji (2003). The improved scoring algorithm eliminates trials with latencies above 10,000 ms and eliminates subjects who are faster than 300 ms in more than 10 % of all trials. No participant had to be dropped in Study 5 because of short latencies. The d-scores were calculated using the training trials as well as the final trials (see Greenwald et al., 2003). In this study, positive d-scores represent a stronger association of the target concepts with men than women; negative d-scores represent a stronger association of the target concepts with women than men. In total, four d-scores were calculated: Two representing implicit dehumanization of men or women as being associated with animal words (d-AW) and human words (d-HW); two other d-scores representing implicit objectification of men or women as being associated with strong sex-words (d-SSW) and weak sex-words (d-WSW). It was expected that on average, men who are inclined to sexually objectify women, would demonstrate negative d-AW and d-SSW scores as well as positive d-HW and d-WSW scores.

*Masculinity Contingency Scale (MCS).*

To assess the extent to which the men's self-esteem was derived from their sense of masculinity, we implemented the Masculinity Contingency Scale (MCS; Burkley et al., 2016). The MCS consists of 10 items measuring whether being masculine (or not) boosts (or threatens) a man's self-esteem (e.g., "When I act manly, I feel good about myself", "My self-worth suffers if I think my manhood is lacking"). For the purpose of the study, the items were translated into German by several English-speaking people. In a group discussion, the best German item versions were selected and implemented in the study (see Appendix D, Table D4, page 296).

*Sociosexual Orientation Revised (SOI-R).*

In contrast to Studies 1-4, which implemented the SOI by Jackson and Kirkpatrick (2007), Study 5 used the German Sociosexual Inventory Revised (SOI-R) by Penke and Asendorpf (2008). Both SOI versions differ from the original sociosexual inventory (Simpson & Gangestad, 1991) as they assume sociosexual orientation to be a multidimensional construct. While the SOI by Jackson and Kirkpatrick (2007) discriminates between the dimensions short- and long-term orientation, the SOI-R (Penke & Asendorpf, 2008) consists of three dimensions: sociosexual behavior, sociosexual attitude, and sociosexual desire. Sociosexual behavior assesses the number of short-term relationships (e.g., one-night stands) in the past. The dimension sociosexual attitude reflects attitudes toward short-term sexual encounters, and the dimension sociosexual desire measures the desire for such encounters. The scale was presented in its 5-point version (see Penke & Asendorpf, 2008, p. 1135).

*Further scales.*

Additionally, the Positive and Negative Affect Scales (PANAS; Watson, Clark, & Tellegen, 1988) were assessed. The constructs assessed with the PANAS are beyond the scope of this thesis and will not be discussed further (for further discussion see Manke, 2018 and Warkentin, 2017).

*Reliability indices for each measure.*

The Cronbach's alphas for each scale and can be obtained from Table 27. For some scales, this coefficient is missing because its calculation was not possible due to the fact that the scales were rank ordered scales. The Cronbach's alphas were satisfactory in most cases. However, the SOOI's subfactors Instrumental Objectification and Visual Objectification showed questionable internal consistencies. Moreover, the parallel test reliabilities for the four ST-IATs were unacceptable.

Table 27

*Reliability Scores for Each Measure in Study 5: Cronbach's Alphas of the Scales and Parallel Test Reliabilities of ST-IATs with Training and Final Scores*

Measure	$\alpha$	$r_{(training, final)}$
ASI-B	.85	-
ASI-H	.89	-
BO-A	.75	-
BO-P	-	-
d-AW	-	.18
d-HW	-	.36**
d-SSW	-	.27**
d-WSW	-	.19*
MCS	.92	-
OOQ	-	-
SOI-R: sociosexual attitudes	.79	-
SOI-R: sociosexual Behavior	.85	-
SOI-R: sociosexual desire	.81	-
SOI-R: total	.85	-
SOOI: Instrumental Objectification	.63	-
SOOI: Visual Objectification	.68	-
SOOI: Overall Objectification	.79	-
SOQ	-	-

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

***Experimental manipulation: masculinity threat and confirmation.***

The manipulation of the participants' sense of masculinity was created based on Glick, Gangl, Gibb, Klumpner, and Weinberg (2007) as well as Wever (2013). To threaten or confirm participants' sense of masculinity, a prototypicality threat was employed: that is, the male participants in Study 5 received false feedback on their status as male group members, following a bogus personality test. The personality test looked similar to the ST-IATs, the participants had received beforehand, as it was implemented with the same ST-IAT script for Inquisit 5 from the millisecond library (Millisecond Software, 2016, 2017). The program displayed 33 personality traits in the center of the screen. The participants were asked to quickly assign the traits to the categories *me* and *not me* in the upper left and right corner by pressing one of two buttons. The traits consisted of 12 stereotypically male and 12 stereotypically female characteristics, which were taken from a scale assessing people's gender-role-self-concept (Berger, 2010, p. 158). Moreover, nine gender-neutral items from Sandra Bem (1974) were displayed (for a

complete list of all used items see Appendix D, Table D5, p. 296). The participants' answers and reaction times were not saved. After the participants had finished the personality test, a message appeared, announcing the final score would be calculated. Ten seconds later, a short text was displayed, which described the alleged ability of the personality test in predicting the femininity or masculinity of people undertaking the test. Additionally, the test score was revealed, and the participant was asked to call for the experimenter. The test score was randomly set to 18 or 39 and determined whether the participants were assigned to the masculinity threat or masculinity confirmation condition. With this approach, we made sure to prevent the influence of an experimenter bias prior to the manipulation. Depending on the test score, the female experimenters<sup>10</sup> told the participants that according to the test, they were either quite feminine and little masculine or of average masculinity and little femininity. In the masculinity threat condition, the experimenter also stressed that the participants' scores were quite unusual. To reinforce the influence of the manipulation, the experimenter visually emphasized her verbal statements using a colored graph, which depicted the possible score range of the test (see Appendix D, Figure D2, p. 297). The possible scores ranged from 0 (very feminine, colored in pink) to 50 (very masculine, colored in blue). A striped sector between 34 and 44 indicated the alleged average test results for men.

***Procedure.***

The order of the different parts of the study can be obtained from Table 28.

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<sup>10</sup> Two female experimenters conducted the study separately. However, no statistical differences (all  $ps > .05$ ) could be obtained between the experimenters' subsamples.

Table 28  
*Procedure of Study 5*

Nr.	Part
1.	General Instruction and informed consent
2.	ST-IATs
3.	Sexual orientation
4.	Grouped questionnaires with randomized item order part 1: ASI MCS SOOI Filler items on dating and relationships to support the cover story
5.	SOQ
6.	OOQ
7.	SOI-R
8.	Grouped questionnaires with randomized item order part 2: MCS SOOI Filler items on dating and relationships to support the cover story
9.	Masculinity manipulation
10.	PANAS
11.	BO-P
12.	BO-A
13.	Demographics
14.	Debriefing and participation in raffle

**Results.**

If not reported otherwise, the statistical assumptions of the following analyses were met. An alpha level of .05 was used for all statistical tests.

***Confirmatory factor analysis.***

Applying a confirmatory factor analysis, we investigated whether the SOOIs factor structure, consisting of Instrumental Objectification and Visual Objectification, could be confirmed. An energy test (Székely & Rizzo, 2005) for the SOOI items with 999 bootstrap samples indicated that multivariate normality was not achieved ( $\epsilon = 1.92, p < .001$ ). Therefore, the confirmatory factor analysis was performed using the maximum likelihood estimator with robust standard errors (see Brown, 2015).

The subsequent confirmatory factor analysis of the two-factor model failed to deliver results, which were fully satisfying:  $SRMR = .07, RMSEA_R = .09, CFI_R = .84, TLI_R = .79$ . The RMSEA, the CFI, and the TLI did not meet the previously defined criteria (see p. 50), indicating a bad fit of the two-factor model. Consequently, the empirical relationship among the variables was not acceptably represented by the assumed factor structure consisting of Instrumental Objectification and Visual Objectification.

***Descriptive statistics.***

Three new instruments were implemented into Study 5, the SOOI, the BO-A, and the BO-P. Moreover, four implicit measures with a novel set of words were applied to measure implicit dehumanization and implicit objectification. The descriptive statistics for those measures can be obtained from Table 29. As the masculinity manipulation was applied prior to the assessment of the BO-A and the BO-P, the results are displayed separately for each condition. The descriptive values for the remaining scales can be found in Appendix D, Table D6 on page 298.

Table 29

*Descriptive Statistics for the SOOI and its Subscales as well as for the BO-A and BO-P*

	Overall		Masculinity Threat		Masculinity Confirmation	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
SOOI: Instrumental	2.88	0.91	-	-	-	-
SOOI: Visual	4.17	1.12	-	-	-	-
SOOI: Overall	3.46	0.91	-	-	-	-
d-AW	0.05	0.31	-	-	-	-
d-HW	0.03	0.34	-	-	-	-
d-SSW	0.00	0.30	-	-	-	-
d-WSW	-0.04	0.30	-	-	-	-
BO-A	-5.64	16.73	-5.48	17.80	-5.79	15.75
BO-P	2.08	0.62	2.05	0.61	2.11	0.63

***Validity analyses.***

To assess construct validity, namely, convergent, discriminant and concurrent validity, correlations of the SOOI, the implicit measures, and the behavioral instruments with each other and all other scales were calculated (see Table 30).

Table 30

*Pearson Correlations of the SOOI, the Implicit Measures and the Behavioral Measures with Each Other and with the Validation Scales*

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. SOOI: Instrumental	—								
2. SOOI: Visual	.64**	—							
3. SOOI: Overall	.90**	.91**	—						
4. d-AW	-.02	-.08	-.05	—					
5. d-HW	.07	.01	.05	.17	—				
6. d-SSW	-.08	-.09	-.09	.26**	.18	—			
7. d-WSW	-.05	-.03	-.04	.24**	.22*	.29**	—		
8. BO-A	.40**	.45**	.47**	.07	-.03	-.09	-.07	—	
9. BO-P	.30**	.42**	.40**	-.13	.03	-.04	.03	.33**	—
ASI-B	.12	.23*	.19*	-.01	-.11	-.09	-.10	.27**	-.03
ASI-H	.38**	.48**	.48**	-.03	-.02	.03	.13	.43**	.31**
MCS	.36**	.36**	.40**	-.04	-.10	.05	-.04	.22*	.18*
OOQ	.29**	.36**	.36**	-.01	.06	-.01	-.21*	.41**	.34**
SOQ	.14	.24**	.21*	-.01	-.01	-.04	-.09	.25**	.22*
SOI-R: Attitudes	.36**	.42**	.43**	.04	.11	-.05	.03	.20*	.28**
SOI-R: Behavior	.24**	.18	.23*	.07	.05	-.09	-.07	.21*	.13
SOI-R: Desire	.44**	.46**	.50**	-.07	.02	-.11	.13	.15	.28**
SOI-R: Overall	.44**	.44**	.49**	.02	.08	-.11	.03	.24*	.29**

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

As in Study 1 and Study 4, the SOOI and its subscales correlated on a small to moderate level with the OOQ and not or only little with the SOQ. Contrary to Study 1, the relationship with the SOOI and its subscales was only moderate with ASI-H (instead of moderate to strong) and non-existent to weak for the ASI-B (instead of weak). Similarly, to Study 1-4 the SOOI's relationship with short-term mating orientation (this time, however, measured with the SOI-R) was on a strong to moderate level.

The correlations of the implicit measures with the SOOI were non-significant. Hypotheses 1a and 1b could not be substantiated. Furthermore, the correlations of the implicit measures with the other instruments were almost entirely insubstantial. Only a small correlation of the d-WSW with the OOQ appeared. It indicated that the more participants associated women and not men with weak, non-objectifying sex words, the more they were inclined to sexually objectify women measured with the OOQ. Given the assumption that the OOQ measures a similar construct as the SOOI, this outcome was contrary to what we expected.

The results of the behavioral measures were as hypothesized by Hypotheses 2a and 2b. Medium correlations of both behavioral measures with the SOOI indicated concurrent validity of the behavioral instruments. The behavioral measures' correlations with the SOOI and scales measuring related constructs like hostile sexism were of comparable size. To investigate the specific influence of men's objectification proclivity (measured with the SOOI) and Ambivalent Sexism, Sociosexual Orientation as well as Masculinity Contingency on the behavioral instruments, stepwise regression analyses were calculated (see Table 31 and Table 32).

Table 31  
*Stepwise Regression of Validation Scales on BO-A*

Model	Variable	$\beta$	$t$	$p$	$R^2_{adj.}$
1	SOOI: Visual	.45	5.32	< .001	.19
2	SOOI: Visual	.34	3.98	< .001	.26
	OOQ	.29	3.33	.001	
3	SOOI: Visual	.20	2.13	.035	.32
	OOQ	.30	3.57	.001	
	ASI-H	.29	3.32	.001	

*Note.* The following variables have not been included due to non-significant outcomes: ASI-B, MCS, SOOI: Instrumental, SOQ, SOI-R: Attitudes, SOI-R: Behavior, SOI-R: Desire.

Table 32  
*Stepwise Regression of Validation Scales on BO-P*

Model	Variable	$\beta$	$t$	$p$	$R^2_{adj.}$
1	SOOI: Visual	.42	4.95	< .001	.18
2	SOOI: Visual	.34	3.84	< .001	.20
	OOQ	.22	2.42	.017	

*Note.* The following variables have not been included due to non-significant outcomes: ASI-B, ASI-H, MCS, SOOI: Instrumental, SOQ, SOI-R: Attitudes, SOI-R: Behavior, SOI-R: Desire.

The stepwise regression analysis for the BO-A showed that visual objectification proclivity measured with the SOOI explained most variance when only Visual Objectification was entered into the model. In the final, three-variable model, consisting of the Other Objectification Questionnaire and hostile sexism, the ASI-H and the OOQ explained more individual variance of the BO-A than the Visual Objectification subscale of the SOOI. All three variables together explained 32% of the variance in BO-A (measured with the adjusted  $R^2$ ; see Miles, 2014). The one-predictor model of the stepwise regression on BO-P was also comprised of the SOOI subscale measuring Visual Objectification. The final, two-predictor model consisted of the Visual Objectification subscale as well as the Other Objectification Questionnaire. Together the two variables explained 20% of the variance of the BO-P. To summarize, both behavioral instruments seem to assess sexual objectification, which is also measured by the Visual Objectification subscale (and the other way around). Additionally, the BO-A, as well as the BO-P, were predicted by a form of objectification, which is measured with the OOQ (and not captured

by Visual Objectification): people's tendency to prefer appearance-based over competence-based attributes regarding women's bodies. Additional variance in the BO-A was explained by hostile sexism.

***Experimental results.***

Hypotheses 3a and 3b predicted that men, who are threatened in their masculinity, would react with more sexually objectifying behavior, the greater their sexual objectification proclivity is, and the more they regard their masculinity as an important factor for their self-esteem. In order to control for interaction effects of objectification proclivity, masculinity contingency, and masculinity manipulation, moderated moderations were calculated with to SPSS PROCESS (Model 3). The SOOI was entered as the focal predictor; the masculinity manipulation served as binary (coded as -1 and 1) and the MCS as continuous moderator. First, to investigate Hypothesis 3a, BO-A was entered as criterion; later, to examine Hypothesis 3b, BO-P served as criterion. Prior to the calculations, all continuous variables were z-standardized. Additionally, all variables were centered around zero to ease the interpretation of the simple effects as discussed by Andrew Hayes (2018, p. 241).<sup>11</sup> Both moderated moderation models were significant,  $R^2 = .24$ ,  $F(7, 108) = 4.97$ ,  $p < .001$ ,  $R^2 = .24$ ,  $F(7, 108) = 4.87$ ,  $p < .001$ . The main effects and interactions can be obtained from Table 33.

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<sup>11</sup> Centering had, however, no effect on the outcome of the moderated moderation: 1. The continuous variables were already standardized. 2. The conditions of the binary moderator were coded with -1 and 1 and contained an equal number of participants, which already resulted in a mean of  $M = 0$ .

Table 33

*Results of Moderated Moderation Analyses with SOOI as Predictor, MCS and Masculinity Manipulation as Moderators and BO-A and BO-P as Criteria*

Criteria with predictors and moderators	$\beta$	$t$	$p$	95% CI	
				LL	UL
Analysis 1: BO-A					
SOOI	0.54	4.73	< .001	0.32	0.77
MCS	-0.01	-0.11	.915	-0.24	0.21
MM	0.07	0.78	.439	-0.11	0.26
SOOI x MCS	-0.06	-0.80	.424	-0.21	0.09
SOOI x MM	0.03	0.23	.819	-0.20	0.25
MCS x MM	-0.09	-0.78	.436	-0.31	0.14
SOOI x MCS x MM	-0.07	-0.94	.351	-0.23	0.08
Analysis 2: BO-P					
SOOI	0.27	2.31	.023	0.04	0.49
MCS	0.12	1.03	.307	-0.11	0.34
MM	-0.11	-1.23	.221	-0.30	0.07
SOOI x MCS	-0.03	-0.40	.689	-0.18	0.12
SOOI x MM	-0.31	-2.67	.009	-0.54	-0.08
MCS x MM	0.33	2.94	.004	0.11	0.56
SOOI x MCS x MM	0.14	1.77	.080	-0.02	0.29

*Note.* CI = confidence interval, MM = Masculinity Manipulation: masculinity confirmation was coded as 0, masculinity threat as 1.

The moderated moderation analysis with BO-A as criterion revealed a significant main effect of SOOI: The greater participants' proclivity to sexually objectify women, the more they engaged in sexually objectifying behavior. No other main effects or interaction effects could be observed. Hypothesis 3a could not be substantiated.

The second moderated moderation analysis also showed a significant main effect of SOOI on sexually objectifying behavior, this time measured with the BO-P (see Table 33, Analysis 2). The hypothesized three-way interaction (Hypothesis 3b) was not confirmed. However, two significant two-way interaction effects emerged: both, the SOOI and MCS interacted with the masculinity manipulation. See Figure 8 and Figure 9 for a display of low SOOI (-1 *SD*), mean SOOI and high SOOI (+1 *SD*) as a function of unstandardized BO-P.

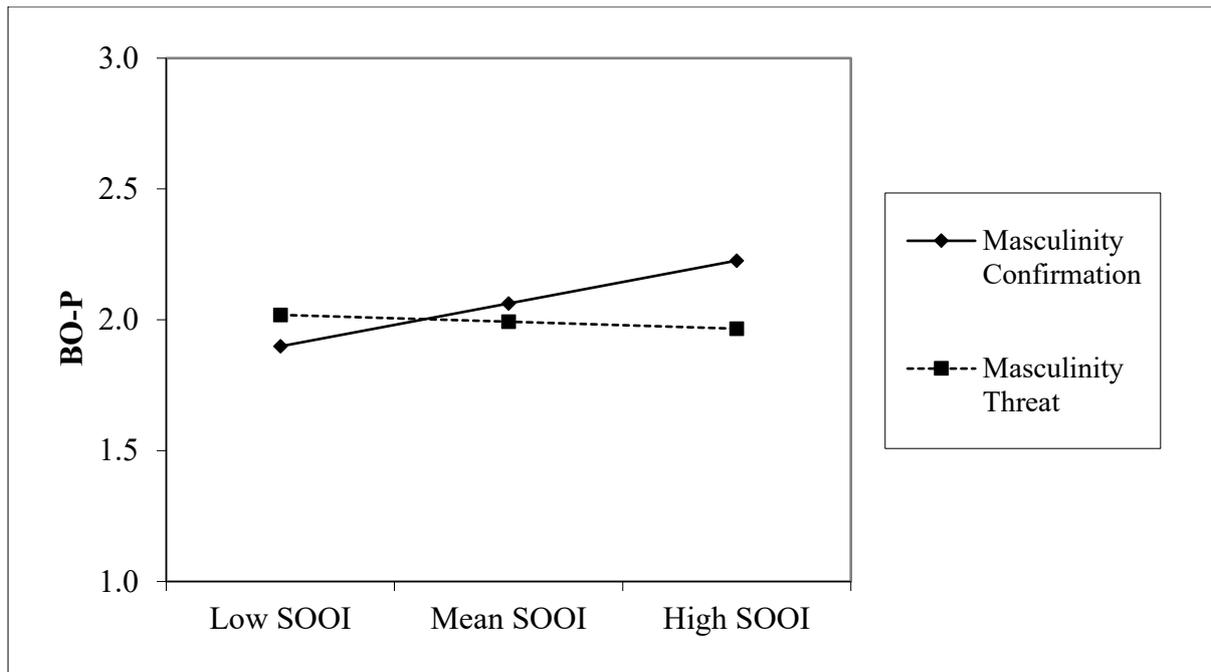


Figure 8. Interaction effect of SOOI and Masculinity Manipulation on BO-P for average MCS. Low SOOI = -1 SD, High SOOI = +1 SD.

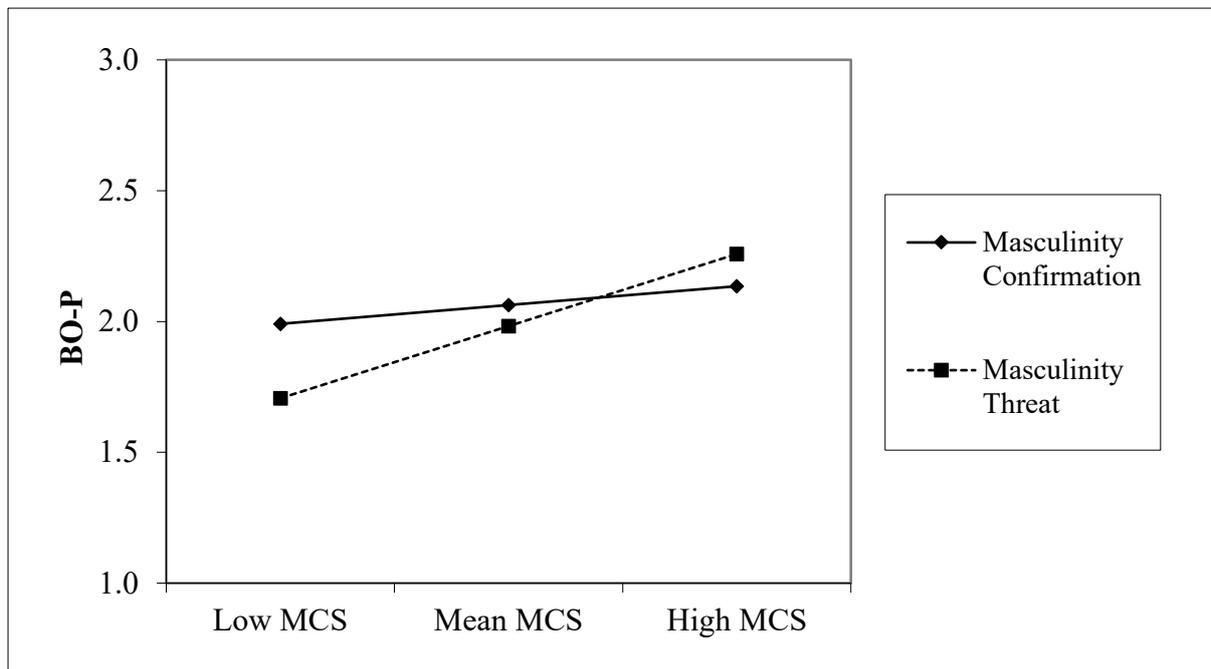


Figure 9. Interaction effect of MCS and Masculinity Manipulation on BO-P for average SOOI. Low MCS = -1 SD, High MCS = +1 SD.

To investigate the two two-way interaction effects, which emerged during the moderated moderation analyses, both effects were probed using the pick-a-point approach (e.g., Hayes, 2018). In a pick-a-point analysis, one of two (or more) interacting variables is set as the focal predictor predicting the criterion. This effect is then tested at different levels of the second (moderating) variable. If the moderating variable is not a binary variable, the variable levels are usually set to one standard deviation below the mean, the mean itself and one standard deviation above the mean. For the performed pick-a-point analyses, the variables, which were not part of the respective interactions, were set to their mean. When MCS was set to its mean, results showed that the SOOI had a significant conditional effect on the behavioral objectification measured by the BO-P in the masculinity confirmation condition,  $\beta = .57$ ,  $t = 4.11$ ,  $p < .001$ , 95% CI [-0.30, 0.85], but not in the masculinity threat condition,  $\beta = -.04$ ,  $t = -0.23$ ,  $p = .822$ , 95% CI [-0.41, 0.32]. For the MCS it was the other way around: masculinity contingency had a significant conditional effect on the BO-P in the masculinity threat condition,  $\beta = .45$ ,  $t = 2.39$ ,  $p = .019$ , 95% CI [-0.08, 0.83], but not in the masculinity confirmation condition,  $\beta = -.22$ ,  $t = -1.73$ ,  $p = .087$ , 95% CI [-0.47, 0.32]. Setting the masculinity manipulation as focal predictor and probing for the effects of low (1 *SD* below the mean), medium (mean) and high (1 *SD* above the mean) SOOI showed that the masculinity manipulation influenced the BO-P of participants scoring high on the SOOI,  $\beta = -.42$ ,  $t = -2.67$ ,  $p = .009$ , 95% CI [-0.73, -0.11]. However, contrary to our expectations, a masculinity threat to participants with a greater degree to sexually objectify others resulted in a relatively smaller amount of behavioral objectification. In other words: confirming the masculinity of men with a high objectification proclivity, resulted in a relatively greater amount of behavioral objectification. For participants with a medium or low SOOI score, no significant influence of the masculinity manipulation could be obtained,  $\beta = -.11$ ,  $t = -1.23$ ,  $p = .221$ , 95% CI [-0.30, 0.07],  $\beta = .19$ ,  $t = -1.40$ ,  $p = .163$ , 95% CI [-0.08, 0.47]. Probing for the effect of masculinity manipulation on BO-P

showed moreover that participants with low masculinity contingency reacted with a relatively lower amount of behavioral objectification after being threatened,  $\beta = .45$ ,  $t = -2.93$ ,  $p = .004$ , 95% CI [-0.75, -0.15]. For participants with a medium score on MCS, no significant effect emerged (see above). Correspondingly, there was no significant effect of masculinity threat for men with greater masculinity contingency,  $\beta = .22$ ,  $t = 1.57$ ,  $p = .120$ , 95% CI [-0.06, 0.50].

**Discussion.**

With Study 5 we pursued several goals: We strived to confirm the SOOI's factor structure, which had been identified during the data analyses of Study 1 and Study 2. Again, we aimed at evaluating the SOOI's convergent and discriminant validity using validation scales, which were applied before. Moreover, to investigate the SOOI's concurrent validity also the statistical associations with implicit as well as behavioral measures of sexual objectification were assessed. Finally, we intended to look at the motives of people showing sexually objectifying behavior by applying a masculinity threat to half of the male participants.

***Factor structure.***

The analysis of the SOOI's factor structure revealed a bad fit of the two-factor model comprised of Instrumental Objectification and Visual Objectification. The unsatisfying fit was accompanied by poor internal consistencies of the scale and its subscales. Against the background that previous confirmatory factor analyses showed good fit indices (see Study 2-4), the question arises, why we were unable to confirm the factor structure this time. Perhaps, the disparity resulted from the different sample configuration: contrary to the previous studies, Study 5 only relied on the data of a male-only sample. Hence, it is possible that the factor structure, which was confirmed in the previous studies, is an arbitrary result of the sample composition of male and female participants. A reanalysis of the obtained results via MIMIC modeling (Brown, 2015) and by introducing gender as a binary-coded covariate into the factor analyses could shed some light on this issue. However, in order to gain full clarity, further studies with larger sample sizes would be needed. Large sample sizes would allow for the detailed investigation of the different factor structure of men, women, other genders, and combined samples by using exploratory as well as confirmatory analyses. Both, a re-analysis as well as further studies are, however, beyond the scope of this thesis.

***Convergent and discriminant validity.***

As in Study 1, in Study 5 we assessed the SOOI's convergent validity using the Other Objectification Questionnaire. As expected, the OOQ correlated positively with the SOOI and its subscales. As in Study 1, the correlation was, however, only of small to moderate size. We have to conclude that the OOQ is not the best measure to investigate the SOOI's convergent validity. Study 1, Study 2 and Study 4 demonstrated that the SOOI'S convergent validity is best shown with scales like the ISOS-P (Gervais et al., 2018) or the COM (Curran, 2004).

To assess the SOOI's discriminant validity, we investigated the SOOI's correlations with scales from the realm of gender and sexuality, which do not measure sexual objectification of others. Low to medium correlations of ambivalent sexism (e.g., Glick & Fiske, 1996), masculinity contingency (Burkley et al., 2016) and self-objectification (Noll & Fredrickson, 1998) provide evidence for discriminant validity. As in Studies 1-4, short-term mating orientation—this time measured with the SOI-R (Penke & Asendorpf, 2008)—correlated moderately to strongly with the SOOI and its subscales. This recurring finding could be interpreted as challenging the SOOI's discriminant validity. In any case, it demonstrates an ample entanglement of short-term mating orientation with sexual objectification proclivity.

The SOOI's concurrent validity was assessed by applying implicit and behavioral measures of sexual objectification.

***Implicit sexual objectification.***

Hypotheses 1a-b were not confirmed: The implicit measures of objectification did not correlate with the SOOI and therefore failed to provide evidence for the scale's concurrent validity. There are some possible reasons for the lack of significant effects: On average, explicit and implicit instruments correlate only on a small level (Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005). Some researchers have argued that the reason for the small association is due to the fact that implicit and explicit attitudes are different constructs (Wilson, Lindsey,

& Schooler, 2000). However, another vast body of evidence suggests that the reason for differing implicit and explicit results lies in the method of measurement. Accordingly, all evaluations are initially conducted implicitly and are subsequently altered to a smaller or greater extent by conscious processes (Fazio & Olson, 2003; Nosek, 2005). Thus, perhaps we could find not even small positive relationships of the implicit measures with the SOOI and all other validation instruments because the explicit measures were more than heavily biased by conscious processes (e.g., social desirability mechanisms). However, an inspection of the reliability scores of the IATs leads to a more plausible explanation: The parallel test reliability scores between training and final runs for all four ST-IAT measures ranged from very low to moderate. Usually, however, IATs show reliability scores above .70 (Schnabel, Asendorpf, & Greenwald, 2008, p. 516). The fact that the test trials and the final trials were deployed right after another and nevertheless failed to produce correlating results indicates an error on the level of measurement.

Why is it that the ST-IATs of Study 5 failed to accurately measure the association of women or men with sex words, animal words, and human words? Probably because, as Russel Fazio and Michael Olson (2003) put it, “in contrast to priming measures, the IAT has little to do what is automatically activated in response to a given stimulus” (p. 351). According to the authors, the classic IAT measures the strength of associations between several category labels but not the strength of associations between category labels and features of the stimuli. In other words, the IAT relies on the cognitive process of construing stimuli as members of one or the other category; features beyond the category membership are irrelevant. As an example, Fazio and Olson (2003) discussed an article by Jan de Houwer (2001) who asked British participants to sort British vs. foreign names as well as positive vs. negative adjectives in an Implicit Association Task. As one would expect, British names were more strongly associated with positive and less strongly with negative adjectives in relation to foreign names. However, what did not

play a role, were the valences of the names itself, which were additionally manipulated. So Princess Diana was similarly evaluated as a British mass murder, Albert Einstein similarly to Adolf Hitler. Naturally, people do regard those pairs as fundamentally different. However, in an IAT where they share the same positively or negatively valenced category membership, the features of the attitude objects themselves do not play a role, even if contrasting the valences of mass murderers against those of everybody's darlings. Although we did use an ST-IAT and not a classic IAT, the relevance of categories over stimuli features should still apply. Inspecting the employed stimuli, it becomes evident that especially the categories "strong sex words" and "weak sex words" seem rather vague and probably do not represent tangible concepts in people's minds. The consequence is a low reliability of the instrument. However, the lack of concreteness is probably not real for the animal and human word categories. But installing those categories as opposed concepts (e.g., like Rudman and Mescher, 2012)—instead of contrasting men and women against each concept alone—might have helped the cause of providing more distinct categories. Future studies should contrast straightforward categories against each other in order to ease the cognitive process of assigning the stimuli to concrete categories. Another possibility is the implementation of priming measures instead of association tests, for instance, within a Lexical Decision Task (e.g., Perea & Rosa, 2002).

***Behavioral objectification.***

We had assumed that men with a greater proclivity to sexually objectify, measured with the SOOI, would show more sexually objectifying behavior. As hypothesized, the greater men's sexual objectification proclivity, the more they wanted to publish objectifying texts (Hypothesis 2a) and photos (Hypothesis 2b) for women's dating platform profiles. Hence, concurrent validity of both newly developed instruments as well as the SOOI was given. Interestingly, the behavioral instruments shared only a medium-sized correlation, indicating that the instruments did not measure the same form of behavioral objectification. Stepwise regression

analyses showed that the behaviors are, indeed, rooted in diverging attitudes: The publication of pictures with more body and less face (BO-P) was mainly predicted by the SOOI's subscale Visual Objectification as well as the Other Objectification Questionnaire (Strelan & Hargreaves, 2005). In contrast, the publication of less humanizing and more objectifying written profile content (BO-A) was also decidedly predicted by hostile sexism. This divergence might reflect the instruments' focus on different aspects of sexual objectification: The BO-P was based upon the result that face-only pictures are dehumanized less than pictures showing more body (Gray et al., 2011; Schwarz & Kurz, 1989). Thus, the BO-P might reflect a cognitive state, which has been described as appearance-focus (Heflick & Goldenberg, 2009) or, in later publications, as local (vs. global) processing (Gervais et al., 2013). The local (vs. global) processing framework argues that people under an appearance-focus narrow their attention on certain aspects of a person (e.g., they concentrate on people's bodies) and therefore fail to perceive the entire human. In contrast, the BO-A seems to be rooted more strongly in men's objectifying and hostile attitudes toward women, which characterize women as mere sex objects. A similar relationship of objectification measures with hostile sexism has been found by Mina Cikara and colleagues (2011): while men's recognition of sexualized female bodies was not associated with hostile sexism, the association of sexualized bodies with objectifying first-person action verbs (e.g., "use") was. Altogether, the results suggested that the proclivity to focus on women's appearance (or to process them more locally and less globally; measured with the BO-P) might be distinct from the proclivity to perceive women as mere objects of one's desire (measured with the BO-A).

The interpretation that the BO-P might have worked as a measure of men's appearance-focus and the BO-A as a measure of men's objectifying and hostile attitudes toward women, challenges, however, the interpretation of the measures as behavioral. Indeed, the behavioral aspect of both instruments was the fact that the men were told that their choices would be

published afterward. If the desire to publish the profile content would have been the driving factor, the association between both instruments should have been higher. Future studies could try to disentangle attitudinal and behavioral aspects of the instruments, for instance, by investigating people's intentions behind their choices: Do participants choose the pictures they would like to see, or do they intend to exert an influence (e.g., harm) on the women in the profile by publishing a more objectifying picture.

Moreover, future studies need to develop ways of measuring sexually objectifying behavior, which is more commonplace and prevalent. For instance, the most prevalent form of objectification, the objectifying gaze (Holland et al., 2016), could be investigated using a mobile eye tracker. A mobile eye tracker would allow for examining gazing behavior in real-life scenarios rather than having the participants look at inanimate pictures. In controlled experiments, one could investigate under what circumstances people look the bodies of present persons. For example, one could examine whether gazing behavior is reduced when participants are inclined to process more globally (vs. locally; Gervais et al., 2013), for instance, because they have learned more about the target persons' personality or competence. Another possibility, to research into more commonplace sexually objectifying behavior, might be the investigation of sexual remarks. Therefore one could adapt an online chat-paradigm, which was initially used to measure sexual harassment (Maass et al., 2003; Siebler, Sabelus, & Bohner, 2008). Instead of giving the participants the option to send pornographic material (Maass et al., 2003) or sexist jokes (Siebler et al., 2008) one could provide the possibility of commenting on the computer-simulated chat partner's body. The comments could vary in the degree of objectification from *not objectifying* (e.g., "Your CV was a very interesting read") to *somewhat objectifying* (e.g., "You look very good on your profile picture") to *very objectifying* (e.g., "You have a stunning body"). Another variation of the experiment would be the possibility to exchange objectifying comments about someone with a third interaction partner.

*Motives to sexually objectify.*

By implementing a masculinity manipulation, we had intended to further investigate the motives behind men's sexual objectification of women. In line with evidence that sexual objectification is tightly entangled with a hegemonic concept of masculinity (Bird, 1996; Grazian, 2007; Quinn, 2002; Seabrook et al., 2018), we postulated that men would exert sexually objectifying behavior in order to restore their sense of masculinity after it has been threatened. However, as a premise, we had assumed that in order to show sexually objectifying behavior, threatened men would require a certain (but unknown) level of sexual objectification proclivity (measured with the SOOI). Moreover, we expected the masculinity threat only to influence men who regarded masculinity as an important factor for their self-esteem (measured with the MCS). For the BO-A measure, the assumed interaction effect between masculinity manipulation, SOOI, and MCS (Hypothesis 3a) was not obtained. Once more indicating differences between BO-A and BO-P, men's responses in the BO-P were characterized by interaction effects of the mentioned variables. Those were, however, different from what we hypothesized with Hypothesis 3b: instead of a three-way interaction, the data showed two two-way interactions of each the SOOI and the MCS with the masculinity manipulation.

A probing of the two-way interaction of SOOI with the masculinity manipulation revealed that in the masculinity confirmation condition the BO-P scores increased alongside the SOOI: the greater men's objectification proclivity, the more likely they chose women's photos with more body and less face when being under a masculinity confirmation influence. This was, however, not the case in the threat condition where SOOI and BO-P were not associated. The difference in BO-P between masculinity confirmation and masculinity threat was only significant for men with greater but not low or average objectification proclivity. Contrary to our assumptions, threatened high-SOOI men showed less instead of more sexual objectification

measured with the BO-P, than men whose masculine identity was confirmed. There are several possible explanations for this outcome:

Self-categorization theory (e.g., Hogg & Reid, 2006; Turner & Reynolds, 2012) states that people whose membership in a group becomes salient, abide more strongly to group norms. Hence, it is possible that by confirming high-SOOI men's group prototypicality, they showed more sexually objectifying behavior (resp. a greater appearance-focus) because they perceive sexual objectification of women as typical for men. On the assumption that BO-P is a valid measure of sexual objectification, the influence of self-categorization can, however, not explain the lack of association between SOOI and BO-P for threatened men. Consequently, it is possible that high-SOOI men with a greater proclivity to sexually objectify others, showed a *reduced* amount of sexual objectification measured with the BO-P, after experiencing a masculinity threat compared to men whose masculinity has been confirmed. How can such an effect be explained? Perhaps the masculinity threat decreased high-SOOI men's sexual interest in women, which resulted in a reduced interest in their bodies. Revisiting the previous findings, which indicated that the BO-P might be a measure of appearance-focus, would support this line of thought. Indeed, research has suggested that men's greater appearance-focus could be a result of an immediate sexual interest in women (e.g., Riemer et al., 2018). This argument would, moreover, help to explain the discrepancy of our findings to the results by Anne Maass et al. (2003) as well as Christopher Hunt and Karen Gonsalkorale (2014) who researched into a construct, which is very much related to sexual objectification: sexual harassment. Both studies (Hunt & Gonsalkorale, 2014; Maass et al., 2003) found an increase in gender harassment after a masculinity threat. Gender harassment differs from other forms of sexual harassment like unwanted sexual attention and sexual coercion (see Fitzgerald, Gelfand, & Drasgow, 1995). Gender harassment "includes [...] behaviors that convey insulting, hostile, or degrading attitudes toward women *without* aiming at sexual cooperation" (Maass et al., 2003, pp. 853–854;

italics added by author).<sup>12</sup> Contrarily, possibly being a measure of appearance-focus, the BO-P did not reflect gender harassment, but rather objectifying sexual interest. This could explain why Maass (2003) as well as (Hunt & Gonsalkorale, 2014) obtained clear evidence that a masculinity threat led to an increase in sexual harassment, while we found a reduced amount of sexual objectification for (high-SOOI) threatened men. It is, however, unclear why only men with a greater sexual objectification proclivity would be prey to this effect. A post hoc analysis implementing sociosexual orientation (SOI-R) as a covariate, eliminated the possibility that this was due to high-SOOI men's greater general interest in short-term relationships with women, as the covariate lacked any influence (see Appendix D, Table D7, p. 298). A replication study would help to further investigate the link between masculinity threat, SOOI, and BO-P.

A probing of the significant two-way interaction of masculinity manipulation with masculinity contingency revealed the greater the importance of masculinity for threatened men's self-esteem, the greater their behavioral objectification (resp. appearance-focus), measured with the BO-P. There was, however, no association of MCS with BO-P for men whose masculinity has been confirmed. The difference in BO-P between masculinity confirmation and masculinity threat was only significant for men scoring low, but not average or high, on MCS. While we expected threatened men with a high MCS score to show more behavioral objectification, compared to non-threatened men, we found that threatened men low on MCS showed less sexual objectification, compared to men who were not threatened. Again, also this interaction could be interpreted in both ways. Hearing, not being masculine could have affected men low on MCS to react with a reduced amount of sexual objectification. By engaging in non-objectifying behavior, showing more interest in women's faces than their bodies, they

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<sup>12</sup> Gender harassment can be measured, for instance, by counting the amount of sexist jokes sent to an ostensible female interaction partner (e.g., Hunt & Gonsalkorale, 2014).

somehow confirmed with what they heard during the masculinity manipulation: that they are not what one would regard as typical masculine (e.g., Quinn, 2002). Such behavior would be predicted by the dissonance theory (Cooper & Fazio, 1984; Festinger, 1962; Gawronski, 2012). By demonstrating that they (as a person low on masculinity contingency) do not care about being very masculine, they were able to reduce cognitive dissonance, which was introduced by the masculinity threat. The other potential explanation of the significant interaction rests on the possibility that the masculinity threat had, as hypothesized, no effect on the extent of behavioral objectification. In other words, the masculinity confirmation was the driving factor behind the difference in sexual objectification between threatened and non-threatened low-MCS men. It seems reasonable that the low-MCS men knew all along that they were low on masculinity. However, in line with self-categorization theory (e.g., Hogg & Reid, 2006; Turner & Reynolds, 2012), the masculinity confirmation could have had a reinstating effect on the low-MCS men's group membership in the group of men. As a result, the regained group membership could have led to a reproduction of group norms, which reflect the sexual objectification of women by men (e.g., Grazian, 2007; Quinn, 2002).

Future studies need to test both explanations. The implementation of a neutral condition as reference group would allow for examining whether the masculinity confirmation or the masculinity threat was the driving factor behind the difference between both conditions. To further investigate the first explanation, one could examine participants' psychological discomfort at the beginning as well as prior and post to the objectification measure. This would enable research into whether cognitive dissonance does occur after a masculinity threat and whether it is reduced after low-MCS men demonstrated reduced objectification (see Elliot & Devine, 1994). The second explanation could be examined by monitoring participants' ingroup identification with the group of men at the beginning as well as prior and post to the sexual objectification measure. In any case, a manipulation check should be implemented.

In summary, we were not able to confirm the assumption that threatened men in general would react with more sexually objectifying behavior than men who were not threatened. The most likely explanation for not being able to confirm this assumption is that the male participants did not believe that the publication of women's objectifying profile contents would have any harmful effect on the women. In contrast to studies allowing for behavioral gender harassment after a masculinity threat (Hunt & Gonsalkorale, 2014; Maass et al., 2003), the threatened men in Study 5 were not able to act via outgroup derogation (e.g., Branscombe, Ellemers, Spears, & Doosje, 1999). Although we were not able to find indications of a heightened level of objectification as a consequence of threatened men's motivation to re-bond with the male ingroup (e.g., Hunt & Gonsalkorale, 2014), the study's results pointed to other motives affecting the amount of sexual objectification displayed. Specifically, the findings indicated that the extent of shown sexually objectifying behavior (resp. appearance-focus) after the masculinity manipulation might have been affected by dissonance reduction, sexual interest and/or confirmation of male group norms. With the discovery of the latter motive we, however, met our goal to investigate the theoretical significance of sexual objectification for men's masculinity.

Future studies could pretend that one or more ostensible male interaction partners would review the published women's profiles. This would increase the behavioral aspects of the behavioral measures and open-up the possibility for ingroup-bonding (see Hunt & Gonsalkorale, 2014) via sexual objectification. This variation of the study would potentially help to demonstrate that threatened men use sexually objectifying behavior in order to bond with the male ingroup. Moreover, such research would extend previous results (Hunt & Gonsalkorale, 2014; Maass et al., 2003), which already demonstrated that men use harassing behavior, which has an immediate effect on its victims, in order to alleviate a masculinity threat.

### **General Discussion of Empirical Part I**

During the five presented studies, we developed and thoroughly tested the Sexual Objectification of Others Inventory (SOOI), which measures people's proclivity to engage in the sexual objectification of others by assessing sexually objectifying behavior and attitudes.

Within Study 1 and Study 2, 11 items for the SOOI were selected from an item pool using exploratory factor analyses. The exploratory factor analyses resulted in two factors: Instrumental and Visual Objectification. The factor Instrumental Objectification represents the act of objectifying others by treating them merely as tools for sex and sexual pleasure. The treatment of people as mere tools causes the neglect of their personhood, individuality, and needs. By many researchers, instrumentality is understood as the central feature of sexual objectification (Bartky, 1990; LaCroix & Pratto, 2015; Nussbaum, 1995). The factor Visual Objectification illustrates the objectification of others via gazing behavior. Objectification as gazing behavior has been investigated in many psychological studies (e.g., Bernard et al., 2012; Gervais et al., 2013; Riemer et al., 2017). The central element of Visual Objectification is the reduction of others to their bodies or body parts. Using confirmatory factor analyses, the two-factor model, consisting of Instrumental and Visual Objectification, was investigated in Studies 2-5 and could be confirmed in Studies 2-4.

Moreover, besides the confirmatory factor analyses and the application of several validation scales, each study focused on an additional different aspect of the SOOI: Study 2 assessed the SOOI's test-retest reliability over a period of two weeks. Testing the SOOI on a sample from the LGBTQ\* community, Study 3 investigated whether the SOOI reliably assesses the sexual objectification proclivity of people of any gender and various sexual orientations. Study 4 applied an English version of the SOOI to English speaking participants. Using an experimental design, Study 5 assessed if the SOOI predicts men's sexually objectifying behavior after a manipulation of their masculinity.

**Reliability of the SOOI.**

Overall the SOOI and its subfactors demonstrated a good test-retest reliability. Only the test-retest reliability of Instrumental Objectification for the subgroup of women was unsatisfactory (see Study 2). The internal consistencies of the overall scale, as well as the factor Visual Objectification, were good in Study 1-4; in Study 5, they ranged from questionable to acceptable. However, the internal consistency of the factor Instrumental Objectification never exceeded the level of being questionable. Probably, this is partially a result of women (see Study 1-4) and people of other genders (see Study 3) lacking variance in Instrumental Objectification, which is reflected in the occurrence of floor effects. The implication is that the factor Instrumental Objectification should not be applied on its own, as it does not measure the Instrumental Objectification of others reliably, at least in women.

**Validity of the SOOI.**

Within five studies, the SOOI's validity has been thoroughly investigated. Low, medium and high correlations of the SOOI with alternative scales measuring sexual objectification of others (COM; Curran, 2004; ISOS-P; Gervais et al., 2014; OOQ; Strelan & Hargreaves, 2005) provide strong evidence for the SOOI's convergent validity (see Studies 1-2 and Studies 4-5). Criterion validity could also be established as the scale was able to predict outcomes on instruments (supposedly)<sup>13</sup> measuring sexually objectifying behavior (see Study 5), interest in sex robots and the preference for objectifying sex words (see Study 2). Further analyses highlighted the importance of instruments measuring related constructs, which shared a large amount of variance with the SOOI: Substantial correlations indicated that people with a greater proclivity to sexually objectify, measured with the SOOI, showed more interest in short-term

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<sup>13</sup> It is not fully clear whether the implemented behavioral measures are really behavioral or not (see page 138 onward).

mating contacts (i.a., STMO; Jackson & Kirkpatrick, 2007; see Study 1-5). Moreover, the SOOI proved to be a strong predictor of men's likelihood to harass women (Pryor, 1987; Vanselow et al., 2010; see Study 1). Although sexual harassment—which is also associated with STMO (e.g., Diehl et al., 2018)—and sexual objectification are theoretically and empirically different (for a discussion see Empirical Part II), the shared variance testifies to some empirical overlap of the constructs. On the one hand, this result threatens the discriminant validity of the SOOI, possibly not being a just a measure of sexual objectification. On the other hand, it could be an indicator of the constructs' pronounced relationship. Indeed, it seems reasonable to assume that sexual interest might be a precursor for sexual objectification and sexual objectification a precursor for sexual harassment<sup>14</sup>. This assumption could be corroborated in a post hoc mediation analysis, showing that SOOI operates as a full mediator between STMO and LSH (Appendix A, Table A11, p. 284). Future studies should investigate the role of sexual objectification as a linking element between sexual interest and sexual harassment.

Although the five studies provided unmistakable evidence that the overall SOOI is a valid measure of sexual objectification, the results indicated that the two subfactors Visual and Instrumental Objectification are probably not discriminating enough to be applied and analyzed individually. Some relatively consistent differences between the factors could, however, be obtained: Small but distinct correlations of the factor Visual Objectification with the Self-Objectification Questionnaire (SOQ; Noll & Fredrickson, 1998; Study 1 and 5, but not Study 4) demonstrated that people who focus on the appearance of their own bodies, also focus on the appearances of other bodies but do not necessarily instrumentalize others as sexual resources. Moreover, negative small to medium correlations of Instrumental Objectification with SOI:

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<sup>14</sup> At least for unwanted sexual attention and sexual coercion, but not gender harassment (for a differentiation see Fitzgerald et al. (1995).

LTMO (Jackson & Kirkpatrick, 2007; Study 1,2 and 4, but not Study 3) indicated that people, who reduce others to mere tools of pleasure and sex, are less interested in long-term relationships, independently from their proclivity to visually objectify others. Additionally, results of Study 1 showed that the correlation of Instrumental Objectification with men's likelihood to sexually harass women (LSH; Vanselow et al., 2010) was stronger for Instrumental Objectification than Visual Objectification. Conversely, was the correlation of the ISOS-P (Gervais et al., 2014), which assesses objectifying behavior of a harassing nature, stronger for the factor Visual Objectification (see Study 1, 2 and 4). Whereas the ISOS-P also assesses Visual Objectification (or body gazes as Gervais et al., 2018 named it), the LSH (Vanselow et al., 2010) measures the likelihood to harass from a position of power by coercing others into providing sexual pleasure. Altogether these results indicate that the two SOOI factors differ to some extent. However, further evidence is needed to employ the factors as measuring two distinct parts of the same construct. Until this is obtained, it seems advisable to use the overall score, knowing that it captures different facets of sexual objectification proclivity.

### **Implications, limitations, and outlook.**

Our conceptual approach toward the Sexual Objectification of Others Inventory comprised three central intents: First, we wanted to develop a comprehensive measure of sexual objectification proclivity by assessing sexually objectifying behavior as well as sexually objectifying attitudes together in one scale. Second, we aimed at creating a scale, which assesses sexual objectification proclivity of men, women, and people with other genders. Third, the SOOI should not be prone to social desirability biases.

The first aim was already met during item development. The scale's items cover a broad range of objectifying attitudes and behaviors, forming a comprehensive and valid measure of sexual objectification proclivity. It is important to mention that the SOOI is not, and was never intended to be, a diagnostic measure of sexual objectification proclivity. Due to the lack of

representative samples and norm values, it cannot be used to assess an individual's sexual objectification proclivity. However, the SOOI is a useful research tool, which can be implemented to investigate sexual objectification on a general level.

The second objective, which was to create a scale measuring sexual objectification proclivity of all genders, was also reached: The SOOI comes in three comprehensively investigated versions, which focus on the sexual objectification of either heterosexual women and men (see Study 1-2 and Study 4-5) or people of any gender and various sexual orientations (see Study 3). The different scale versions will prove beneficial due to several reasons: First, they allow for drawing conclusions about sexual objectification by regarding people's gender. For instance, Studies 1-4 demonstrated that especially men are prone to sexually objectify others. Hence, if one would, for example, aim at reducing sexual objectification in society, men would be a good starting point for interventions (e.g., training at schools). Moreover, the gender-neutral SOOI version allows for assessing sexual objectification of non-heterosexual individuals and people outside the gender binary. With this scale version, we hope to provide a tool, which helps to counteract the pronounced heteronormativity in psychology (see Clarke & Peel, 2007). Thus, researchers can investigate sexual objectification without excluding people, which are already marginalized by psychology, and society in general. Furthermore, using the neutral SOOI version, the direct investigation of LGBTQ\* people's sexual objectification proclivity is now possible.

The third objective, which was to make the SOOI an instrument not susceptible for desirability biases, could not be reached: The SOOI's items have been developed hand in hand with laypersons in order to feature commonplace sexual objectification (see Study 1). In all Studies the SOOIs mean was around the lower center of a 7-point Likert scale, indicating that the SOOI does indeed assess rather frequent sexual objectification. However, although, the SOOI showed no association with motivation to respond without sexism (EMS-S; Klonis, Plant,

& Devine, 2005; see Study 1), Study 2 and Study 4 indicated negative little to medium correlations with the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1994 cited by Musch, Brockhaus, & Bröder, 2002). Thus, people with a greater proclivity for impression management reported a lower proclivity to sexually objectify others. Hence, our aim to develop a measure, which would not be prone to social desirability, was not met. When implementing the SOOI, researchers should carefully analyze the impact of participants' self-reported social desirability.

A further point of critique concerns the small item pool of 37 items, which was used to develop the SOOI. Future studies could try to expand the SOOI's initial item pool by creating items, which are tailored to the two factors Instrumental Objectification and Visual Objectification. While additional items would undoubtedly help to create factors, which are empirically more stable, it would remain unclear whether the two factors adequately represent all potential and relevant constructs, which comprise the proclivity to sexually objectify others. For instance, it is possible that we missed other crucial factors of sexual objectification because our item pool was too small to allow for the discovery of all relevant factors. As we were not able to confirm the factor structure in all of our studies, and there is still a lack of validation results differentiating both factors, it is even possible that the factors are random results of our item pool and sample. Consequently, a safer approach would be to start entirely from the beginning with a larger item pool. A larger item pool would permit finding all relevant factors of other-objectification proclivity. Moreover, if Instrumental Objectification and Visual Objectification are indeed crucial factors of peoples' sexual objectification proclivity, they should reappear in the new factor solution.

However, the so-called inductive approach to scale development—i.e. the collection of large number of items, which are reduced to several meaningful factors via exploratory factor analyses—comes with a disadvantage: Even if items load on the same factor, it is unclear

whether they really measure the same theoretical construct or some extraneous content (Hinkin, 1998). The so-called deductive approach to scale development bypasses this problem by laying out a sound theoretical foundation before item generation. For the SOOI, we pursued an inductive rather than a deductive approach, because no clear theory on sexual objectification proclivity or even sexual objectification per se was available. While researchers agree on the broad definition of sexual objectification of reducing someone to his or\* her body, they hugely differ in the way they operationalize it (cf., Bernard et al., 2012; Gervais et al., 2013; Gervais et al., 2018; Loughnan et al., 2010; Rudman & Mescher, 2012; Vaes et al., 2011). Whereas many studies found evidence for sexual objectification, it remains unclear whether the results are rooted in the same construct, or if studies measure different phenomena under the same label. Only a few studies combined different paradigms to assess sexual objectification (e.g., Bareket, Shnabel, et al., 2018; Rudman & Mescher, 2012). A more extensive theory, integrating all previous evidence on sexual objectification, is still missing. A deductive procedure for the development of a scale, measuring the proclivity to sexually objectify others, is, however, not entirely impossible.

Of course, the first and most crucial step of a deductive scale development would be to develop a concise theory, which is able to integrate most of the paradigms and results from previous sexual objectification research. Thus, the theory should make clear what sexual objectification proclivity is, and what is not (see Clark & Watson, 1995). Simultaneously, the central elements of sexual objectification proclivity should be identified. In doing so, it is expedient to select elements, which are likely to constitute clear psychological constructs and/or have been or can be operationalized distinctively. For instance, the philosopher Martha Nussbaum provided an elaborate theory of sexual objectification comprising several elements or features of sexual objectification (instrumentality, violability, ownership, etc. ; 1995). There is, however, no evidence or indication that all the elements of Nussbaum's theory could be

assessed separately. However, many studies were able to measure the visual objectification of others (e.g., Abeles, Gervais, Shnabel, Yuval-Greenberg, & Bareket, 2018; Gervais et al., 2013; Riemer et al., 2017). This indicates that it might be reasonable to consider visual objectification as one crucial element in a larger sexual objectification theory. In the final item pool of the deductively generated scale, each element of the theory should be represented by a number of items (Clark & Watson, 1995). For item generation, one could ask experts of sexual objectification to contribute items for each category. Thereby, the items' validity could be improved right from the beginning.

Deductive scale development is a very time-consuming procedure (Hinkin, 1998) and takes up many resources. Until a sexual objectification scale has been developed, which is based on a sound and extensive theory, the SOOI, which has been proved to be a reliable and valid scale, will provide the sufficient means to investigate people's sexual objectification proclivity. For instance, one could investigate how people evaluate individuals, who engage in sexually objectifying behavior, as a function of their own sexual objectification proclivity—which is what we did in Empirical Part II (see Study 3).

## **Empirical Part II:**

### **Sexual Objectification in the Eyes of Observers**

#### **General Introduction**

Several studies have investigated how people evaluate sexually harassing behavior. For instance, a recent, representative poll on US-American's attitudes toward sexual harassment found that 87% of the sample (91% of all women and 82% of all men) believed that "[a] zero-tolerance policy for sexual harassment is essential to bringing about change in our society" (Ipsos & National Public Radio, 2017, p. 3). A survey drawing on a representative sample of Europeans (European Commission, 2016) found that 55% of all participants were of the opinion that "making sexually suggestive comments or 'jokes' to a woman in the street" is wrong and should be (or already is) against the law (p. 47). Other studies investigated different factors influencing the evaluation of sexual harassment: A study on the evaluation of sexual harassment, which included perpetrators' characteristics, showed that harassment was less accepted when the perpetrator was male than when the perpetrator was female (Gutek, Morasch, & Cohen, 1983). Consequently, research showed that people want to punish male harassers more strongly than female ones (Cummings & Armenta, 2002). In addition, sexual harassment by an unattractive male perpetrator was rated as more harassing than by an attractive one (Castellow et al., 1990; Golden, Johnson, & Lopez, 2001). Further, in an experiment by Barbara Gutek and colleagues (1983) sexual harassment by a high-status person was rated less positively than harassment by a low-status person. Although many studies researched into the evaluation of sexual harassment, there seems to be no scientific work, which has investigated the evaluation of sexual objectification.

With the set of studies at hand, we wanted to shed light on the question of how people perceive perpetrators and targets of sexual objectification. We focused on psychological

dimensions, which are known to play essential roles in social perception: All three conducted studies investigated the attribution of the fundamental dimensions of stereotypes—warmth and competence (Fiske, Cuddy, & Glick, 2007)—as well as the ascription of power to perpetrators and targets of sexual objectification. Moreover, as studies on sexual harassment pointed out the importance of gender and social status in the perception of perpetrators and targets (e.g., Cummings & Armenta, 2002; Gutek et al., 1983), perpetrators' and targets' gender (Study 1-3) and social status (Study 1-2) were manipulated. Additionally, taking a programmatic approach, each study focused on distinct aspects in people's evaluation of sexual objectification.

Study 1 inspected potential backlash effects (e.g., Rudman, Moss-Racusin, Phelan, & Nauts, 2012) toward women and low-status perpetrators as well as the potential application of the shifting standards model by Monica Biernat and Theresa Vescio (2002). Study 2 applied an ethical decision-making framework (Jones, 1991) and contrasted sexual objectification with sexual harassment and gossiping. Study 3 investigated the influence of participant gender as well as participant's proclivity to sexually objectify (measured with the SOOI) on the evaluation of perpetrators of sexual objectification, harassment, and a neutral behavior. Altogether, the conducted studies provide insight into which factors play a critical role in the evaluation of perpetrators and targets of sexually objectifying behavior.

## Study 1

### **Introduction.**

With Study 1, we wanted to investigate how people evaluate perpetrators and targets of sexual objectification before and after the act of objectification. We expected that the evaluation of targets and perpetrators would partially be determined by their gender and social status and would be prone to various interrelated psychological phenomena: stereotypes, contrast- and backlash-effects.

During the study, participants were asked to rate an employee and a boss, first, after reading a vignette describing both persons (Time 1), and second, after reading another vignette, illustrating sexually objectifying behavior of one person toward the other (Time 2). We manipulated the gender-constellation of the persons so that either the boss was female and the employee male or the boss was male and the employee female. Furthermore, we manipulated whether the low-status person objectified the high-status person or the high-status person objectified the low-status person. The implemented measures assessed people's attributions of power, warmth, and competence to and social distance toward perpetrators and targets of sexual objectification.

The data of Study 1 was collected with the help of a student who wrote her bachelor thesis on sexual objectification (see Köhne, 2017).

### ***Power.***

In social psychology, power is defined as the ability to influence others (Copeland, 1994). In contrast to people with low status, people with high status usually have more power in the sense that they are listened to, looked-up to and have relatively more influence (Anderson, John, & Keltner, 2012). As men, in general, hold higher status positions, they exert more power than women (Eagly & Wood, 2012). In our study, we, therefore, predicted main effects of status

and gender at Time 1, so that prior to the objectification incident, people would attribute more power to men and high-status persons than to women and low-status persons.

*Hypothesis 1a:* At Time 1, high-status characters will be perceived as more powerful than low-status characters.

*Hypothesis 1b:* At Time 1, male characters will be perceived as more powerful than female characters.

We expected sexual objectification to be perceived as a powerful act. Sexually objectifying another person in public can be considered as a violation of social norms. Research by Gerben van Kleef and colleagues (2011) suggested that people who violate norms are evaluated as more powerful in the eyes of others. Moreover, there is considerable evidence for the association of power and sexual objectification: For instance, work on sexual harassment suggests that individuals might engage in sexual harassment to gain or regain power over another person (Bargh, Raymond, Pryor, & Strack, 1995). Moreover, Jonathan Kunstman and Jon Maner (2011) observed that having power activated participants' mating goals and their expectations of sexual interest from subordinates. Furthermore, using an inversion paradigm (see Bernard et al., 2012), Ciro Civile and Sukhvinder Obhi (2016) could show that participants primed with power, reacted with greater sexual objectification (see also Civile, Rajagopal, & Obhi, 2016). We inferred that people would be aware of the association of sexual objectification and power and therefore conclude that individuals engaging in sexual objectification, have more power. Additionally, we expected a heightened attribution of power to perpetrators, because by objectifying another person in public, they violated social norms, which leads to the ascription of power (see van Kleef et al., 2011). Hence, we hypothesized a main effect of time for perpetrators and targets, so that after the objectifying incident, people would attribute more power to the perpetrators and less power to the targets of sexual objectification.

*Hypothesis 2a:* At Time 2, perpetrators of sexual objectification will be perceived as more powerful than at Time 1.

*Hypothesis 2b:* At Time 2, targets of sexual objectification will be perceived as less powerful than at Time 1.

Finally, we expected a contrast effect on power for low-status and female perpetrators as well as high-status and male targets. Contrast effects occur when the evaluated behavior does not fit the depicted role and violates social norms (Fischer, Eagly, & Oosterwijk, 2013). The shifting standards model by Monica Biernat and Theresa Vescio (2002) explains this effect by different standards, which are used to judge a certain behavior. For example, men who cry at work might be judged as more emotional than crying women at work (Fischer et al., 2013) because both are judged relative to the gender within-group standard (Biernat & Sesko, 2018). Because sexual objectification perpetration is likely perceived as more atypical for low-status persons and women, we expected an interaction of time and status as well as time and gender, so that low-status and female perpetrators would gain (i.e., from Time 1 to Time 2) relatively more attributed power by objectifying than high-status persons and men.

*Hypothesis 3a:* The act of sexual objectification will result in a greater increase of power attribution to low-status perpetrators than to high-status perpetrators.

*Hypothesis 3b:* The act of sexual objectification will result in a greater increase of power attribution to female perpetrators than to male perpetrators.

Correspondingly, we expected interaction effects of time and status as well as time and gender for targets of objectification, so that high-status and male targets lose (i.e., from Time 1 to Time 2) more attributed power than low-status and female targets of sexual objectification.

*Hypothesis 3c:* The act of sexual objectification will result in a greater decrease of power attribution to high-status targets than to low-status targets.

*Hypothesis 3d:* The act of sexual objectification will result in a greater decrease of power attribution to male targets than to female targets.

***Fundamental content of social judgments: warmth and competence.***

Research showed that people are very quick in assessing others and making predictions of their future behavior (Balci et al., 2013). Theorists assume that this trait is a result of evolutionary pressure: in order to survive, our ancestors learned to quickly assess other individuals or groups based on their ascribed intentions and their ability to act on those intentions. The resulting assessments correspond with feelings and assessments of more or less respecting and liking (Fiske et al., 2007). Susan Fiske and colleagues (2002) for example found that compared to other groups and on average rich people were seen as relatively more competent, confident and intelligent but also as relatively less tolerant, warm and sincere. The authors evidenced that such attributions load on two orthogonal dimensions, which they called warmth and competence. Study 1 examines people's judgments of perpetrators and targets of sexual objectification on those dimensions.

Research has demonstrated that in comparison to women and low-status persons, men and high-status persons are generally seen as holding more competence and less warmth (Eckes, 2002; resp. Fiske et al., 2002). Hence, we predicted main effects of status and gender at Time 1.

*Hypothesis 4a:* At Time 1, characters with high social status will be perceived as holding more competence but less warmth than low-status characters.

*Hypothesis 4b:* At Time 1, male characters will be perceived as holding more competence but less warmth than female characters.

To our knowledge, so far, the stereotype content model has not been applied to perpetrators of sexual objectification or sexual harassment. Research on sexual harassment showed, however, that perpetrators are generally disapproved of (Cummings & Armenta, 2002). As sexual harassment and sexual objectification are remarkably similar, we assumed that after

engaging in sexual objectification, perpetrators would be rated as less warm. Moreover, research showed that sexually objectifying and sexually harassing behavior at a workplace is deemed very unprofessional by men and women (Pryor, 1995). Hence, we also expected reduced attribution of competence for perpetrators of sexual objectification.

*Hypothesis 5:* At Time 2, perpetrators of sexual objectification will be perceived as less competent and less warm than at Time 1.

Research investigating sexual objectification from a dehumanization perspective usually finds that when people are objectified, they are perceived as holding less competence and warmth (Heflick & Goldenberg, 2009; Heflick et al., 2011). However, such research usually implemented the participants as objectifiers. In our study, however, the objectification occurred outside the participants' minds. The participants had to infer warmth and competence from the depicted situation. Hence, we saw no reason why the objectification incident should affect the assessment of the target's warmth and competence and refrained from making any predictions in this direction.

***Backlash Effects—a plausible reason for gender differences in sexually objectifying behavior?***

In Empirical Part I, we demonstrated that men show significantly higher ratings of sexual objectification proclivity than women. Further research on sexually objectifying behavior has shown that that women seem to engage less in sexual objectification than men. For example, using the Interpersonal Sexual Objectification Perpetration Scale (ISOS-P; Gervais et al., 2014), Sarah Gervais and colleagues (2015) obtained evidence that men engaged in significantly more behavioral body evaluation and executed more unwanted explicit advances than women (statistical comparisons by the author). Moreover, evidence from a diary study points to more frequent objectification by men, as women reported four times more often than men that they been

sexually objectified (Swim et al., 2001).<sup>15</sup> There are several possible explanations for these sex differences in objectification proclivity and behavior. Some explanations can be derived from studies focusing on hegemonic men's interpersonal sexual behavior. For instance, research by Grazian (2007) indicated that the objectification of women is an integral part of male college students courtship behavior, therefore suggesting male group norms promoting objectification. In Study 1, we would like to entertain an additional explanation for sex differences in sexual objectification: Women deliberately avoid to sexually objectify others in public to avert social repercussions. This assumption is supported by research on backlash.

Several studies showed that women who are or act agentic encounter backlash (e.g., Bowles, Babcock, & Lai, 2007; Rudman, Moss-Racusin, Glick, & Phelan, 2012; Rudman, Moss-Racusin, Phelan, & Nauts, 2012). Sexually objectifying behavior is agentic as it is proactive, dominant, assertive, autonomous, and controlling. Therefore, women might experience more negative outcomes for objectifying others than men. This reasoning is based on the so-called status incongruity hypothesis (Rudman, Moss-Racusin, Glick, et al., 2012). Its rationale rests on the observation that gender stereotypes can hold several functions: Some stereotypes just *describe*, which characteristics men and women allegedly possess, and how they supposedly behave (descriptive qualities). Other stereotypes *prescribe*, which characteristics men and women should hold and how they should behave (prescriptive qualities). Sometimes, however, stereotyped characteristics or behaviors are reserved for one gender, and explicitly not for the other—the characteristic and behaviors are *proscribed* (proscriptive qualities; Rudman, Moss-Racusin, Phelan, et al., 2012). Deborah Prentice and Dale Carranza (2002) identified, for

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<sup>15</sup> Of course, women could also have been objectified (and harassed) by women or other genders; and men by men or other genders. But even if one takes, for instance, the increasing amount of sexual interest in same-sex individuals into account (e.g., Mercer et al., 2013 report a quadruplication of women's same sex experiences from 4% to 16% in a period of 20 years), the data still point to more objectifying behavior by men toward women.

example, that for women (but not men), it is proscribed to be ruthless, arrogant or domineering; and for men (but not women), it is proscribed to be weak, insecure or shy. Such proscriptive stereotypes are strongly connected to men's and women's status in society. The prohibition of women to be domineering, and of men to be weak, supports the current gender hierarchy where men possess a relatively higher status than women. The status incongruity hypothesis (Rudman, Moss-Racusin, Phelan, et al., 2012) states that women who possess proscribed characteristics, and who do not behave in line with their relatively lower status, receive backlash because their status incongruity questions the status quo. In support of this assumption, Laurie Rudman and colleagues (2012) found out that agentic women received more backlash by participants with greater system-justification beliefs. Similarly, in a subsequent experiment, they ascertained that a system-threat elicited more backlash against female leaders. Moreover, Julie Holliday Wayne, Christine Riordan, and Kecia Thomas (2001) showed that women engaging in sexual harassment were found to be more guilty than men. Those results corroborate the assumption that women who oppose the proscription of stereotypes, for instance by sexually objectifying (or harassing) men, receive more backlash because they challenge the current hierarchy.

In line with research on status incongruent behavior (Rudman, Moss-Racusin, Phelan, et al., 2012) and research on the evaluation of sexual harassment by women (Wayne et al., 2001), we expected a backlash effect for low-status persons and women who show sexual objectification. Usually, research on backlash toward female leaders shows that dominant women are rated as less likable but not less competent (Williams & Tiedens, 2016). However, sexual objectification at a work context is considered as unprofessional (Pryor, 1995). Therefore, we also assumed a backlash effect on competence.

We predicted differences between Time 1 and Time 2 so that by sexually objectifying another person, low-status persons and women would be perceived as even less warm and competent than high-status perpetrators and men. We formulated the following hypotheses:

*Hypothesis 6a:* The act of sexual objectification will result in a greater decrease of warmth and competence attribution to low-status perpetrators of sexual objectification, compared to high-status perpetrators.

*Hypothesis 6b:* The act of sexual objectification will result in a greater decrease of warmth and competence attribution to female perpetrators of sexual objectification, compared to male perpetrators.

Correspondingly, a backlash effect for social distance was predicted. We assumed that participants would want to keep more social distance from female and low-status perpetrators because they question the hierarchy by not behaving in a way congruent with their status.

*Hypothesis 7a:* The preferred social distance will be greater toward low-status perpetrators of sexual objectification than toward high-status perpetrators.

*Hypothesis 7b:* The preferred social distance will be greater toward female perpetrators of sexual objectification than toward male perpetrators.

**Method.*****Participants.***

Two hundred ninety-nine participants completed an online survey. Data collection ended after each cell contained at least 20 male participants. Multivariate outlier analyses flagged five persons who were removed because of missing data due to an error in the online survey or because of lacking variance. Four other participants were excluded from analyses because they did not complete the survey within 24 hours. The final sample consisted of  $N = 290$  participants (182 women, 102 men and 6 persons outside the gender-binary). On average, the participants were 25.63 years old ( $SD = 11.17$ ). 81.7 % of all participants indicated being heterosexual, 6.9 % bisexual, and 2.8 % homosexual. 8.6 % specified other sexual orientations. Regarding the highest level of education, most of the participants had at least a high school diploma (49.7 %), a bachelor's (23.8 %) or a master's degree (15.9 %). Most participants were recruited via social media (29.3 %), mailing lists (24.8 %), recommendations (11.4 %) or personal recruitment on campus (9.0 %). The participants had the chance to win a 50€ voucher and to receive course credits if they were enrolled in psychology at Bielefeld University.

***Cover story.***

A cover story was created to conceal the real purpose of the study during the recruitment and the actual survey. The participants were told the study's interest lied in social impression formation processes of people who start new jobs.

***Design.***

Participants had to assess two characters featured in two text vignettes immediately after reading each vignette. In the first vignette, both characters were introduced to the participants. The second vignette illustrated a situation where one of the characters objectified the other. Depending on a between-subjects manipulation, either the male character objectified the

female or the other way around. The same applied for status: either the high-status character objectified the low-status character or vice versa. The design of the study was hence a 2 (gender constellation) by 2 (status constellation) by 2 (time of measurement) mixed design. All participants were randomly assigned to one of the four status and gender constellations. The number of participants in each cell can be found in Table 34. A chi-squared test confirmed that the total number of participants were distributed equally to each cell ( $\chi^2_{1, N=290} = 0.48, p = .56$ ). Separate chi-squared analyses for female and ( $\chi^2_{1, N=182} = 0.88, p = .88$ ) and male participants ( $\chi^2_{1, N=102} = 0.11, p = .12$ ) indicated that men and women were also equally distributed to the cells. A chi-squared test for non-binary-identified participants could not be calculated because the statistical assumption of having a cell count of at least five was not met.

Table 34

*Total and Participant's-Gender-Separated Number of Participants in each Cell*

Perpetrator Status	Perpetrator Gender	
	Female	Male
Low-status	78 (47 women, 29 men, 2 other)	69 (45 women, 23 men, 1 other)
High-status	70 (47 women, 20 men, 3 other)	73 (43 women, 30 men, 0 other)

### *Text vignettes.*

The two texts were written in a first-person perspective. Participants were asked to put themselves into the position of the protagonist, who had recently started a new job.

The first vignette featured a first day at a new job and introduced Mr./Ms. Krueger and Mr./Ms. Lange, the two main characters of the story (see Appendix E, Vignette Time 1, p. 299). One of them was depicted as the low-status employee and the other as the high-status boss. To make the characters' status more salient, additional status-information was presented. The boss was introduced as driving an expensive car, wearing high-quality clothes, owning a big house, and playing golf. The employee was described as using public transports, wearing cheap clothes, renting a small apartment, and pursuing a hobby that is deemed lower-class.

The second vignette was set a few weeks after the protagonist's first day at work (see Appendix E, Vignette Time 2a-b, pp. 300-301). After some irrelevant information about the protagonist's new office and the company's offer of sports courses, a situation in the company's cafeteria was illustrated. It was disclosed that the protagonist had been noticing that one of the aforementioned main characters (depending on the manipulation either the low-status or high-status character) had secretly peered at the other's buttocks from time to time. Moreover, it was reported that the protagonist had overheard the same character whispering to another colleague: "I'd love to pinch that luscious butt" while pointing at the other person. The protagonist was described, leaving the scenery without making known that he/she had overheard the conversation. The story ends with the protagonist going back to his or her office, finishing a presentation for a business trip.

### *Measures.*

If not indicated otherwise, all scales were assessed using a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The internal consistencies for each scale can be found in Table 35 on page 156.

#### *Sense of Power Scale.*

To assess the attributed power, we adapted the Sense of Power Scale by Cameron Anderson and colleagues (2012). Originally the scale measures one's personal sense of power (e.g., "I can get him/her/them to do what I want."). To assess the attributed power toward the two characters in the vignette, we rephrased all eight items in the following manner: "Mr. [Ms.] Krueger [Lange] can get others to do what they want". A complete list of the adapted German items can be found in Appendix E, Table E1 on page 302.

#### *Warmth and competence.*

To assess attributed warmth and competence to both characters, we used each six single-word items adapted and translated into German from Susan Fiske and colleagues (2002).

For exploratory reasons, we also assessed liberal and conservative beliefs, which are discussed as a newly discovered fundamental dimension of stereotype content (Koch, 2016). The analysis of this dimension is, however, beyond the scope of this thesis. All items can be found in Appendix E, Table E2 on page 303.

*Social Distance Scale.*

To assess social distance toward perpetrator and target an adapted version of the Social Distance Scale (Bogardus, 1933) was used. The adapted version was originally developed by Diana Scheffer (2013) to assess social distance at a workplace and comprises four items. We slightly modified those items for our use (e.g., “How much would you like to share an office with Mr. [Ms.] Krueger [Lange]”). The items can be found in Table E, Table E3 on page 303.

*Social Dominance Orientation.*

We exploratorily assessed the participants’ social dominance orientation, i.e., the degree to which people prefer social inequality amongst groups (e.g., “It’s OK if some groups have more of a chance in life than others.”; Pratto et al., 1994.) by using the SDO<sub>6</sub> scale (Sidanius & Pratto, 2001; German translation by Six et al., 2001) and the SDO<sub>7</sub> scale (Ho et al., 2015), each comprised of 16 items. By administering both scales, we initially intended to create additional data for the validation of the German translation of the SDO<sub>7</sub> by Carvacho et al. (in preparation).

*Ambivalent Sexism Inventory.*

We had an exploratory interest in the influence of hostile and benevolent sexist attitudes, which were measured with the Ambivalent Sexism Inventory by Glick and Fiske (2001b; German translation by Eckes & Six-Materna, 1999). Hostile sexist attitudes, measured with 11 items of the ASI-H subscale, encompass resentment toward women who question patriarchal gender norms (e.g., “Feminist are seeking for women to have more power than men”). Benevolent sexist attitudes, measured with 11 items of the ASI-B subscale, are directed at women who subject to traditional gender norms and describe those women as wonderful creatures who

have to be admired and protected by men (e.g., “Every man ought to have a woman whom he adores”).

*Internal consistencies.*

Internal consistencies for each scale can be found in Table 35. They ranged from good to excellent.

Table 35  
*Cronbach's Alphas of Each Scale*

Scale	min.- max. $\alpha$
ASI-B	0.89
ASI-H	0.93
Competence	.86 - .93
SDO <sub>6</sub>	0.86
SDO <sub>7</sub>	0.9
Sense of Power Scale	.90 - .94
Social Distance Scale	.90 - .93
Warmth	.84 - .92

*Note.* Ranges include alphas of scales assessing evaluations of Mr. [Ms.] Krueger and Ms. [Mr.] Lange at Time 1 and Time 2.

*Time difference scores.*

In order to answer Hypotheses 3a-d and 6a-d, time difference scores for the power, warmth and competence scales were calculated. They were computed by subtracting the participants' results of Time 1 from Time 2. Therefore, a score below zero means that the character was evaluated less strongly on the respective variable at Time 2 compared to Time 1; and a score above zero means that the character was evaluated more strongly at Time 2 compared to Time 1.

***Procedure.***

After learning about the cover story, being advised about the study's anonymity and being informed that they were able to quit the study at any time, participants were instructed to read the first vignette about a person's first day at his or her new job. The participants were asked to put themselves into the protagonist's position. After confirming that they had conscientiously read the vignette, participants were asked to answer some distractor items on the

protagonist's self-efficacy and locus of control at the new job (items were taken from Muschalla & Fay, 2015). Afterward, the two main characters featured in the vignette, Mr. [Ms.] Krueger and Ms. [Mr.] Lange were evaluated regarding their power, warmth, competence, and their liberal/conservative beliefs. Then, participants read the second vignette, answered the distractor items again, and filled out the power, warmth, competence and belief scale for a second time. Moreover, participants had to indicate the preferred social distance toward both characters. The order of the questionnaires for the two characters, as well as the items of every single questionnaire, was randomized at Time 1 and Time 2. Before indicating their demographics, participants had to fill out the Ambivalent Sexism Inventory and both Social Dominance Orientation scales, which were shown on one single page with randomized item order. At the very end, participants were thanked, debriefed, and invited to participate in the study's raffle.

## Results.

If not reported otherwise, all statistical assumptions of the following analyses were met. An alpha level of .05 was used for all statistical tests.

To test the effects of both the *gender* and *status* manipulation on power, warmth, and competence at *Time 1* (Hypotheses 1a-b and 4a-b), mixed ANOVAs were calculated. To account for the fact that each participant filled out two questionnaires—depending on one of four conditions for a male [female], low-status [high-status] later-on target and a female [male], high-status [low-status] later-on perpetrator—it was decided to add *role* (target vs. perpetrator) as within-subjects factor although the distinction between target and perpetrator was not made at Time 1. Gender and status were included as between-subjects factors. This statistical approach allowed for including all available data from both questionnaires.<sup>16</sup> The effects of interest in this design are the interactions involving the role variable. The statistical interaction effects of role with status and role with gender provided information about the effects of role and gender, independently of the within-subjects condition.<sup>17</sup> Likewise, the interaction effect of role, status, and gender corresponded with the actual interaction effect of status and gender and could be interpreted as such. The results can be obtained from Table 36. Between-subjects and main effects were omitted from the results table; because the variables gender status and role were confounded, they were uninterpretable.

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<sup>16</sup> The main effects for *role* could, however, not be interpreted, as no difference at Time 1 was expected.

<sup>17</sup> The variables gender, status and role were confounded—the main effects of gender and status could not be interpreted as such. For example, in one of the four conditions the variables gender and status indicated that the target was a high-status male but the perpetrator a low-status female. Hence, the variables gender and status had a different meaning for the perpetrator and target questionnaires.

Table 36

*Interaction Effects of ANOVAs of Role, Status, and Gender on Power, Warmth, and Competence at Time 1*

Independent Variables	Dependent Variable	Sum of Squares	<i>df</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
R	Power	0.35	1	0.46	.497	0.00
	Warmth	0.09	1	0.13	.717	0.00
	Competence	0.61	1	1.31	.254	0.01
R x S	Power	474.61	1	636.67	< .001	0.69
	Warmth	226.65	1	327.05	< .001	0.53
	Competence	112.65	1	242.81	< .001	0.46
R x G	Power	1.83	1	2.46	.118	0.01
	Warmth	0.42	1	0.61	.435	0.00
	Competence	2.50	1	5.39	.021	0.02
R x S x G	Power	0.07	1	0.09	.765	0.00
	Warmth	0.77	1	1.11	.293	0.00
	Competence	0.26	1	0.55	.458	0.00
Error (within)	Power	213.20	286			
	Warmth	198.20	286			
	Competence	132.69	286			

*Note.* R = Role, S = Status, G = Gender. As gender, status, and role are confounded, between-subjects and main effects were uninterpretable and therefore omitted.

As expected, indicating differences between low-status and high-status characters, the interaction effects of role and status were significant for the dependent variables power, competence, and warmth. Moreover, as predicted, people attributed a different amount of competence to male and female characters, which was revealed by an interaction effect between role and gender. For attributed power and warmth there was, however, no indication for a difference between male and females.

To investigate, whether the obtained status and gender differences lay in the expected direction, Bonferroni post hoc tests were calculated. Using the long format in the statistical program R (R Core Team, 2018)<sup>18</sup>, the values of gender and the values of status were swapped

<sup>18</sup> In SPSS, a similar result can be obtained with the VARSTOCASES command.

for the targets of sexual objectification. Thus, the variables gender and status indicate gender and status independently from the role variable and are not confounded any longer.<sup>19</sup>

Table 37

*Pairwise Comparisons of Mean Differences between Levels of Status and Gender with Bonferroni correction for Power, Warmth, and Competence at Time 1*

Dependent Variable	Comparison	$M_1$	$SD_1$	$M_2$	$SD_2$	adj. $p$	$d$
Power	Status (low vs. high)	3.86	0.85	5.66	0.80	< .001	-2.19
	Gender (female vs. male)	5.29	0.84	4.03	0.86	< .001	1.47
Warmth	Status (low vs. high)	4.55	0.85	5.43	0.89	< .001	-1.01
	Gender (female vs. male)	5.04	1.01	4.94	0.92	.191	0.10

Confirming Hypotheses 1a and 4a, the post hoc tests (see Table 37) revealed that persons with high social status were perceived as holding more power, more competence, and less warmth than low-status persons. Although suggested by the interaction effect, no (Bonferroni-corrected) statistical difference could be obtained between men and women for attributed competence. Together with the established lack of gender differences for power and warmth (see Table 36), Hypotheses 1b and 4b could not be substantiated: participants did not attribute more power and competence as well as less warmth to males than females.

Hypotheses 2a and 5 predicted that perpetrators of sexual objectification would be perceived as holding more power and competence and less warmth after they engaged in sexual objectification compared to beforehand. Hypothesis 2b assumed that targets of sexual objectification would be perceived as holding less power than beforehand. To test all three hypotheses, several ANOVAs were calculated. Results can be obtained from Table 38.

<sup>19</sup> As mixed ANOVAs work with paired values, this course of action could not have been taken earlier.

Table 38

*Means, Standard Deviations and Effects of ANOVAs with Time on Power, Warmth, and Competence for Perpetrators and Targets of Sexual Objectification*

	Time 1	Time 2	Sum of Squares	<i>df1, df2</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
	<i>M (SD)</i>	<i>M (SD)</i>					
Perpetrators							
Power	4.72 (1.19)	4.60 (1.21)	2.25	1, 289	8.99	.003	0.03
Warmth	4.69 (1.09)	3.74 (1.14)	128.50	1, 289	189.66	< .001	0.40
Competence	4.95 (0.91)	4.59 (1.06)	18.89	1, 289	76.23	< .001	0.21
Targets							
Power	4.80 (1.26)	4.74 (1.25)	0.53	1, 289	2.43	.120	0.01

Confirming our prediction, results indicated that perpetrators were seen as less warm and less competent at Time 2. Contrary to our predictions, however, perpetrators of sexual objectification were also perceived as holding significantly less power after behaving in an objectifying way. For targets of sexual objectification, no difference in ascribed power could be obtained. To sum up, Hypothesis 5 was confirmed, but Hypotheses 2a-b could not be substantiated.

With Hypotheses 3a-b and 6a-b, we predicted that sexually objectifying act, low-status, and female perpetrators would be described as relatively more powerful, but, because of backlash-effects, as relatively less warm and competent than high-status and male perpetrators. The investigation of Hypothesis 2b already showed that participants attributed less power to perpetrators at Time 2 compared to Time 1, which is oppositional to what was expected. As the inclusion of status and gender as independent variables might bring additional insights, it was regardless decided to test Hypotheses 3a-3b. To test this set of hypotheses, several mixed ANOVAs for perpetrators with the between-subjects variables gender and status were computed. As the hypotheses assumed a difference between two points of time, the differences between Time 1 and Time 2 (Time 2 – Time 1) for the variables power, warmth and competence were deployed as dependent variables. Levene's tests showed that the variances were not equal for

the differences scores of power, warmth and competence,  $F(3,286) = 9.05, p < .001$ ;  $F(3,286) = 8.82, p < .001$ ;  $F(3,286) = 3.19, p = .024$ . However, as we had a large sample and equal sample sizes in each group, we relied on the ANOVAs' robustness (Field, 2009). The results of the ANOVAs on the perpetrators of sexual objectification can be found in Table 39.

Table 39

*Means, Standard Deviations and Effects of ANOVAs with Time-Difference-Scores on Power, Warmth, and Competence for Perpetrators of Sexual Objectification*

	<i>M (SD)</i>		Sum of	df1, df2	<i>F</i>	<i>p</i>	$\eta_p^2$
	low	high	Squares				
<b>Status</b>							
Power	-0.06 (0.85)	-0.19 (0.51)	1.22	1, 286	2.46	.118	0.01
Warmth	-1.28 (1.20)	-0.59 (1.01)	38.78	1, 286	36.85	< .001	0.11
Competence	-0.38 (0.80)	-0.34 (0.59)	0.14	1, 286	0.29	.588	0.00
<b>Gender</b>							
	female	male					
Power	-0.11 (0.75)	-0.13 (0.66)	0.01	1, 286	0.02	.882	0.00
Warmth	-0.53 (0.95)	-1.37 (1.21)	55.54	1, 286	52.78	< .001	0.16
Competence	-0.28 (0.64)	-0.45 (0.76)	2.08	1, 286	4.24	.040	0.01
<b>Status x Gender</b>							
Power			1.94	1, 286	3.92	.049	0.01
Warmth			0.00	1, 286	0.00	.949	0.00
Competence			0.54	1, 286	1.09	.296	0.00

Results could not substantiate Hypothesis 3a and Hypothesis 3b as neither low- and high-status perpetrators nor female and male perpetrators differed in a change of power attributed to them. Regarding the hypotheses on backlash, outcomes partially confirmed Hypothesis 6a as low-status perpetrators dropped more strongly in attributed warmth than high-status perpetrators, but not in attributed competence. However, oppositional to our prediction in Hypothesis 6b, male perpetrators suffered more strongly from a decrease in attributed warmth and competence than female perpetrators. A significant interaction effect between status and gender

for the time-difference-scores of power and subsequent Bonferroni post hoc comparisons indicated, high-status female perpetrators ( $M = -0.27$ ,  $SD = 0.54$ ) dropped in attributed power and consequently differed from low-status female perpetrators who did not show a change between Time 1 and Time 2 ( $M = 0.02$ ,  $SD = 0.87$ ,  $p_{adj.} = .012$ ). Moreover, low-status ( $M = -0.15$ ,  $SD = 0.82$ ) and high-status male perpetrators ( $M = -0.12$ ,  $SD = 0.47$ ) were perceived holding less power after sexually objectifying another person but did not differ from each other ( $p_{adj.} = .774$ ). Furthermore, there were no gender-differences for low-status ( $p_{adj.} = .131$ ) or high-status persons ( $p_{adj.} = .199$ ).

With Hypotheses 3c-d, we expressed the assumption that low-status and female targets would be seen as relatively less powerful than high-status and male targets after being objectified than beforehand. An ANOVA on the time-difference-scores for the targets of sexual objectification revealed a significant difference between low-status ( $M = 0.02$ ,  $SD = 0.69$ ) and high-status targets ( $M = -0.14$ ,  $SD = 0.63$ ) in ascribed power,  $F(1, 286) = 5.65$ ,  $p = .018$ ,  $\eta_p^2 = 0.02$ . In contrast to low-status targets, high status-targets were perceived as less powerful after being sexually objectified, which was predicted by Hypothesis 3c. With Hypothesis 3d, we assumed that all targets of sexual objectification drop in attributed power, but men drop more than women. Results of the ANOVA on the targets of sexual objectification showed, however, that female targets ( $M = -0.42$ ,  $SD = 0.66$ ) were seen as less powerful after being sexually objectified and male targets ( $M = 0.11$ ,  $SD = 0.61$ ) were evaluated as more powerful after the objectification incident,  $F(1, 286) = 22.91$ ,  $p < .001$ ,  $\eta_p^2 = 0.07$ . Hypothesis 3d was not substantiated. There was no significant interaction effect between status and gender,  $F(1, 286) = 1.81$ ,  $p = .180$ ,  $\eta_p^2 = 0.01$ .

Hypotheses 7a-b predicted that individuals would indicate more social distance toward low-status and female perpetrators versus high-status and male perpetrators. Because we were exploratorily interested in the social distance toward targets of sexual objectification, a mixed

ANOVA with role as within-subjects variable and gender and status as between-subjects variables, was calculated. A main effect of role showed that individuals preferred a greater social distance toward perpetrators ( $M = 4.84, SD = 1.34$ ) than toward targets of sexual objectification ( $M = 3.45, SD = 1.25$ ),  $F(1, 286) = 201.00, p < .001, \eta_p^2 = 0.41$ . Moreover, the results indicated a significant interaction of role and status,  $F(1, 286) = 6.12, p = .014, \eta_p^2 = 0.02$ , and of role and gender,  $F(1, 286) = 41.11, p < .001, \eta_p^2 = 0.13$ . No significant three-way interaction between role, gender, and status emerged,  $F(1, 286) = 2.32, p = .129, \eta_p^2 = 0.01$ .<sup>20</sup> Restructuring the data into long format with R (R Core Team, 2018), the computation of Bonferroni post hoc test revealed information about all remaining main effects and interactions (see Table 40 for descriptive values of subgroups and Figure 10 for an illustration of the results' pattern). Results showed that overall, participants preferred significantly more distance toward high-status ( $M = 4.27, SD = 1.29$ ) than low-status persons ( $M = 4.01, SD = 1.29, p_{adj.} = .025$ ). Comparing within the groups of perpetrators and targets, this effect was, however, not statistically significant for perpetrators or targets only ( $p_{adj.} = .062$ , resp.  $p_{adj.} = 1$ ). As Hypothesis 7a, predicted a preference for a greater social distance toward low-status perpetrators, this hypothesis was not substantiated. Further post hoc tests revealed that on average, participants preferred a significantly greater social distance toward men ( $M = 4.44, SD = 1.26$ ) than toward women ( $M = 3.83, SD = 1.33, p_{adj.} < .001$ ). Analyzing perpetrators and targets separately, this effect could only be reproduced for perpetrators ( $p_{adj.} < .001$ ) but not for targets of sexual objectification ( $p_{adj.} = .576$ ). As Hypothesis 7b assumed a greater social distance toward female and not toward male perpetrators, this hypothesis was not substantiated.

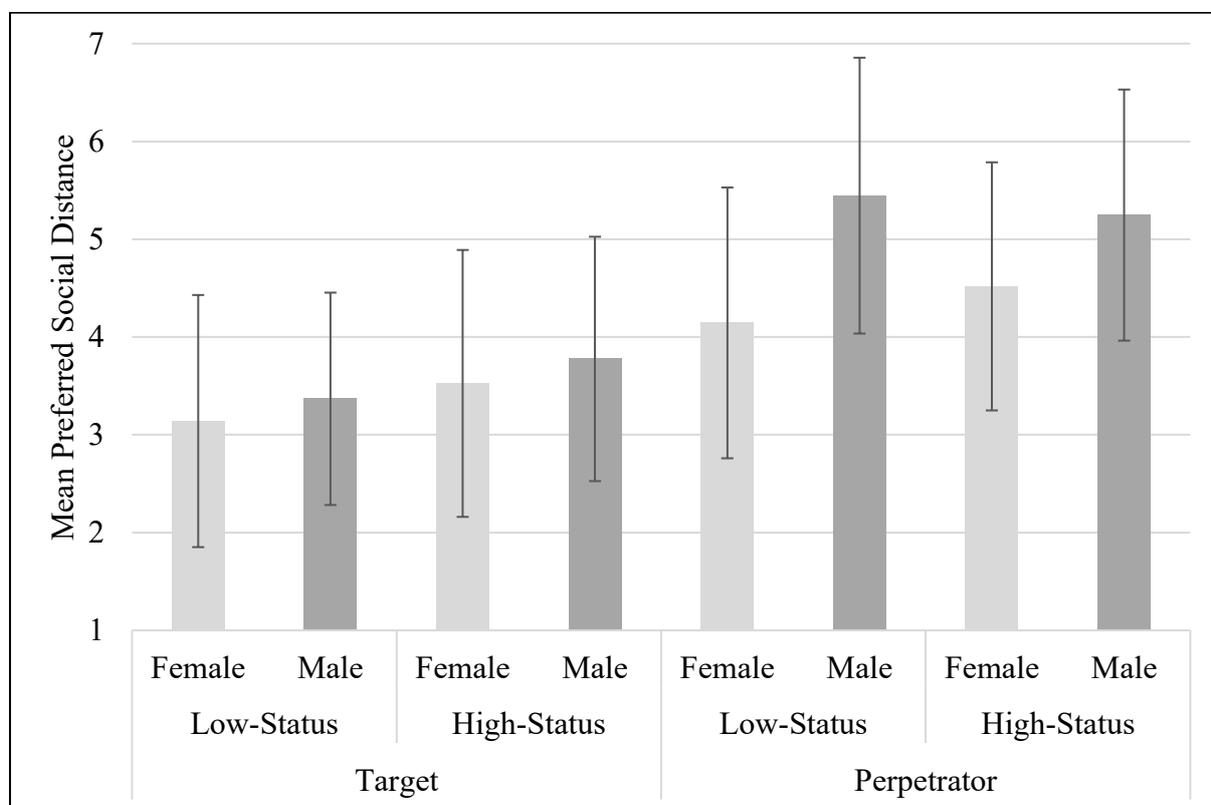
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<sup>20</sup> Because role was again confounded with gender and status, main effects and interactions of gender and status without role were uninterpretable.

Table 40

*Means of Social Distance, Standard Deviations and Sample Sizes for Role, Status, and Gender*

Role	Status	Gender	<i>M</i>	<i>SD</i>	<i>n</i>
Target	Low-Status	Female	3.14	1.31	73
		Male	3.37	1.09	70
	High-Status	Female	3.53	1.36	69
		Male	3.78	1.25	78
Perpetrator	Low-Status	Female	4.14	1.38	78
		Male	5.45	1.41	69
	High-Status	Female	4.52	1.27	70
		Male	5.25	1.29	73



*Figure 10.* Social Distance toward the groups of Role, Status, and Gender. Bars represent standard deviations.

Overall, the results did not meet our predictions regarding a backlash effect toward low-status and female individuals. To get further insight into the obtained effects, we decided to exploratorily analyze the influence of participants' social dominance orientation, hostile sexism, and gender on the preferred social distance.

Initially, we assumed that objectifying low-status perpetrators might be perceived as a threat to the depicted hierarchy. Against this background, one would expect that people with greater social dominance orientation might be threatened more by low-status perpetrators and less by high-status perpetrators: We, therefore, predicted an interaction effect of status and SDO predicting that the greater the participants' social dominance orientation, the less warmth and competence they would attribute to low-status perpetrators. Correspondingly, we expected that the greater participants' social dominance orientation, the more social distance they would prefer toward low-status perpetrators. For high-status perpetrators, we anticipated the reversed effect: high-SDO persons should attribute relatively more warmth and competence and less social distance to high-status perpetrators than low-SDO persons. To test this interaction of SDO and status, we computed three simple moderation analyses for the  $z$ -values of warmth, competence and social distance with the PROCESS macro for SPSS (Hayes, 2016) implementing status as predictor and the  $z$ -value of SDO<sub>6</sub> as moderator. The variables were centered before the analyses. The overall models for the dependent variables warmth,  $R^2 = .09$ ,  $F(3, 286) = 9.59$ ,  $p < .001$ ; competence,  $R^2 = .19$ ,  $F(3, 286) = 21.93$ ,  $p < .001$ ; and social distance,  $R^2 = .04$ ,  $F(3, 286) = 3.78$ ,  $p = .011$  became significant. Results—which can be obtained from Table 41—showed that the greater participants social dominance orientation was, the more warmth they attributed to perpetrators of sexual objectification and the less social distance they showed toward them. Attributed competence was, however, not predicted by SDO. Status was a significant predictor for warmth and competence, but not social distance, when being in the same model as SDO. Moreover, interaction effects of SDO and status could not be established (see Table 41). Hence, the exploratory hypothesis that the participants' social dominance orientation might have had an influence on the participant's attribution of warmth, competence, or their social distance in relation to the perpetrator's status could not be substantiated.

Table 41

*Results of Moderation Analyses for Perpetrator Status and Social Dominance Orientation on Warmth, Competence, and Social Distance*

	$\beta$	$t$	$p$	95% CI	
				LL	UL
Warmth					
S	-0.54	-4.76	<.001	-0.76	-0.32
SDO	0.13	2.32	.021	0.02	0.24
S x SDO	0.08	0.73	.465	-0.14	0.31
Competence					
S	0.84	7.88	<.001	0.63	1.05
SDO	-0.10	-1.95	.053	-0.21	0.01
S x SDO	0.01	0.09	.927	-0.20	0.22
Social Distance					
S	0.10	0.82	.415	-0.13	0.32
SDO	-0.18	-3.16	.002	-0.30	-0.07
S x SDO	-0.08	-0.68	.500	-0.31	0.15

Note. S = Perpetrator Status, SDO = Social Dominance Orientation, CI = confidence interval, LL = lower limit, UL = upper limit.

In addition, we sought to investigate whether people might prefer a different social distance toward male vs. female perpetrators, depending on their own gender and how hostile sexist they are. We exploratorily hypothesized that male and more hostile sexist participants would have reported a greater social distance toward female perpetrators than female and less sexist participants. To allow for an interaction between participant gender and hostile sexism, we investigated the predicted interactions by computing a moderated moderation using SPSS PROCESS Model 3 (Hayes, 2016). We deployed perpetrator gender as predictor, participant gender as moderator (only including men and women), the z-values of hostile sexism as moderator of the moderation and the z-values of either perpetrator's warmth, perpetrator's competence, or social distance toward perpetrators as criterion. All variables were centered prior to the analyses. The overall moderated moderation models for social distance,  $R^2 = .21$ ,  $F(7, 276) = 10.40$ ,  $p < .001$  and warmth,  $R^2 = .24$ ,  $F(7, 276) = 12.74$ ,  $p < .001$ , were significant. The overall model for competence was not significant,  $R^2 = .05$ ,  $F(7, 276) = 1.86$ ,  $p = .077$ . The results of the moderated moderations can be found in see Table 42.

Table 42

*Results for Moderated Moderation of Perpetrator Gender, Participant Gender and Hostile Sexism on Ascribed Warmth, Competence, and Social Distance Toward Perpetrators*

	$\beta$	$t$	$p$	95 % CI	
				LL	UL
<b>Warmth</b>					
Perpetrator Gender (G)	-0.85	-8.03	<.001	-1.06	-0.64
Participant Gender (A)	0.10	0.88	.378	-0.12	0.32
Hostile Sexism (H)	0.15	2.78	.006	0.04	0.25
G x A	0.51	2.28	.023	0.07	0.94
G x H	0.22	2.08	.039	0.01	0.43
A x H	0.01	0.05	.963	-0.21	0.22
G x A x H	-0.32	1.47	.144	-0.75	0.11
<b>Competence</b>					
Perpetrator Gender (G)	-0.24	-2.03	.043	-0.47	-0.01
Participant Gender (A)	-0.07	-0.55	.585	-0.31	0.18
Hostile Sexism (H)	0.06	0.98	.329	-0.06	0.18
G x A	0.36	1.47	.143	-0.12	0.85
G x H	0.24	2.04	.043	0.01	0.48
A x H	0.02	0.14	.889	-0.22	0.26
G x A x H	0.06	0.24	.813	-0.42	0.54
<b>Social Distance</b>					
Perpetrator Gender (G)	0.69	6.35	<.001	0.48	0.90
Participant Gender (A)	-0.31	-2.71	.007	-0.53	-0.08
Hostile Sexism (H)	-0.16	-2.85	.005	-0.26	-0.05
G x A	-0.40	-1.76	.080	-0.85	0.05
G x H	-0.23	-2.13	.034	-0.45	-0.02
A x H	-0.15	-1.35	.178	-0.37	0.07
G x A x H	0.27	1.21	.227	-0.17	0.71

*Note.* CI = confidence interval, LL = lower limit, UL = upper limit.

For warmth, a main effect of gender emerged, indicating that in general, male perpetrators were judged as less warm. A significant interaction of participant gender and perpetrator gender and a subsequent probing of the effects, revealed that women,  $\beta = -1.10$ ,  $t = -7.24$ ,  $p < .001$ , 95% CI [-1.62, -0.97]; and, to a significantly lesser degree men,  $\beta = -0.60$ ,  $t = -3.88$ ,  $p < .001$ , 95% CI [-0.90, -0.29];  $\beta_{\text{contrast}} = -0.51$ ,  $t = -2.28$ ,  $p = .023$ , 95% CI [-0.94, -0.07]; perceived female perpetrators as warmer than male perpetrators. However, while men and women ascribed the same amount of warmth to female perpetrators,  $\beta = -1.56$ ,  $t = -0.97$ ,  $p = .334$ , 95% CI [-0.47, 0.16]; men found male perpetrators significantly warmer than women, ( $\beta = 0.35$ ,  $t = 2.28$ ,  $p = .023$ , 95% CI [0.05, 0.65]). A main effect of hostile sexism indicated that

more hostile sexist participants perceived perpetrators in general warmer. An interaction of hostile sexism and perpetrator gender and subsequent pick-a-point analyses indicated, however, that that hostile sexist attitudes only positively influenced the evaluation of male,  $\beta = 0.26$ ,  $t = 3.43$ ,  $p = .001$ , 95% CI [0.11, 0.41]; but not female perpetrators,  $\beta = 0.04$ ,  $t = 0.49$ ,  $p = .622$ , 95% CI [-0.11, 0.19]. The interaction is depicted in Figure 11.

For social distance, effects indicated that female and less hostile sexist participants preferred a greater social distance toward perpetrators of sexual objectification. Moreover, in general, participants preferred more social distance toward male than female perpetrators. A probing of the significant interaction between perpetrator gender and hostile sexism showed that hostile sexism influenced the preferred social distance toward male,  $\beta = -0.28$ ,  $t = 3.52$ ,  $p = .001$ , 95% CI [-0.43, -0.12]; but not female perpetrators,  $\beta = 0.04$ ,  $t = 0.51$ ,  $p = .608$ , 95% CI [-0.19, 0.11]. The interaction is depicted in Figure 12. Overall, these results add to the evidence that no backlash effect for female perpetrators of sexual objectification occurred.

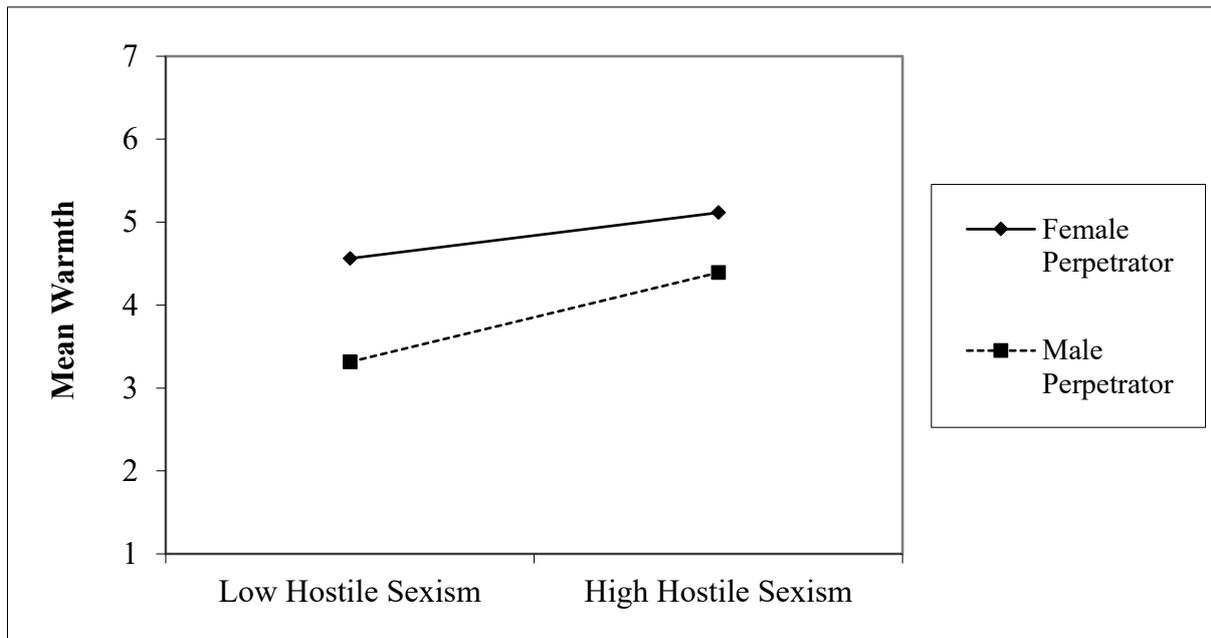


Figure 11. Two-way interaction of perpetrator gender and hostile sexism on warmth.

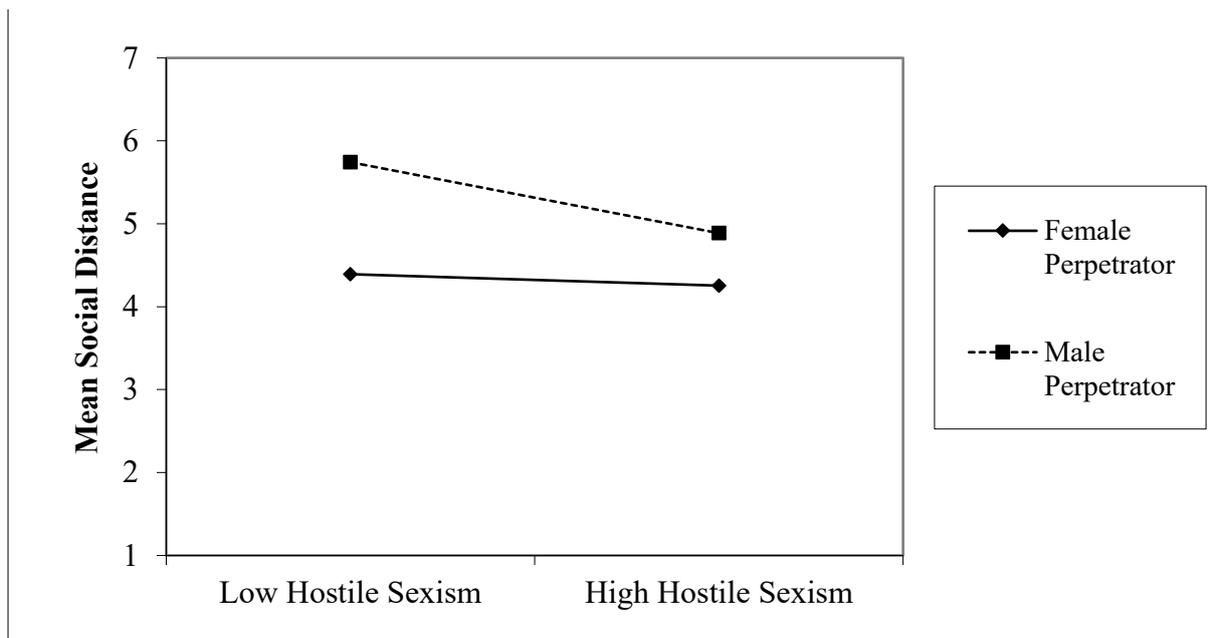


Figure 12. Two-way interaction of perpetrator gender and hostile sexism on social distance.

**Discussion.**

Study 1 examined how third-person observers evaluated targets and perpetrators of sexual objectification. Moreover, we aimed at investigating whether women, who sexually objectify men, receive backlash because of the status-incongruency of female objectifying behavior. To explore these research questions, we conducted an online study. Participants had to evaluate a target and a perpetrator of sexual objectification, which were featured in two vignettes: before and after the sexually objectifying act. Gender and status-constellation of target and perpetrator were manipulated. The target was either female or male and either low-status or high-status; the perpetrator was always the respective other.

Before dealing with our main research questions, we wanted to determine the general evaluation of male, female, low-status, and high-status individuals. In line with previous research (Anderson et al., 2012; Eagly & Wood, 2012; Eckes, 2002; Fiske et al., 2002), Hypotheses 1a-b and 4a-b predicted that in general, high-status and male individuals would be perceived as more powerful and competent but less warm than low-status and female individuals. Our analyses showed that the hypotheses' predictions were only met for the factor status but not for character gender. As also more recent studies show that gender stereotypes still prevail (e.g., Hentschel, Heilman, & Peus, 2019), we assume the lack of gender effects in our study is due simultaneous presentation of a role membership (low-status employee or high-status boss). Indeed, already Alice Eagly and Valerie Steffen (1984) showed that a salient role membership can overwrite gender stereotypes. According to the social role theory, gender stereotypes originally stem from the association of women and men with certain occupational roles (Eagly & Wood, 2012). Especially because the vignettes made the status-group membership much more salient than the respective gender, it is not unlikely that stereotypes on status superseded gender-stereotypes.

Regarding the general evaluation of target and perpetrators of sexual objectification we tested several hypotheses: First, drawing on research on sexual harassment and sexual objectification and norm violations (Bargh et al., 1995; Civile & Obhi, 2016; van Kleef et al., 2011), we assumed sexually objectifying behavior to be associated with power. Therefore, we predicted that participants would perceive individuals, who sexually objectified another person, as relatively more powerful after the event (Hypothesis 2a). Correspondingly, we assumed that participants would evaluate individuals, who have been sexually objectified, as relatively less powerful (Hypothesis 2b). Regarding Hypothesis 2a, we found the exact opposite of what was expected: perpetrators of sexual objectification were evaluated as less powerful after the sexual objectification occurred compared to beforehand. For the targets of sexual objectification (Hypothesis 2b), no significant difference emerged. This suggests that, in general, sexually objectifying another person makes people appear less powerful in the eyes of others and, being objectified does not change how powerful one is perceived by others. We identified two reasons, which might have led to this surprising result: First, participants might have inferred that the perpetrator was motivated to show sexually objectifying behavior in order to gain power because he or she is actually not powerful. This might have led them to evaluate the perpetrator as less powerful. Second, participants were asked to assess the perpetrators' and targets' general power before and after the objectification incident happened (e.g., "Mr. [Ms.] Lange [Krueger] has a great deal of power"; adapted from Anderson et al., 2012). While the results showed that sexual objectification decreased the *overall* attribution of power to the perpetrator by third-person observers, a more specific form of power-attribution might show the opposite expected effect: *the power of the perpetrator over the target*. After all, power can be defined as the capacity of someone to modify another person's state (e.g., Keltner, Gruenfeld, & Anderson, 2003), which is inherent to sexually objectifying behavior as it can have a direct or indirect

effect on its target (e.g., Kozee et al., 2007). Hence, in future studies, power should be assessed by concretely measuring the power relation between targets and perpetrators, respectively.

Drawing on the stereotype content model (Fiske, 2018; Fiske et al., 2002), we hypothesized that perpetrators of sexual objectification would be evaluated as less warm and less competent after the objectification occurred (Hypothesis 5). The results confirmed our predictions: Perpetrators were evaluated as less warm and less competent at Time 2 compared to Time 1. The decrease in warmth is in line with research on sexual harassment (e.g., Cummings & Armenta, 2002), which showed that people disapprove of perpetrators. The decrease in competence substantiates the observation that people find sexual objectification rather unprofessional in a work context (Pryor, 1995).

Further hypotheses on the evaluation of target and perpetrators of sexual objectification were based on the shifting standards model by Monica Biernat and Theresa Vescio (2002). The shifting standards model suggests that when an individual's behavior is found to contradict within-group standards, he or she is judged as more extreme than he/she usually would be. The consequences are contrast effects. As sexual objectification perpetration is less typical for women and individuals with low status, we predicted that after engaging in sexual objectification, women and low-status perpetrators would be evaluated as relatively more powerful than men and high-status individuals (Hypotheses 3a-b). Correspondingly, because being sexually objectified is less typical for men and individuals with high status, we expected that after being sexually objectified, men and high-status targets would be perceived as relatively less powerful than women and low-status individuals (Hypotheses 3c-d). The hypotheses were tested, comparing difference scores of Time 1 and Time 2 on the factors gender and status. The analyses revealed no significant effects for the perpetrators. Consequently, Hypothesis 3a-b could not be substantiated. Confirming Hypothesis 3c, high-status sexual objectification targets were rated as less powerful than low-status targets. The difference scores showed moreover that only

the high-status persons lost ascribed power, the low-status individuals remained on the same level they had before the sexual objectification. Examining the mean of ascribed power more closely, a floor effect for low-status targets can be eliminated as an explanation. Perhaps, the absence of change in the general power attribution to the low-status target is as well a result of the unspecific wording of the power items. The effect of the power difference in men and women was also significant, but in a direction, which was opposite to what was predicted by Hypothesis 3d. Disconfirming the prediction of a contrast effect, women were evaluated with significantly less power than men after the objectification incident. Further inspection of the difference scores revealed that men were not perceived as less, but even as more powerful after being objectified. This finding diverges from the notion of female dyadic power which is discussed by Peter Glick and Susan Fiske (1996). The authors assumed that while men would hold structural power, women would hold dyadic power, which entails the ability to grant or refuse the satisfaction of sexual needs. If our participants had shared this belief, female targets would have been evaluated as more powerful and male targets as less powerful after being objectified, and not the other way around. Perhaps, the difference between male and female perpetrators emerged due to participants' understanding of what male and female perpetrators might find attractive: Research suggests that men with a greater proclivity to sexually harass, find women, over whom they have power, more attractive (Bargh et al., 1995). Analogously, some studies suggested that women would find dominant men more attractive than submissive men (Ahmetoglu & Swami, 2012; Sadalla, Kenrick, & Vershure, 1987). It is reasonable that the participants shared those views on heterosexual attractiveness, and therefore rated male targets as more powerful and female targets as less powerful after these targets had been sexually objectified.

Research on status-incongruent behavior evidenced that people receive backlash when they behave in a way that challenges the current hierarchy (Rudman, Moss-Racusin, Glick, et

al., 2012). Melissa Williams and Larissa Tiedens (2016), for example, found out that women showing explicit dominance behavior were evaluated as less likable. We assumed that sexually objectifying behavior by low-status and female perpetrators would be perceived as status incongruent and would result in backlash. It was predicted that low-status (Hypothesis 6a) and female (Hypothesis 6b) perpetrators would receive backlash, which would be indicated by a smaller attribution of warmth and competence in comparison to high-status and male perpetrators. Furthermore, we anticipated that participants would want to keep more social distance from low status than from high-status perpetrators (Hypothesis 7a) as well as more social distance from women than from men (Hypothesis 7b).

Partially confirming Hypothesis 6a, results indicated that low-status perpetrators were evaluated as less warm but not less competent than high-status perpetrators. However, this was not accompanied with a preference for greater social distance toward low- vs. high-status perpetrators (Hypothesis 7a). To follow up on these inconclusive results, we ran exploratory analyses, including participants' social dominance orientation as a moderator. We predicted that participants with a greater social dominance orientation would be more threatened by low-status perpetrators than high status perpetrators. The results indicated, however, no moderating influence of the social dominance orientation on the attributions of warmth and competence or the social distance toward the target. To conclude, also the exploratory follow-up analysis did not provide any evidence for a backlash effect toward low-status perpetrators of sexual objectification.

Regarding the backlash against objectifying women, the resulting gender differences were opposite to what we expected: Male perpetrators were evaluated as less warm and less competent than female perpetrators. Moreover, participants wanted to keep more social distance from male than from female perpetrators. Hence, Hypotheses 6b and 7b were refuted. The results are, however, in line with previous research on sexual harassment and sexual

violence, which showed that people are more willing to accept sexual harassment by female than male perpetrators (Cummings & Armenta, 2002; Gutek et al., 1983). Although backlash is often investigated by contrasting the assessment of men and women (Rudman, Moss-Racusin, Glick, et al., 2012), backlash for women can theoretically occur, even when men are judged more negatively. This would be the case when male and female behavior would be judged against different standards. In the present research, for instance, the perception of male perpetrators might have been influenced by ethical concerns regarding the consequences of male perpetration behavior; but the perception female perpetrators could have been influenced by resentment toward female dominance. Hence, a backlash effect could have occurred, even if the general evaluation of female perpetrators was less severe than the evaluation of male perpetrators. In order to fully understand if backlash had occurred, we ran additional exploratory moderation analyses that tested the influence of hostile sexism. We figured participant's hostile sexism should predict negative evaluations of female perpetrators if backlash did occur (Masser & Abrams, 2004). The results indicated that hostile sexism moderated the evaluation of male perpetrators. More hostile sexist participants perceived male perpetrators as warmer and preferred less social distance toward them. This is in line with research on sexual violence, which showed that the more hostile sexist people were, the more they were willing to excuse a rapist's behavior (Yamawaki, 2007). However, substantiating the previous findings of no backlash effect regarding objectifying women, hostile sexism did not influence the evaluation of female perpetrators on warmth, competence, or social distance. It seems, female objectifying behavior has not been perceived as status-incongruent, maybe because it is regarded as having a small, less severe impact. The notion that women, who objectify men, would receive backlash has to be dismissed. It is safe to conclude that the gender difference, in the amount people engaging in sexually objectifying behavior (e.g., Gervais et al., 2015; Swim et al., 2001), does not exist not because women would receive backlash when showing sexual objectification.

**Summary and conclusion.**

Study 1 provided several insights into people's evaluation of perpetrators and targets of sexual objectification. First, we learned that perpetrators of sexual objectification were perceived as less powerful after those objectified another person. Moreover, perpetrators, especially those who were male, were rated as less warm and less competent after the act of sexual objectification. Targets of sexual objectification were evaluated as relatively less powerful when they were women and relatively more powerful when they were men. Up to now, it remains, however, unclear whether the reduced attribution of power to perpetrators, as well as the increased ascription of power to male targets, was due to the nature of the scale: instead of assessing the power of one person over the other, the applied scale measured power in an un-specific way.

Beyond, Study 1 demonstrated that women do not suffer from backlash when sexually objectifying men. The assumption that backlash would be a reason why women show less sexually objectifying behavior had to be refuted. Similarly to studies on sexual harassment (e.g., Cummings & Armenta, 2002; Gutek et al., 1983) the results showed, however, that participants preferred greater social distance toward male and, to a lesser degree, toward female perpetrators of sexual objectification. The question arises, whether people perceive sexually objectifying behavior and sexual harassment to be different from one another.

## Study 2

### **Introduction.**

With Study 2, we intended to further investigate people's evaluations of targets and perpetrators of sexual objectification. We focused on questions, which were raised by Study 1. Additionally, we sought to replicate some of the previous findings.

The data of Study 1 was collected with the help of a student who wrote her bachelor thesis on sexual objectification (see Knapp, 2018).

### ***Investigating sexual objectification and sexual harassment.***

Contrary to our initial assumptions, results of Study 1 showed that objectifying women do not receive backlash for their behavior. In fact, the findings indicated that in general male perpetrators were evaluated more negatively than female perpetrators. This outcome corresponds with findings from research on sexual harassment (Cummings & Armenta, 2002; Gutek et al., 1983).

Results of Empirical Part I already suggested that sexual objectification and sexual harassment are related strongly. For instance, the correlation of the Sexual Objectification of Others Inventory with men's Likelihood to Sexually Harass was large. Against this background, the main issue we wanted to investigate in Study 2 was the differentiation of sexual objectification and sexual harassment. Indeed, the theoretical constructs overlap to a great extent: sexually objectifying behavior is often sexually harassing, and sexually harassing behavior is oftentimes objectifying. Although overlapping, the constructs sexual harassment and sexual objectification are, however, different.

Sexual harassment in one of its broader definitions includes unwanted, sexually connoted behavior and the violation of a person's dignity (Diehl, Glaser, & Bohner, 2014). For sexual harassment to be considered harassing, the target person must be aware of the behavior. Sexually objectifying behavior, however, can but must not occur with the target person's

knowledge. For example, an unnoticed look can be objectifying but does not necessarily have to be harassing. People might even welcome being sexually objectified, for instance, by their intimate partners. In this sense, the construct of sexual harassment seems to depend more on the evaluation of the harassed individual as well as the overall situation. The construct of sexual objectification, however, focuses more on the behavior of the objectifying person and even allows for the behavior to be positively regarded. In Study 2, we wanted to explore whether this scientifically defined difference would also play a role in people's evaluations.

In order to investigate the differences between sexual objectification and harassment, we created new versions of the text vignettes used in Study 1: one vignette featuring sexual objectification, another featuring open sexual harassment. Moreover, for comparison, a third vignette was added, depicting a less extreme malicious non-sexual behavior: mild gossiping. To be able to replicate findings from Study 1, the factors type of behavior, and gender and status constellation of target and perpetrator were again included in this second experiment.

***Extending and replicating: power, ethical assessment, and stereotype content.***

Study 1 revealed that contrary to our predictions, perpetrators of sexual objectification were evaluated as less powerful after the objectification occurred. We assumed that this result was partly based on the phrasing of the power scale, which assessed perpetrators' power in an unspecific, general way. Therefore, we decided to measure relational power between perpetrator and target instead.

Power itself is usually defined as the ability to influence others (Copeland, 1994). Because gossiping, objectifying, and harassing behavior can have a direct or indirect influence on the target persons, it was predicted that perpetrators would be evaluated as relatively more powerful than targets. This assumption is substantiated by research on the violation of social norms, which showed that people who violate norms are evaluated as more powerful than people who do not violate social norms (van Kleef et al., 2011). We expected any malicious

behavior to be regarded as norm violation. Hence, this was an additional reason to predict that perpetrators of any malicious behavior would be regarded as more powerful than targets of the same behavior.

*Hypothesis 1:* Perpetrators of any malicious behavior will be evaluated as more powerful than targets of the same behavior.

Moreover, we theorized that the perceived influence on the target's life would be the smallest in the light-gossiping and the largest in the sexual harassment condition. As power is defined as the ability to influence others (Copeland, 1994), we made the following predictions regarding power:

*Hypothesis 2a:* Participants will attribute more relational power to a person who openly sexually harasses someone than to a person who engages in sexual objectification.

*Hypothesis 2b:* Participants will attribute more relational power to a person who covertly sexually objectifies someone than to a person who engages in mild gossiping.

Study 1 discovered that after an incident of sexual objectification, male targets were rated as more powerful than beforehand, and female targets as less powerful than beforehand. One explanation for this finding was that people inferred that objectified men must be attractive. Because the power of men is associated with how attractive they are perceived by women, (Ahmetoglu & Swami, 2012; Sadalla et al., 1987), participants might have evaluated objectified men as more powerful. As this reasoning was developed post hoc, we aimed at testing our idea with Study 2. Because gossiping should not be associated with inferred attractiveness, we predicted that only sexually objectified or harassed men would be perceived as relatively more powerful.

*Hypothesis 3:* Male targets of sexual objectification and sexual harassment but not gossiping will be evaluated as more powerful than female targets.

Another critical aspect of the perception of people's behaviors is the extent to which a behavior is perceived as an ethical issue. The degree to which people recognize an act as an ethical issue was identified as one major component of ethical decision-making model by Thomas Jones (1991). With his model of ethical decision-making, Jones wanted to emphasize the importance of the characteristics of ethical issues themselves. The model has been applied frequently since its publication (see Kish-Gephart, Harrison, & Treviño, 2010; O'Fallon & Butterfield, 2005). Mostly, it was used to investigate the contents of moral reasoning prior to an unethical choice at work (Kish-Gephart et al., 2010) or to examine the effects of issue characteristics on the recognition of a moral issue (e.g., Chia & Lim, 2000). The six components of Jones (1991) ethical decision-making model are thought to influence the degree to which people evaluate an act as immoral: 1. *Social consensus* describes the social agreement according to which a behavior is considered as evil (or good). 2. The *Probability of effect* takes the probability into account to which an act causes harm or benefits. 3. *Temporal immediacy* considers the time between the act in question and the consequences of the act. 4. *Proximity* describes the feeling of social, cultural, psychological, or physical nearness to the victim. 5. *Magnitude of consequences* is defined as "the sum of the harms (or benefits) done to victims (or beneficiaries)" (Jones, 1991, p. 374). 6. The *Concentration of effect* incorporates how much people are affected by an act of a given size.

While the model was originally developed to capture components of conscious moral reasoning, we argue that the same components are likely to be automatically consulted during the process of forming intuitive moral judgments as described by Haidt's social intuitionist approach (Haidt, 2001). However, our focus did not lie on the cognitive processes—whether intuitive or not—on the basis of which people arrive at their judgments of sexual objectification. With the present research, we investigated the influence of contextual factors (i.e., gender and

status constellation) on people's moral judgments of sexual objectification with respect to the components of ethical decision-making described by Jones (1991).

As the number of victims or beneficiaries did not change across conditions of malicious behavior (gossiping, sexual objectification, and sexual harassment), we expected only the first five components to be of relevance. We assumed that people socially consent that sexual objectification and harassment would be a graver ethical issue than gossiping, especially when it is performed by men (e.g., Cummings & Armenta, 2002; Gutek et al., 1983). Furthermore, we anticipated that people would estimate the probability of the effect greater for high-status perpetrators as they exert more power over their counterpart than low-status persons. In general, we estimated the probability of effect, the magnitude of consequences, as well as the temporal immediacy lower for gossiping and sexual objectification because the victim would not be described noticing the malicious behavior. The sum of those assumptions gave rise to the following predictions:

*Hypothesis 4a:* Sexual harassment will be perceived as a graver ethical issue than sexual objectification.

*Hypothesis 4b:* Sexual harassment will be perceived as a graver ethical issue than gossiping.

*Hypothesis 5:* Sexual Objectification and sexual harassment by a man will be perceived as a graver ethical issue than the same behavior by a woman.

*Hypothesis 6:* Any malicious behavior by a high-status person will be perceived as a graver ethical issue than any malicious behavior by a low-status-person.

Applying Jones' (Jones, 1991) ethical decision-making model to sexual harassment in organizations, Lynn Bowes-Sperry and Gary Powell (1999) found out that the degree to which sexual harassment was perceived as unethical, positively influenced people's intentions to intervene. Based on this results, we predicted that the effects of type of behavior, perpetrator

gender, and perpetrator status on the perception as an ethical issue, would indirectly influence the amount of negative sanctioning of the perpetrator.

*Hypothesis 7:* The effects of type of behavior, perpetrator status, and perpetrator gender on the sanctioning of the behavior will be mediated by the recognition of the behavior as an ethical issue.

In Study 1, difference scores, which had been calculated based on the evaluations before and after the sexually objectifying incident, indicated that the attributions of warmth and competence of male perpetrators decreased more strongly than those of female perpetrators. Moreover, Study 1 demonstrated that people preferred to keep a greater social distance toward male than female perpetrators. We expected those effects to replicate in Study 2. However, as we decided against two times of measure, we made assumptions about the general difference between male and female perpetrators in the attribution of warmth and competence. Moreover, we expected a decrease of ascribed competence and warmth and an increase of preferred social distance alongside the severity of the three malicious behaviors. We made the following predictions:

*Hypothesis 8:* Compared to female perpetrators, male perpetrators of any malicious behavior will be evaluated as less competent and less warm.

*Hypothesis 9:* The preferred social distance will be greater toward male than female perpetrators.

*Hypothesis 10a:* In comparison to perpetrators of sexual objectification, participants will attribute less warmth and competence to and prefer more social distance toward perpetrators of sexual harassment.

*Hypothesis 10b:* In comparison to perpetrators of mild gossiping, participants will attribute less warmth and competence to and prefer more social distance toward perpetrators of sexual harassment.

**Method.*****Participants.***

The required sample size was calculated using G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007). Sample size calculation was based on the planned within-between-subjects ANOVA for the investigation of power. The number of groups was set to 12, the number of measurements to 2, power to .95, and the effect size to a medium effect of .25. For the correlation between repeated measures, we used the average correlation of attributed power to target and perpetrators at Time 1 and Time 2 of Study 1 ( $r = -.57$ ). G\*Power calculated a required sample of 336 participants.

$N = 338$  participants took part in the online study. In contrast to Study 1, no participants had to be excluded from data analyses because of any irregularities. On average, participants were 33.15 years old ( $SD = 17.21$ ). Two hundred thirty-three participants indicated to be female, 100 to be male and five to be of another gender. Most participants (84.6 %) indicated to be heterosexual. Of all participants, 2.4 % indicated to be homosexual, 6.2 % bisexual, and 6.8 % specified other sexual orientations. Regarding participants highest education, 23.7 % of all participants had less than a high-school diploma, 32% had a high-school diploma, 28.1 %, had a bachelor's degree or equivalent training, 15.1 % a master's degree and 1.2 % a Ph.D. Most participants were recruited via social media (65.4 %) or recommendations by friends (9.5 %). Participants were eligible for a raffle of a 30€ voucher and were able to receive course credits if they were enrolled in psychology at Bielefeld University.

***Cover story.***

The cover story was the same as in Study 1 (see p. 155).

***Design.***

Study 2 featured a 2 (gender constellation) by 2 (status constellation) by 3 (type of behavior) between-subjects design. All participants were randomly assigned to one of twelve

conditions. Table 43 depicts the number of participants in each cell. Participants were equally distributed to each cell according to a chi-squared test ( $\chi^2_{2, N=338} = 0.63, p = .730$ ). Moreover, women ( $\chi^2_{2, N=233} = 1.81, p = .405$ ) and men ( $\chi^2_{2, N=100} = .88, p = .643$ ) were equally distributed to each cell. A chi-squared test for non-binary-identified participants could not be calculated because the statistical assumptions of a required cell count of at least five were not met.

Table 43

*Total and Participant's-Gender-Separated Number of Participants in each Cell*

Perpetra- tor Gen- der	Perpetra- tor Status	Types of Behavior		
		Gossiping	Sexual Objectifica- tion	Sexual Harassment
Female	Low	26 (15 w., 11 m.)	32 (24 w., 7 m., 1 o.)	28 (22 w., 5 m., 1 o.)
	High	30 (21 w., 9 m.)	30 (20 w., 10 m.)	21 (14 w., 7 m.)
Male	Low	25 (17 w., 8 m.)	32 (24 w., 6 m., 2 o.)	26 (20 w., 6 m.)
	High	27 (17 w., 10 m.)	28 (20 w., 8 m.)	33 (19 w., 13 m., 1 o.)

*Note.* Abbreviations stand for women (w.), men (m.) and any other non-binary gender (o.).

### ***Text vignettes.***

We used the same two vignettes as in Study 1. This time, however, we adapted the second vignette, which had been used to depict sexually objectifying behavior. For Study 2, we created three versions of this vignette, comprising distinct types of malicious behavior. The first version contained gossiping as malicious behavior: That is, at the cafeteria, the protagonist overheard how the perpetrator said to one of his colleagues: “She [he] really eats lasagna every day”. The second version was created to show sexually objectifying behavior. Therefore, we added the information that the protagonist saw *one day* how the perpetrator Mr. [Ms.] Lange looked *unobtrusively* at the target’s ([Ms.] Mr. Krueger) bottom. Moreover, we added that the protagonist noted a situation in the cafeteria in which the perpetrator pointed at the target’s bottom and whispered to one of his colleagues “I’d love to pinch that luscious butt”. We added that the target *did not notice* the comment. The third version was created in order to depict open

sexual harassment. Here, the protagonist was described as *often* noticing how the perpetrator *demonstratively* looks at the target's bottom. Again, the perpetrator was described as pointing at the target's bottom and whispering to one of his colleagues "I'd love to pinch that luscious butt". In the third version, however, we added that the target had *definitely noticed* the perpetrator's comment. The text vignettes can be found in Appendix F, Vignette Time 2a-c, pp. 304-305.

### *Measures.*

Warmth and competence and social distance were assessed using the same scales as in Study 1 (Fiske et al., 2002, see p. 157; resp. Bogardus, 1933 and Scheffer, 2013, p. 158).

If not indicated otherwise, all scales were assessed using a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

#### *Sense of Power Scale.*

To assess the ascribed power, we used the adapted Sense of Power Scale by Cameron Anderson and colleagues (2012), which we already implemented in Study 1. In Study 2, however, we rephrased the items again in order to assess relational power: "Mr. [Ms.] Krueger [Lange] can get Ms. [Mr.] Lange [Krueger] to do what he [she] wants". A complete list of the adapted German items can be found in Appendix F, Table F1 on page 307.

#### *Recognition as an Ethical Issue.*

To assess to what extent the perpetrator's behavior (gossiping, sexual objectification or sexual harassment) would be evaluated as an ethical issue, we took five items from the Sexualization of Work Environment Scale by Lynn Bowes-Sperry and Gary Powell (1999) and adapted them for our use. An example item is "Mr. [Ms.] Lange's behavior is unethical.". The items were translated into German with the help of several English-speakers. The items can be found in Appendix F, Table F2 on page 307.

*Negative Sanctioning.*

In order to assess participant's negative sanctioning of the perpetrators, we asked the participants to imagine that they would be the HR manager in the company and were able to take measures affecting Mr. [Ms.] Krüger and Ms. [Mr.] Lange. Although we were only interested in the negative sanctioning of the perpetrators, we chose to measure the sanctioning of both characters in order to avoid arousing any suspicion regarding the intentions of the study. For both characters, participants had to rate the extent to which they would take four positive (e.g., salary increase) and four negative measures (e.g., suspension). Positive measures were recoded prior to the analyses. The full list of all items can be found in Appendix F, Table F3 on page 308.

*Additional scales.*

As part of a bachelor's thesis (Knapp, 2018) the following scales were also assessed, but are not of any interest for the research at hand: Social Dominance Orientation (SDO<sub>6</sub>; Sidanius & Pratto, 2001; German translation by Six et al., 2001), Social Dominance Orientation (SDO<sub>7</sub>; Carvacho et al., in preparation; Ho et al., 2015), Ambivalent Sexism Inventory (2001b; German translation by Eckes & Six-Materna, 1999), and a slider assessing the relative power of target vs. perpetrator.

*Internal consistencies.*

Internal consistencies can be found in Table 44. The internal consistencies ranged from acceptable to excellent.

Table 44  
*Cronbach's Alphas of Each Scale*

Scale	min.- max. $\alpha$
Competence	.76 - .85
Negative Sanctioning	.75 - .85
Recognition as Ethical Issue	.85 - .86
Sense of Power Scale	.91 - .92
Social Distance Scale	.87 - .90
Warmth	.76 - .86

*Note.* Ranges include alphas of scales assessing evaluations of Ms. [Mr.] Lange (and Mr. [Ms.] Krueger).

***Procedure.***

The procedure was the same as in Study 1. However, in Study 2, we showed both vignettes in a row. Hence, participants rated both the target and the perpetrator just once. Moreover, after the last scale on power, we measured the negative sanctioning of first, the target and second the perpetrator. Afterward, participants were asked to indicate how much of an ethical issue the perpetrator's behavior was.

**Results.**

If not reported otherwise, all statistical assumptions of the following analyses were met. An alpha level of .05 was used for all statistical tests.

Hypothesis 1 assumed that perpetrators of any malicious behavior would be evaluated as more powerful than targets of any malicious behavior. Hypothesis 2a predicted that perpetrators of sexual harassment would be perceived as relatively more powerful than perpetrators of sexual objectification. Hypothesis 2b predicted that perpetrators of sexual objectification would be perceived as relatively more powerful than perpetrators of gossiping. Hypothesis 3 predicted that male targets would be seen as more powerful than female targets of sexual objectification, sexual harassment, but not gossiping. In order to test this set of hypotheses, a mixed ANOVA was calculated. Role (target and perpetrator) was deployed as a within-subjects variable, status (low and high), gender (female and male) and type of behavior (gossiping, sexual objectification, sexual harassment) were deployed as between-subjects variables.<sup>21</sup> Levene's tests showed that the variances were equal for the target's power evaluation,  $F(11,329) = 0.69$ ,  $p = .746$ ; but not the perpetrator's power evaluation,  $F(11,326) = 3.36$ ,  $p < .001$ . However, due to the large sample, equal sample sizes in each group and the ANOVA's robustness, we continued with the analysis (Field, 2009). Results are depicted in Table 45.

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<sup>21</sup> As in Study 1, the factor role was confounded with status and gender: when the perpetrator was male [female] and of low-status [high-status] then the target was female [male] and of high-status [low-status]. Hence, main effects of status and gender were uninterpretable.

Table 45

*Results of ANOVA on Ascribed Power, with the Factors Role, Type of Behavior, Perpetrator Status and Perpetrator Gender*

Independent Variables	Sum of Squares	<i>df</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
R	0.29	1	0.23	.635	.00
T	1.03	2	1.27	.282	.01
R x T	0.13	2	0.05	.951	.00
R x S	657.72	1	515.22	<.001	.61
R x G	0.00	1	0.00	.973	.00
R x T x S	2.82	2	1.10	.333	.01
R x T x G	1.49	2	0.58	.558	.00
R x S x G	0.02	1	0.02	.895	.00
R x T x S x G	0.71	2	0.28	.757	.00
Error (within)	416.16	326			
Error (between)	132.54	326			

*Note.* R = Role, T = Type of Behavior, S = Perpetrator Status, G = Perpetrator Gender. As the factors gender and status are confounded with role, any effects of gender and status without role were omitted.

Hypothesis 1 could not be substantiated as targets and perpetrators did not differ in the amount of power attributed to them. To check, whether the predicted difference between target and perpetrators depended on the perpetrator's and target's status groups, the significant interaction effect between role and status was investigated by applying Bonferroni post hoc tests. The results indicated a power-difference between low-status ( $M_{targ.} = 3.11$ ,  $SD_{targ.} = 0.95$ ,  $M_{perp.} = 3.06$ ,  $SD_{perp.} = 0.82$ ) and high-status characters ( $M_{targ.} = 5.08$ ,  $SD_{targ.} = 0.93$ ,  $M_{perp.} = 5.05$ ,  $SD_{perp.} = 0.96$ ;  $p_{adj.} < .001$ ,  $p_{adj.} < .001$ ), but not between low-status targets and perpetrators ( $p_{adj.} = 1$ ) or high-status targets and perpetrators ( $p_{adj.} = 1$ ). Hypotheses 2a-b would have implicated a significant interaction effect between the type of behavior and role. However, no such effect was obtained. The hypothesis that there would be a power difference between the types of perpetration had to be dismissed. Hypothesis 3 predicted a significant three-way interaction between role type and perpetrator's gender. However, the interaction was not significant (see Table 45). The assumption that male targets of sexual objectification and harassment would be perceived as more powerful than female targets was refuted.

Hypotheses 4-6 pertained to the perception of the behaviors as unethical. Hypotheses 4a-b predicted that participants would find sexual harassment as most ethically problematic, sexual objectification as lesser ethically problematic and talking behind someone's back as even lesser ethically problematic. Hypothesis 5 predicted that a male perpetrator's sexual objectification and sexual harassment would be seen as a graver ethical issue as a female's perpetrators behavior. Hypothesis 6 assumed that a high-status perpetrator's behavior in general would be seen as a graver ethical issue than a low-status perpetrator's behavior. To test those assumptions, an ANOVA with the factors type of behavior, perpetrator's gender, and perpetrator's status was calculated. Descriptive results are displayed in Figure 13. The ANOVA's results can be found in Table 46.

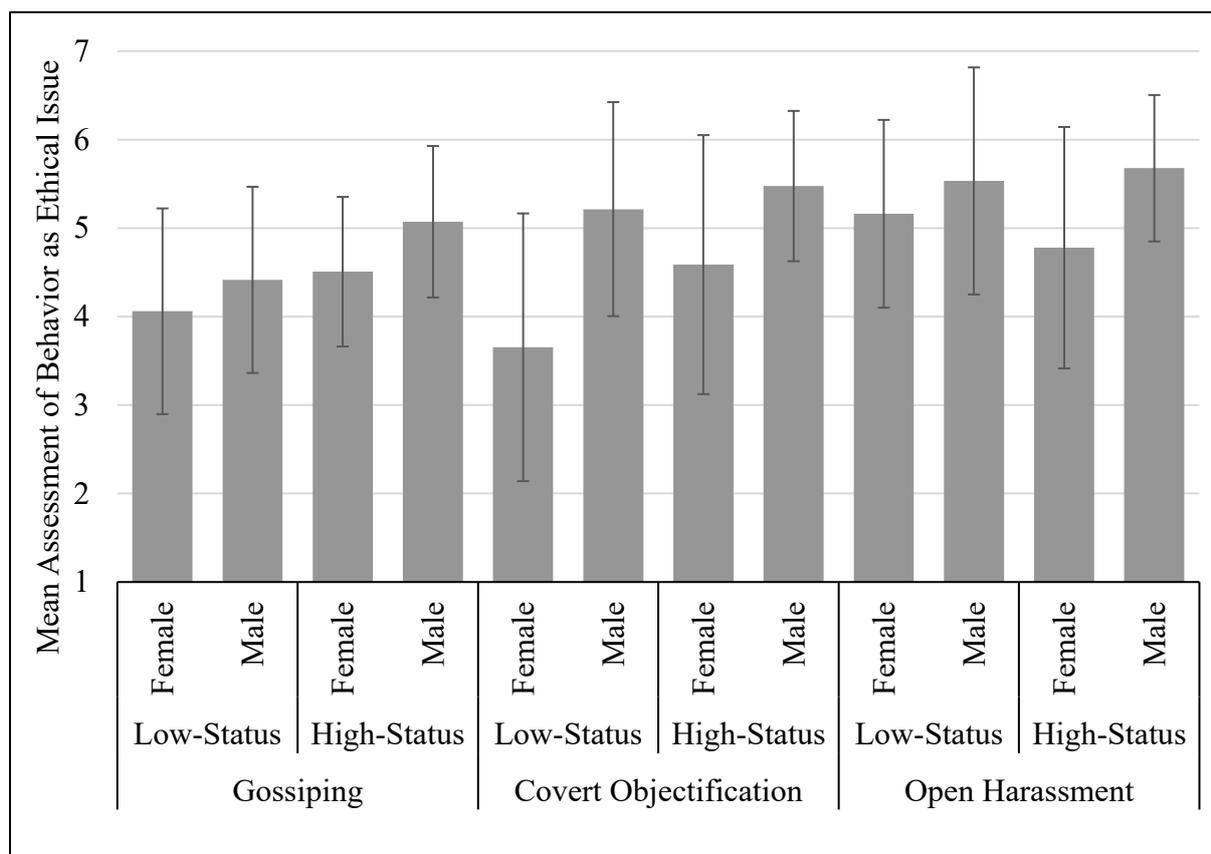


Figure 13. Mean assessment of behavior as an ethical issue for the groups type of behavior, perpetrator status, and perpetrator gender. Bars indicate standard deviations.

Table 46

*ANOVA on Mean Assessment of Behavior as an Ethical Issue with the Factors Type of Behavior, Perpetrator Status, and Perpetrator Gender*

Independent Variables	Sum of Squares	<i>df</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
T	33.94	2	12.55	<.001	.07
S	9.81	1	7.26	.007	.02
G	49.73	1	36.78	<.001	.10
T x S	8.77	2	3.24	.040	.02
T x G	9.30	2	3.44	.033	.02
S x G	0.01	1	0.01	.934	.00
T x S x G	5.57	2	2.06	.129	.01
Error	440.76	326			

*Note.* T = Type of Behavior, S = Perpetrator Status, G = Perpetrator Gender.

The ANOVA produced significant main effects for type of behavior, perpetrator status, and perpetrator gender as well as interaction effects of type of behavior with perpetrator status and type of behavior with perpetrator gender. The main effect of type of behavior indicated a difference between all three types of behavior. However, the descriptive values and the significant interactions of type of behavior with perpetrator status and perpetrator gender, implied that the obtained main effect does not prevail in every condition. The main effect of perpetrator status cannot be interpreted for the same reason. However, the main effect of perpetrator gender appeared on every factor level and indicated that, on average, malicious behavior by a male perpetrator was judged as a graver ethical issue than malicious behavior by a female perpetrator. A closer investigation of the interaction of type of behavior with perpetrator status using Bonferroni post hoc tests indicated that sexual harassment of low-status perpetrators ( $M = 5.39$ ,  $SD = 1.21$ ) was judged as a graver ethical issue than when a low-status person showed sexual objectification ( $M = 4.41$ ,  $SD = 1.57$ ;  $p_{adj.} < .001$ ) or talked behind someone's back ( $M = 4.23$ ,  $SD = 1.12$ ;  $p_{adj.} < .001$ ). Sexual objectification and talking behind someone's back did not differ significantly for low-status perpetrators ( $p_{adj.} = 1$ ). Talking behind someone's back ( $M = 4.78$ ,  $SD = 0.89$ ), sexual objectification ( $M = 5.03$ ,  $SD = 1.27$ ) and sexual harassment ( $M = 5.21$ ,  $SD = 1.22$ ) by a high-status perpetrator were judged as equally grave ethical issues

(all  $p_{adj.} > .164$ ). Further Bonferroni post hoc tests showed that it was seen as a graver ethical issue when a high-status person talked behind someone's back ( $p_{adj.} = .014$ ) or engaged in sexual objectification ( $p_{adj.} = .005$ ) than if a low-status person showed the same behaviors. For sexual harassment, no difference emerged between low-status and high-status perpetrators ( $p_{adj.} < .597$ ). Further inspection of the interaction between type of behavior and perpetrator gender revealed the following: A woman talking behind someone's back ( $M = 4.27, SD = 1.04$ ) and a woman's sexual objectification ( $M = 4.14, SD = 1.55$ ) was seen as less severe ethical issue than sexual harassment ( $M = 4.94, SD = 1.25; p_{adj.} = .009, p_{adj.} = .001$ ). Between gossiping and sexual objectification, no significant difference emerged ( $p_{adj.} = 1$ ). For male perpetrators, the pattern was different: Talking behind someone's back ( $M = 4.73, SD = 1.01$ ) was seen as less severe ethical issue than sexual objectification ( $M = 5.35, SD = 1.03; p_{adj.} = .020$ ) and sexual harassment ( $M = 5.60, SD = 1.10; p_{adj.} < .001$ ). The latter behaviors did not differ significantly from each other ( $p_{adj.} = .674$ ). Further post hoc tests of the interaction support the main effect of gender: male gossiping ( $p_{adj.} = .041$ ), male sexual objectification ( $p_{adj.} < .001$ ) and male sexual harassment were judged as a graver ethical issues ( $p_{adj.} = .005$ ) than the same behaviors of a female person. To conclude, the prediction that gossiping would be judged as the least, and sexual harassment as the greatest ethical issue (Hypotheses 4a-b) could not be substantiated. Furthermore, the assumption that a high-status perpetrator's behavior would be seen as a graver ethical issue (Hypothesis 6) could only be confirmed for gossiping and sexual objectification but not for sexual harassment. The hypothesis that sexual objectification and sexual harassment by a male perpetrator would be judged as a graver ethical issue than the same behavior by a female perpetrator could be substantiated (Hypothesis 5). However, also gossiping by a male person was evaluated as a graver ethical issue than gossiping by a female perpetrator.

Hypothesis 7 predicted that the effect of gender, status, and type of behavior on the sanctioning of the behavior would be mediated by the recognition of a behavior as an ethical issue. To test this assumption, a moderated moderated mediation was calculated with SPSS PROCESS (Model 12<sup>22</sup>; Hayes, 2016). Type of behavior was instantiated as a dummy-coded predictor. Using simple indicator coding, the gossiping condition was set reference category (see Hayes, 2018). Perpetrator status and gender were set as moderator, the z-value of recognition as an ethical issue as mediator and the z-value of negative sanctioning as criterion. All variables were centered prior to the analysis. The overall models on the mediator and the criterion were significant,  $R^2 = .22$ ,  $F(7, 326) = 8.39$ ,  $p < .001$ ,  $R^2 = .27$ ,  $F(15, 322) = 7.91$ ,  $p < .001$ . The results can be obtained from Table 47.

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<sup>22</sup> To investigate eventual interaction effects of the predictors with the mediator on the criterion, also Model 73 was applied exploratorily. The results did, however, not provide any added value, which is why we continued with the more parsimonious model.

Table 47

*Results of Moderated Moderated Mediation with Recognition of the Behavior as Ethical Issue as Mediator and Negative Sanctioning as Criterion*

Criteria with predictors and moderators	$\beta$	$t$	$p$	95% CI	
				LL	UL
Ethical Issue					
O'	0.17	1.45	.148	-0.06	0.41
H'	0.60	4.86	<.001	0.36	0.84
S	0.43	2.47	.014	0.09	0.77
G	0.35	2.05	.041	0.01	0.70
O' x S	0.03	0.13	.897	-0.44	0.50
H' x S	-0.52	-2.10	.036	-1.00	-0.03
O' x G	0.59	2.48	.013	0.12	1.06
H' x G	0.14	0.55	.583	-0.35	0.62
S x G	0.16	0.47	.641	-0.52	0.84
O' x S x G	-0.68	-1.43	.153	-1.62	0.25
H' x S x G	0.25	0.50	.619	-0.72	1.21
Negative Sanctioning					
Ethical Issue	0.40	7.46	<.001	0.30	0.51
O'	0.16	1.40	.161	-0.07	0.39
H'	0.25	1.98	.049	0.00	0.49
S	0.07	0.43	.667	-0.26	0.41
G	-0.12	-0.69	.491	-0.45	0.22
O' x S	0.05	0.20	.844	-0.41	0.50
H' x S	-0.06	-0.23	.819	-0.53	0.42
O' x G	0.37	1.59	.113	-0.09	0.83
H' x G	0.64	2.67	.008	0.17	1.11
S x G	0.23	0.69	.491	-0.43	0.90
O' x S x G	0.04	0.09	.925	-0.87	0.96
H' x S x G	-0.56	-1.16	.245	-1.50	0.39

*Note.* O' = Type of Behavior: Objectification vs. Gossiping, H' = Type of Behavior: Harassment vs. Gossiping, S = Perpetrator Status, G = Perpetrator Gender, CI = confidence interval, LL = lower limit, UL = upper limit.

The moderated moderated mediation revealed a significant effect of type of behavior on the mediator. Naturally, the obtained effects were similar to those of the previous ANOVA: Harassment, but not sexual objectification, was perceived as a graver ethical issue than gossiping. Moreover, the behavior of a high-status person was perceived more ethically problematic than the behavior of a low-status person; and the behavior of a male perpetrator was seen as a graver ethical issue than the behavior of a female perpetrator. Furthermore, two interaction

effects of harassment vs. gossiping and status, as well as sexual objectification vs. gossiping and perpetrator gender, were obtained. As the previous ANOVA and the subsequent post hoc test already investigated the interaction of those variables in detail, we refrained from further probing.

For the criterion negative sanctioning results showed that recognition as an ethical issue had a significant influence: the more a behavior was perceived as an ethical issue, the more it was negatively sanctioned. Moreover, a main effect of the dummy coded variable type of behavior: harassment vs. gossiping indicated that harassment was more sanctioned than gossiping, independently of whether the behavior was perceived as an ethical issue or not. A significant interaction of type of behavior: harassment vs. gossiping with perpetrator gender indicated, moreover, that the effect harassment vs. gossiping on negative sanctioning was different for male and female perpetrators. A pick-a-point analysis revealed that for male perpetrators of all status groups harassment was more sanctioned than gossiping,  $\beta = 0.57$ ,  $t = 3.30$ ,  $p = .001$ , 95% CI [0.23, 0.90]; whereas for female perpetrators of all status groups no such effect occurred,  $\beta = -0.07$ ,  $t = -0.43$ ,  $p = .668$ , 95% CI [-0.42, 0.27]. Furthermore, male perpetrators of harassment were more sanctioned than female ones,  $\beta = 0.52$ ,  $t = 3.04$ ,  $p = .003$ , 95% CI [0.18, 0.86]. No gender difference occurred for perpetrators of sexual objectification,  $\beta = 0.25$ ,  $t = 1.52$ ,  $p = .128$ , 95% CI [-0.07, 0.58] or gossiping,  $\beta = 0.12$ ,  $t = 0.69$ ,  $p = .491$ , 95% CI [-0.45, 0.22]. To investigate possible mediation effects, indirect effects were calculated for all conditions. See Table 48 to Table 50 for an overview of all direct and indirect effects in all conditions.

Table 48

*Direct and Indirect Effects of Type of Behavior on Negative Sanctioning at the Values of the Moderators*

Type of behavior	Perpetrator Gender	Perpetrator Status	Direct Effects					Indirect Effects		
			$\beta$	$t$	$p$	95% CI		$\beta$	95% CI	
						LL	UL		LL	UL
O'	F	Low	-0.03	-0.15	.879	-0.48	0.41	-0.12	-0.34	0.09
O'	F	High	-0.01	-0.05	.964	-0.46	0.44	0.03	-0.16	0.22
O'	M	Low	0.31	1.31	.190	-0.16	0.98	0.25	0.06	0.46
O'	M	High	0.38	1.62	.105	-0.08	0.84	0.13	-0.02	0.28
H'	F	Low	-0.19	-0.74	.459	-0.68	0.31	0.34	0.15	0.55
H'	F	High	0.04	0.16	.875	-0.43	0.50	0.08	-0.10	0.27
H'	M	Low	0.73	3.15	.002	0.27	1.19	0.35	0.16	0.55
H'	M	High	0.40	1.61	.108	-0.09	0.89	0.19	0.04	0.35

*Note.* CI = confidence interval, LL = lower limit, UL = upper limit, O' = Type of Behavior: Objectification vs. Gossiping, H' = Type of Behavior: Harassment vs. Gossiping, F = Female, M = Male.

Table 49

*Direct and Indirect Effects of Perpetrator Gender on Negative Sanctioning at the Values of the Moderators*

Type of behavior	Perpetrator Status	Direct Effects					Indirect Effects		
		$\beta$	$t$	$p$	95% CI		$\beta$	95% CI	
					LL	UL		LL	UL
G	Low	-0.23	-1.00	.316	-0.69	0.22	0.11	-0.06	0.30
G	High	-0.00	-0.00	.998	-0.48	0.48	0.18	0.03	0.33
O	Low	0.12	0.48	.628	-0.35	0.58	0.48	0.25	0.76
O	High	0.39	1.77	.078	-0.04	0.83	0.28	0.10	0.47
H	Low	0.69	2.81	.005	0.21	1.17	0.12	-0.09	0.31
H	High	0.36	1.50	.135	-0.11	0.83	0.28	0.09	0.50

*Note.* CI = confidence interval, LL = lower limit, UL = upper limit, G = Gossiping, O = Objectification, H = Harassment.

Table 50

*Direct and Indirect Effects of Perpetrator Status on Negative Sanctioning at the Values of the Moderators*

Type of behavior	Perpetrator Gender	Direct Effects					Indirect Effects		
		$\beta$	$t$	$p$	95% CI		$\beta$	95% CI	
					LL	UL		LL	UL
G	Female	-0.04	-0.18	.854	-0.50	0.42	0.14	-0.02	0.32
G	Male	1.19	0.77	.441	-0.29	0.67	0.20	0.04	0.39
O	Female	-0.02	-0.09	.932	-0.46	0.42	0.29	0.06	0.56
O	Male	0.26	1.13	.260	-0.19	0.70	0.08	-0.09	0.25
H	Female	0.18	0.72	.473	-0.31	0.67	-0.12	-0.33	0.09
H	Male	-0.14	-0.63	.531	-0.60	0.31	0.05	-0.11	0.24

*Note.* CI = confidence interval, LL = lower limit, UL = upper limit, G = Gossiping, O = Objectification, H = Harassment.

The confidence intervals of the indirect effects support the mediation hypothesis (Hypothesis 7) for some but not all conditions, as the bootstrapped confidence intervals did not include zero in every case (Field, 2013). Results showed an indirect effect for sexual objectification vs. gossiping over the recognition as an ethical issue for low-status men. Moreover, when contrasting harassment against gossiping, type of behavior had a significant indirect effect over the recognition as an ethical issue on sanctioning for men in general, as well as low-status women. Perpetrator gender had a significant indirect effect on negative sanctioning in almost every condition; only gossiping and harassment of low-status persons was not sanctioned more when performed by a male perpetrator in comparison to a female perpetrator. An indirect effect of perpetrator status via the perception as an ethical issue on negative sanctioning could be obtained for male gossipers and female objectifiers, indicating more sanctioning when both were of high status.

Based on results from Study 1, we anticipated that participants would rate male perpetrators of any malicious behavior as less competent and less warm than female perpetrators

(Hypothesis 8) and that participants would prefer greater social distance toward male compared to female perpetrators (Hypothesis 9). Hypotheses 10a-b predicted a difference between the three types of behavior. It was assumed that while participants would want to keep social distance toward sexual harassers, they would prefer to keep somewhat less social distance toward objectifiers and even less toward people who talk behind someone's back. Moreover, the Hypotheses 10a-b assumed that participants would ascribe the least warmth and competence to the perpetrator of sexual harassment and the most warmth and competence to the person who talked behind the target's back. To test these hypotheses, three ANOVAS were calculated. To exploratorily test for any unexpected interactions, the factors perpetrator's status and gender were included in all three ANOVAs additionally to the factor type of behavior. The descriptive results are depicted in Figure 14; the ANOVAS' results are shown in Table 51.

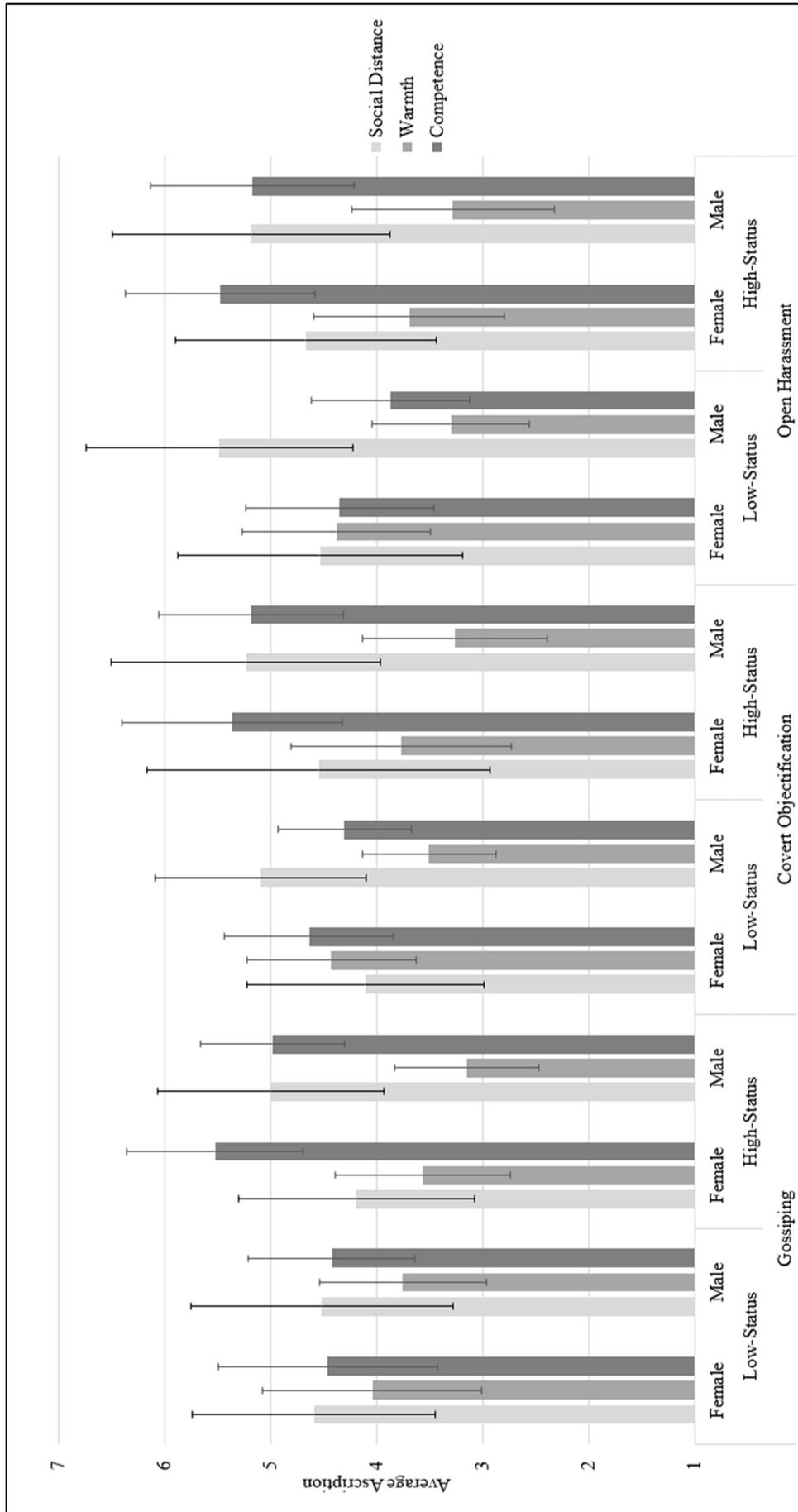


Figure 14. Mean preferred social distance, mean ascribed warmth and mean ascribed competence for the factors perpetrator's gender, perpetrator's status and type of behavior. Bars indicate standard deviations.

Table 51

*Results of ANOVAs on Preferred Social Distance, Ascribed Competence and Ascribed Warmth with the Factors Type of Behavior, Perpetrator Status, and Perpetrator Gender*

Independent Variables	Dependent Variable	Sum of Squares	<i>df</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
T	Social Distance	8.24	2	2.69	.070	.02
	Warmth	0.78	2	0.53	.588	.00
	Competence	1.52	2	0.96	.385	.01
S	Social Distance	0.55	1	0.36	.549	.00
	Warmth	16.64	1	22.73	<.001	.07
	Competence	73.97	1	93.31	<.001	.22
G	Social Distance	34.70	1	22.66	<.001	.07
	Warmth	30.33	1	41.41	<.001	.11
	Competence	8.00	1	10.10	.002	.03
T x S	Social Distance	2.05	2	0.67	.514	.00
	Warmth	0.47	2	0.32	.728	.00
	Competence	2.97	2	1.88	.155	.01
T x G	Social Distance	3.40	2	1.11	.331	.01
	Warmth	2.62	2	1.79	.169	.01
	Competence	0.28	2	0.17	.841	.00
S x G	Social Distance	0.05	1	0.03	.861	.01
	Warmth	2.13	1	2.91	.089	.01
	Competence	0.07	1	0.08	.774	.01
T x S x G	Social Distance	7.13	2	2.33	.099	.01
	Warmth	2.14	2	1.46	.233	.01
	Competence	2.06	2	1.30	.275	.01
Error	Social Distance	499.37	326			
	Warmth	238.75	326			
	Competence	258.43	326			

*Note.* T = Type of Behavior, S = Perpetrator Status, G = Perpetrator Gender.

As predicted by Hypothesis 8, significant main effects showed that participants evaluated male perpetrators as less warm ( $M = 3.38$ ,  $SD = 0.80$ ) and less competent ( $M = 4.64$ ,  $SD = 0.96$ ) compared to female perpetrators ( $M = 3.97$ ,  $SD = 0.97$ ;  $M = 4.99$ ,  $SD = 1.06$ ). Moreover, participants wanted to have more social distance toward male perpetrators ( $M = 5.11$ ,  $SD = 1.22$ ) than toward female perpetrators ( $M = 4.44$ ,  $SD = 1.23$ ). Hence, also Hypothesis 9 was substantiated. In order to better understand the results, an exploratory stepwise regression

analysis with type of behavior, perpetrator status, perpetrator gender, participant gender<sup>23</sup> as well as the z-values of warmth, competence, recognition as an ethical issue on the preferred social distance was calculated. The final model showed that mainly ascribed warmth,  $\beta = -0.50$ ,  $p < .001$ ,  $t = -10.82$ , 95% CI [-0.59, -0.41]; followed by recognition as an ethical issue,  $\beta = 0.21$ ,  $p < .001$ ,  $t = -4.40$ , 95% CI [0.11, 0.30]; ascribed competence,  $\beta = -0.17$ ,  $p < .001$ ,  $t = -4.27$ , 95% CI [-0.25, -0.09]; and participant gender (women coded as 0, men as 1),  $\beta = -0.36$ ,  $p < .001$ ,  $t = -4.23$ , 95% CI [-0.53, -0.19]; influenced the social distance toward the perpetrator. Perpetrator status, type of behavior and perpetrator gender or had no direct influence on social distance ( $p = .079$ ,  $p = .089$ ,  $p = .774$ ). All significant variables of the final model together explained 51% of the variance of social distance.

The ANOVAs' main effects moreover showed that high-status perpetrators were perceived less warm ( $M = 3.46$ ,  $SD = 0.91$ ) but more competent ( $M = 5.23$ ,  $SD = 0.91$ ) than low-status perpetrators ( $M = 3.87$ ,  $SD = 0.91$ ;  $M = 4.33$ ,  $SD = 0.89$ ). Participants preferred no different amount of social distance toward low-status ( $M = 4.75$ ,  $SD = 1.25$ ) and high-status perpetrators ( $M = 4.81$ ,  $SD = 1.33$ ).

Regarding Hypotheses 10a-b, no significant main effect could be obtained for the type of behavior. People who talk behind someone's back ( $M = 3.65$ ,  $SD = 0.90$ ;  $M = 4.83$ ,  $SD = 1.06$ ), objectifiers ( $M = 3.74$ ,  $SD = 0.95$ ;  $M = 4.89$ ,  $SD = 0.91$ ) and sexual harassers ( $M = 3.61$ ,  $SD = 0.95$ ;  $M = 4.69$ ,  $SD = 1.10$ ) were perceived holding no different amount of warmth and competence. Also, participants indicated they would want to keep no different amount of social distance from people who gossip ( $M = 4.57$ ,  $SD = 1.16$ ), objectify ( $M = 4.75$ ,  $SD = 1.34$ ) or harass ( $M = 5.02$ ,  $SD = 1.32$ ). No significant higher order interaction emerged. Consequently, Hypotheses 10a-b could not be affirmed.

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<sup>23</sup> Only women and men were included into this analysis.

**Discussion.**

Study 2 aimed at deepening our knowledge on how people evaluate perpetrators and targets of sexual objectification. Building on the results of Study 1, we wanted to replicate some of the previous findings. Foremost, however, we intended to extend our research in order to investigate the differences between sexual objectification and sexual harassment in people's evaluations of perpetrators. Furthermore, we incorporated an ethical decision-making framework and examined what influences people's judgments of sexual objectification, sexual harassment, and for comparison, mild gossiping, as immoral.

Public acts of social norm violations are known to increase attributed power (van Kleef et al., 2011). However, other than expected, results of Study 1 showed that perpetrators were perceived as less powerful after the sexually objectifying act was committed. We attributed this surprising effect to the measure of power, which assessed power in a more general way. As a consequence, in Study 2 we assessed power with a relational measure and expected the effect to emerge as initially predicted in Study 1: we anticipated that any malicious behavior would lead to an increased attribution of power to the perpetrator in comparison to the target. However, contrary to what was predicted by Hypothesis 1, perpetrators were not seen as more powerful than targets. In fact, perpetrators did not differ from targets regarding the amount of ascribed power to them. Furthermore, contrary to what was predicted by Hypotheses 2a-b, the type of behavior (gossiping, sexual objectification, or sexual harassment) did not have any influence on the ascribed power to the perpetrators. Moreover, we were not able to replicate an outcome of Study 1: the amount of attributed power to targets of sexual objectification did not change as a function of gender constellation and type of behavior (Hypothesis 3). Hence, the change from a general to a relational power measurement did indeed result in different outcomes—but by showing no significant differences, the results differed from what was expected.

As power relations are one of the basic building blocks of impression formation (see Fiske et al., 2002), the lack of results even seems unusual at first sight. However, low-status and high-status persons differed greatly in the amount of ascribed power to them. Hence, the most plausible explanation for the lack of significant results for the factors role, gender, and type of behavior is, therefore, one that was already mentioned earlier: the superseding influence of the status categorization on the assessment of power. For instance, Alice Eagly and Valerie Steffen (1984) showed that a salient role membership can overwrite gender stereotypes because those originally stem from the association of gender with occupational roles (Eagly & Wood, 2012). Additionally, in the vignettes, the status-group membership was much more salient than the factor levels of gender or type of behavior. Removing the status factor should result in more distinct differences between male and female perpetrators and between different types of behavior in the amount of attributed power.

Based on an ethical-decision making model (Jones, 1991), Hypotheses 4 to 6 explored an ethical decision-making perspective. We predicted that participants would find sexual harassment as most ethically problematic, sexual objectification as less ethically problematic and talking behind someone's back as even lesser ethically problematic (Hypotheses 4a-b). Furthermore, we assumed that a high-status perpetrator's behavior would be seen as a graver ethical issue than a low-status perpetrator's behavior (Hypothesis 6). The results showed that both Hypotheses had to be refuted because of an interaction between the underlying factors type of behavior and perpetrator status. The interaction itself, however, was very illuminating.

For the perception of the behaviors as an ethical issue, it did not matter whether a high-status perpetrator gossiped about, covertly objectified or openly sexually harassed his or her employee; all behaviors were rated similarly immoral. What follows is that malicious behaviors in general—and not only severe ones like sexual harassment (see Gutek et al., 1983)—might be judged as immoral, when they are executed by a high-status person. This outcome is similar

to findings by Jonathan Haidt and Jonatahan Baron (1996) who showed that differences in the judgment of two unethical behaviors resulting in same consequences (acting and omitting), were lowest for high- compared to low-status perpetrators. They assumed that moral judgment is sensitive to social role expectations and that high-status persons are held accountable if they do not fulfill their obligation of responsibility (see also Hamilton & Sanders, 1981).

Gossiping and sexual objectification by a low-status perpetrator were evaluated as less severe ethical issues than sexual harassment. Moreover, mild gossiping by a low-status person was generally perceived just as immoral as sexual objectification. Three of the six components of Jones' (Jones, 1991) model of ethical decision-making provide suitable explanations for this effect: Participants might have assumed that the *probability of effect* as well as the *magnitude of consequences* was similar for mild gossiping and sexual objectification. Moreover, based on *social consensus*, participants might have evaluated both behaviors similarly in terms of evilness. Against the background that sexual objectification is happening quite frequently (Swim et al., 2001), there might be some truth to this assumption.

Following previous research (e.g., Cummings & Armenta, 2002; Gutek et al., 1983), we predicted with Hypothesis 5 that a male perpetrator's sexual objectification and sexual harassment would be seen as a graver ethical issue than when the same behavior was exerted by a woman. Although the prediction was confirmed, the difference between male and female perpetrators in the evaluation as an ethical issue not only showed for sexual objectification and harassment, but also for gossiping. Hence, other than expected, any type of behavior was evaluated as a graver ethical issue when it was performed by a man toward a woman than vice versa. This outcome might be a direct result of participants' *proximity* to the victim. *Proximity* is a notion, which is discussed in Jones ethical decision-making model. Because nearly 70% of our participants were women, it is not unlikely that those identified with female victims or

female perpetrators and evaluated accordingly. Unfortunately, the number of men in each cell was too small to test this explanation.

Previous research (Bowes-Sperry & Powell, 1999) indicated that the degree to which sexual harassment was perceived as unethical, positively influenced people's intentions to intervene. Study 2 sought to replicate this finding. We predicted that the effect of type of behavior, perpetrator status, and perpetrator gender on the negative sanctioning of the behavior, would be mediated by the recognition as an ethical issue (Hypothesis 7). To test this assumption, a moderated moderated mediation was calculated. The results indicated that perpetrator gender had an indirect influence on the sanctioning of the behavior over the recognition as an ethical issue in most conditions. In other words, behavior of male perpetrators was mostly regarded as a more problematic ethical issue than the same behavior of women, which in turn influenced the negative sanctioning of the male perpetrators. However, the pattern of indirect effects of perpetrator's status and type of behavior on negative sanctioning, mediated by the recognition as an ethical issue, was inconclusive. Because the effects were rather small, we refrain from further interpretation. Concisely, results indicated a partial confirmation of Hypothesis 7: overall, the effects of perpetrator gender, but not perpetrator status or type of behavior, on the negative sanctioning of the behavior, were mediated by the recognition as an ethical issue. Extending the results by Bowes-Sperry and Powell (1999), we were able to show that the degree to which a behavior is perceived as unethical, was greater for male perpetrators, which in turn lead to more negative sanctioning. Again, as the majority of participants was female, the result could be the direct result of a *proximity* effect (Jones, 1991).

By testing Hypotheses 8 and 9, we aimed at replicating effects of Study 1. Hypothesis 8 predicted that male perpetrators of any malicious behavior would be rated as less warm and competent than female perpetrators. The data substantiated this prediction. Hypothesis 9 predicted that participants would wish for greater social distance toward male compared to female

perpetrators. The results confirmed this hypothesis. Although predicted, it remains, however, unclear why exactly people prefer a greater distance toward male perpetrators and perceive them as holding less warmth, compared to female perpetrators. As before, the fact that most participants were women could have led to an identification with female victims (and female perpetrators), which in turn might have influenced the outcomes in favor of female perpetrators. In order to investigate this explanation, subsequent studies should ascertain equal participation of men and women.

Hypotheses 10a-b predicted that the ascription of warmth and competence, as well as the preferred social distance, would vary along with the type of behavior. However, all three behaviors were rated alike. This lack of effects is surprising, especially because type of behavior did have an influence on the recognition as an ethical issue in previous analyses. However, evaluations of a behavior are probably more influenced by the type of behavior than evaluations of a person. In order to establish effects in warmth, competence, and social distance between different types of behavior, the contrasts between different types of behavior should be more pronounced in future studies. For example, an even less extreme (i.e., more neutral) condition than mild gossiping, would allow for pinpointing the perception of sexual objectification as an ethical issue. Moreover, more pronounced differences between the types of behaviors should result in a distinct ascription of warmth, competence, and preferred social distance.

**Summary and conclusion.**

While Study 1 provided insights into people's evaluation of perpetrators and targets of sexual objectification, Study 2 led to an even greater understanding of people's evaluation and perception.

First, we learned that only character's status but not character's role (target or perpetrator) gender (male or female) or type of behavior (gossiping, sexual objectification, or sexual harassment) lead to a greater ascription of power to the characters. In order to exclude the possibility of *role salience* (i.e., the salience of the characters' status) overriding any influence of the other variables (see Eagly and Steffen, 1984), Study 3 should refrain from implementing perpetrator's status as a condition.

Second, we discovered that participants found mild gossiping as equally immoral as sexual objectification. There was, however, no difference between gossiping, sexual objectification, and harassment for the ascription of warmth and competence or the preferred amount of social distance. Hence, the next study should aim at creating more pronounced differences between the types of behavior.

Third, we replicated and identified a major influence of perpetrator's gender. Male perpetrators of all behaviors were evaluated as less warm and less competent than female perpetrators. Moreover, any behavior of a male perpetrator was evaluated as a graver ethical issue than the same behaviors by a female perpetrator, which in turn lead to more negative sanctioning of male perpetrators. As it remained unclear whether those effects were due to the sample, which mainly consisted of women, Study 3 should counterbalance male and female participants.

### Study 3

#### **Introduction.**

Study 3 was designed as an extension study to further investigate people's evaluations of targets and perpetrators of sexual objectification based on the outcomes of Study 1 and Study 2: Under the assumption that sexual objectification and sexual harassment are norm-violating behaviors, Study 1 and Study 2 aimed at establishing attributed power as a function of character role (target vs. perpetrators), perpetrator behavior and perpetrator gender. Data from both studies did not support our predictions. Two factors might have contributed to this: the unspecific item wording of the power items and the overarching influence of the status manipulation. Whereas Study 2 only eliminated the first factor, Study 3 eliminated both. Moreover, in Study 3, gossiping was replaced with a neutral behavior in order to have a more discriminable reference condition. For power in Study 3, we made predictions which were similar to those of Study 2:

*Hypothesis 1a:* Perpetrators of any malicious behavior (i.e., sexual objectification and sexual harassment) will be evaluated as more powerful than targets of the same behavior.

*Hypothesis 1b:* Male perpetrators of each behavior (i.e., neutral behavior, sexual objectification, and sexual harassment) will be perceived as more powerful than female perpetrators; correspondingly, will male targets be perceived as more powerful than female targets.

*Hypothesis 2a:* Participants will attribute more relational power to an individual who openly sexually harasses someone than to an individual who engages in sexual objectification.

*Hypothesis 2b:* Participants will attribute more relational power to an individual who covertly sexually objectifies someone than to an individual who engages in a neutral behavior.

Study 2 applied an ethical decision-making model (Jones, 1991) to investigate to what extent people perceive sexual objectification and sexual harassment as an ethical issue. Results showed that every malicious behavior of a high-status perpetrator was evaluated equally immoral. For low-status perpetrators, gossiping and sexual objectification did not differ, while harassment was evaluated more extreme. In Study 3, the status constellation of perpetrator and target was not manipulated in order to remove status as a potential influence. Thus, we made the following predictions regarding the perception as an ethical issue:

*Hypothesis 3a:* Sexual harassment will be perceived as a graver ethical issue than sexual objectification.

*Hypothesis 3b:* Sexual objectification will be perceived as a graver ethical issue than a neutral behavior.

In accordance with previous results (i.e., Study 2; Cummings & Armenta, 2002; Gutek et al., 1983), we predicted that sexual objectification and harassment by male perpetrators would be perceived as a graver ethical issue than the same behavior displayed by women.

*Hypothesis 4:* Sexual objectification and sexual harassment by a male character will be perceived as a graver ethical issue than the same behavior by a female character.

Interestingly, the obtained results of Study 2 provided additional evidence that also gossiping was perceived as a more severe ethical issue when performed by a male perpetrator, in contrast to a female one. This outcome was possibly due to the sample, which mainly consisted of women. Indeed, the ethical decision-making model (Jones, 1991) would predict that a higher *proximity* to the victim—which is the feeling of social, cultural, psychological, or physical nearness to the victim (e.g., being of the same gender)—would result in a more severe evaluation of a malicious behavior as an ethical issue. In Study 3, we controlled for the influence of participant gender by introducing it as an additional factor. This allowed us to explore the influence of a proximity effect and to investigate whether our initial assumption from Study 2

could be confirmed independently of the effect. However, as the proximity effect should not occur for non-malicious behaviors, we did not expect a gender difference for the neutral behavior. Moreover, as research has shown that men evaluate sexually harassing behavior by women much more positively than women do (e.g., Struckman-Johnson & Struckman-Johnson, 1993), no proximity effect for male participants was anticipated.

*Hypothesis 5:* Female participants will perceive sexual objectification and sexual harassment by male perpetrators as a graver ethical issue than male participants.

Research has shown that men with a greater proclivity to sexually harass, tend to blame perpetrators of sexual harassment less because they identify more strongly with the perpetrator (Key & Ridge, 2011). We anticipated a similar effect for sexual objectification. We expected that people with a greater proclivity to sexually objectify would perceive sexual objectification as a less severe ethical issue and would tend to sanction it less.

*Hypothesis 6:* The greater participants' proclivity to sexually objectify others, the less they will perceive sexual objectification as an ethical issue, and the less they will tend to sanction it negatively.

In Study 2, we extended previous research by Bowes-Sperry and Powell (1999), who showed that the degree to which sexually harassing behavior was perceived as unethical, positively influenced people's intentions to intervene. We predicted that perpetrator gender, perpetrator status, and his/her kind of behavior would indirectly influence the negative sanctioning of the perpetrator via the perception of the behavior as an ethical issue. However, only perpetrator gender distinguished itself as a functioning predictor in a mediation effect. In Study 3, we started a new attempt in exploring the relationship between the mediator perception as an ethical issue and the criterion negative sanctioning. We hoped to produce further insight into the conditions that result in the perception as an ethical issue leading to more negative sanctioning.

*Hypothesis 7:* The effect of type of behavior, perpetrator gender, and participants' proclivity to sexually objectify on the sanctioning of the behavior is mediated by the recognition of the behavior as an ethical issue.

Contrary to our expectations, results of Study 2 did not confirm that warmth and competence, as well as the preferred social distance, would vary along with the different type of behaviors. As Study 3 implemented a neutral control condition instead of a gossiping condition, we anticipated the following:

*Hypothesis 8:* In comparison to perpetrators who display neutral behavior, participants will attribute less warmth and competence to and prefer more social distance toward perpetrators of sexual objectification and sexual harassment.

Study 1 and Study 2 provided evidence that male perpetrators of any malicious behavior were perceived as less competent and less warm and were treated with greater social distance than female perpetrators. By including participant gender as an additional variable, in Study 3, we were able to investigate whether this outcome was due to the largely female sample, which might have identified with the female victims. We hypothesized:

*Hypothesis 9:* Compared to female perpetrators, male perpetrators of sexual objectification and harassment, but not male perpetrators of the neutral behavior, will be evaluated as less competent and less warm and will prefer greater social distance toward them.

*Hypothesis 10:* In comparison to male participants, female participants will evaluate male perpetrators of sexual objectification and harassment, but not male perpetrators of the neutral behavior, as less warm and competent and will prefer greater social distance toward them.

**Method.*****Participants.***

The sample size was based on an a priori sample-size calculation for ANOVAs with three-way interactions (see Hypotheses 5 and 10) using G\*Power (Faul et al., 2007). The number of groups was set to 12, power to .95, and the effect size to  $f = 0.25$ , which is a medium effect. The recommended sample size was 251. We collected a few more participants to be on the safe side.

Two hundred fifty-nine participants completed the online study. Eleven participants were removed from the sample as they failed to correctly answer the attention check (“I have spoken to a woman [man] before in my life”). Three participants were discarded as they were below the age of 18, which is the legal age in Germany. The final sample consisted of 245 participants (122 women and 123 men), which were on average 25.79 ( $SD = 9.14$ ) years old. Most participants (83.7 %) indicated being heterosexual. Of all participants, 6.1 % indicated to be homosexual, 6.1 % bisexual, and 4.1 % specified other types of sexual orientation. Of all participants, 5.3 % reported having less than a high-school diploma, 57.1 % had a high-school diploma, 24.0 %, had a bachelor’s degree or equivalent training, 13.1 % a master’s degree and 0.4 % a Ph.D. Most participants (41.6 %) were recruited personally on campus. 21.6 % were recruited via social media, 18.7% via advertisements on campus, and 18.0 % via recommendations by friends. For participation, each participant received a 5€ voucher. Moreover, participants were able to receive course credits if they were enrolled in psychology at Bielefeld University.

***Cover story.***

The cover story was the same as in Study 1 and Study 2 (see page 155).

***Design.***

Study 3 featured a 2 (participant gender) by 2 (perpetrator-target gender constellation) by 3 (type of behavior) design. Male and female participants were randomly assigned to one of six conditions. The number of men and women in each cell can be obtained from Table 52.

Table 52  
*Number of Participants in Each Cell.*

Partici- pant Gender	Perpetra- tor Gender	Types of Behavior		
		Neutral behavior	Sexual Objectification	Sexual Harassment
Female	Female	20	20	19
	Male	21	22	20
Male	Female	23	21	17
	Male	18	24	20

According to chi-squared tests, men ( $\chi^2_{2, N=123} = 1.05, p = .59$ ) and women ( $\chi^2_{2, N=122} = 0.01, p = .99$ ) were equally distributed to each cell.

***Text vignettes.***

We used the same vignettes as in Study 2, with some minor changes: Firstly, any clues indicating the perpetrator's and target's status difference were removed. Secondly, to increase the salience of the protagonist's gender, we added some gender-relevant information. The female protagonist was described having long curly hair, wearing red lipstick and discreet earrings. The male protagonist was described having short hair and a short beard as well as wearing a sporty watch. Especially hair cues have been shown to be sufficient triggers of gender categories and gender stereotypes in visual priming experiments (Macrae & Martin, 2007). Thirdly, we changed the gossiping ("He really eats lasagna every day") into a more neutral statement ("I met him on the staircase today.") and added that the target did not hear this exchange of words. See Appendix G, Vignette 1a-2c (pp. 309-313) for a depiction of the vignettes.

**Measures.**

Study 3 included the same measures as Study 2: A measure of warmth and competence (Fiske et al., 2002, see p. 157), a measure of social distance (Bogardus, 1933 and Scheffer, 2013; see p. 158), Negative Sanctioning (see p. 190), the Sense of Power Scale (Anderson et al., 2012; relational version, see p. 189), Recognition as Ethical Issue (Bowes-Sperry & Powell, 1999; see p. 189). Moreover, we applied the SOOI (see Empirical Part I, Study 1-2) together with a one-item measure of sexual orientation (see p. 36). In contrast to Study 2, warmth and competence were, however, only assessed for the perpetrators and not the targets. We did this in order to make the study shorter and because we had no corresponding hypotheses. All scales applied a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

**Internal consistencies.**

Internal consistencies can be found in Table 53. The internal consistencies ranged from questionable (cf., Negative Sanctioning) to excellent (cf., Social Distance Scale).

Table 53  
*Cronbach's Alphas of Each Scale in Study 3.*

Scale	min.- max. $\alpha$
Competence	.76 - .80
Negative Sanctioning	.67 - .82
Recognition as Ethical Issue	.86 - .90
Sense of Power Scale	.71 - .83
Social Distance Scale	.91 - .92
SOOI	.82
Warmth	.77 - .78

*Note.* Ranges include alphas of scales assessing evaluations of Ms. [Mr.] Lange (and Mr. [Ms.] Krueger).

**Procedure.**

The procedure of Study 3 was mostly the same as in Study 2. However, in Study 3, the SOOI was implemented. The SOOI was displayed after the Negative Sanctioning scale. Moreover, a little instruction was added prior to the evaluation of the perpetrator's behavior as an ethical issue: "On the next page, we would like to ask you to evaluate the behavior of Mr. [Ms.] Lange. As a reminder, here's a little extract of the text you have seen before". The subsequent

paragraph shortly outlined the neutral, objectifying, or harassing behavior. With this change, we wanted to make sure that the participants knew, which behavior they would have to evaluate.

### Results.

If not reported otherwise, all statistical assumptions of the following analyses were met. An alpha level of .05 was used for all statistical tests.

Hypothesis 1a predicted that perpetrators of sexual objectification and harassment would be evaluated as more powerful than targets of the same behavior. Hypothesis 1b made the prediction that male perpetrators of each behavior would be perceived as more powerful than female perpetrators, and male targets as more powerful than female targets. Hypotheses 2a-b assumed that compared to sexual objectification, perpetrators of sexual harassment would be perceived as more powerful and perpetrators of a neutral behavior as less powerful. To test this set of hypotheses, a mixed ANOVA was calculated. Role (target and perpetrator) was deployed as within-subjects variable.<sup>24</sup> Type of behavior (neutral, sexual objectification, and harassment) and perpetrator gender (female and male) were deployed as between-subjects variables. Results can be obtained from Table 54.

Table 54

*Results of ANOVA on Ascribed Power, with the Factors Role, Type of Behavior and Perpetrator Gender*

Independent Variables	Sum of Squares	<i>df</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
R	0.44	1	0.56	.456	.00
T	3.26	1	7.58	.006	.03
R x T	12.19	2	7.76	.001	.06
R x G	0.58	1	0.73	.392	.00
R x T x G	0.02	2	0.01	.989	.00
Error (within)	187.76	239			
Error (between)	102.77	239			

*Note.* R = Role, T = Type of Behavior, G = Perpetrator Gender. As the factor gender is confounded with role, any effects of gender without role were omitted.

<sup>24</sup> As in Study 1 and Study 2, the factor role was confounded with gender: when the perpetrator was male [female] then the target was female [male]. Hence, the main effect gender was uninterpretable.

The ANOVA resulted in a significant main effect of type of behavior as well as a significant interaction of role with type of behavior. No significant effect was obtained for any interaction, including perpetrator gender. Contrary to Hypothesis 1, Bonferroni post hoc tests revealed that targets of sexual objectification ( $M = 4.23$ ,  $SD = 0.79$ ) were perceived as more powerful than perpetrators ( $M = 3.86$ ,  $SD = 0.71$ ,  $p = .005$ ), while targets of sexual harassment ( $M = 4.09$ ,  $SD = 0.95$ ) did not differ from perpetrators ( $M = 3.93$ ,  $SD = 0.73$ ,  $p = .251$ ). Moreover, perpetrators of the neutral behavior were perceived more powerful ( $M = 4.10$ ,  $SD = 0.78$ ) than targets of the neutral behavior ( $M = 3.74$ ,  $SD = 0.72$ ,  $p = .009$ ). Hypotheses 2a-b had also to be refuted as Bonferroni post hoc tests indicated no difference in attributed power to perpetrators of the neutral behavior and perpetrators of sexual objectification ( $p = .107$ ), as well as no difference between sexual objectification and sexual harassment ( $p = 1.00$ ).

Hypothesis 3a stated that openly sexually harassing someone would be perceived as a graver ethical issue than covertly objectifying someone. Hypothesis 3b predicted that covertly objectifying someone would be perceived as a graver ethical issue than a neutral behavior. Hypothesis 4 stated that sexual objectification and sexual harassment by a male character would be perceived as a graver ethical issue than the same behavior by a female character. Hypothesis 5 assumed that women would perceive sexual objectification and sexual harassment by male perpetrators as a graver ethical issue than men. To test this set of hypotheses, an ANOVA on the perception as an ethical issue and with type of behavior, perpetrator's and participant's gender as between-subjects factors was calculated. Descriptive results are depicted in

Figure 15. Results of the ANOVA are displayed in Table 55.

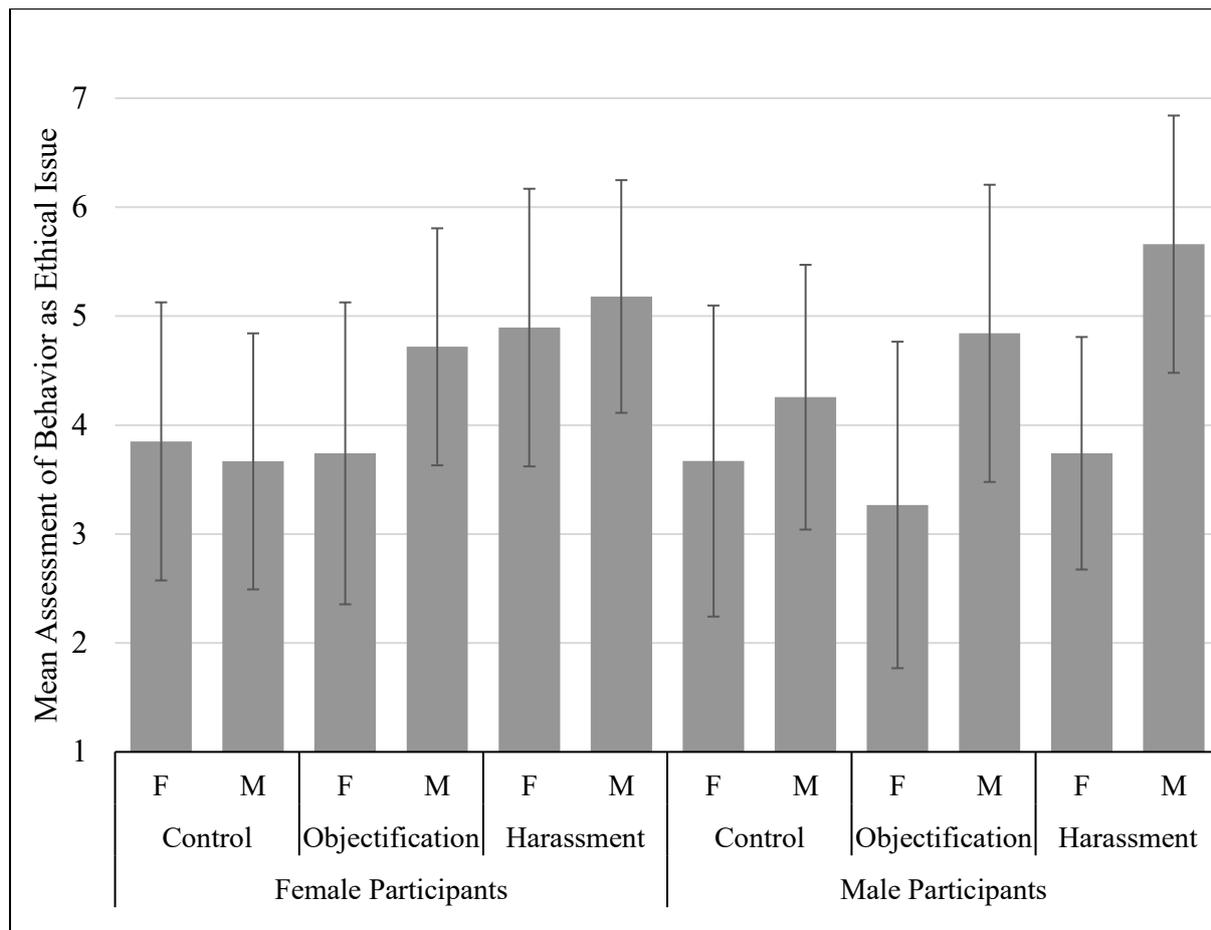


Figure 15. Mean assessment of behavior as an ethical issue of female and male participants for the groups type of behavior and perpetrator gender. Bars indicate standard deviations. F = female perpetrator, M = male perpetrator.

Table 55

*ANOVA on Mean Assessment of Behavior as an Ethical Issue with the Factors Type of Behavior, Perpetrator Status, and Perpetrator Gender*

Independent Variables	Sum of Squares	<i>df</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
A	0.64	1	0.64	.529	.00
T	42.22	2	21.11	< .001	.10
G	44.91	1	44.91	< .001	.11
A x T	3.07	2	1.53	.386	.01
A x G	15.18	1	15.18	.002	.04
T x G	13.69	2	6.85	.015	.04
A x T x G	3.04	2	1.52	.389	.01
Error	373.186	233			

Note. A = Participant Gender, T = Type of Behavior, G = Perpetrator Gender.

The ANOVA's main effects revealed that the perceived ethical issue differed as a function of type of behavior and as well as perpetrator gender. Furthermore, results indicated interaction effects of participant and perpetrator gender and, moreover, type of behavior and perpetrator gender. Bonferroni post hoc tests for type of behavior demonstrated that the control condition ( $M = 3.84$ ,  $SD = 1.28$ ) was perceived as similarly severe ethical issue than sexual objectification ( $M = 4.18$ ,  $SD = 1.48$ ;  $p = .454$ ), and as less grave ethical issue than sexual harassment ( $M = 4.91$ ,  $SD = 1.32$ ;  $p < .001$ ). Sexual objectification was also perceived as a smaller ethical issue than harassment ( $p = .001$ ). Hence, Hypothesis 3a but not Hypothesis 3b was confirmed. Bonferroni post hoc tests of the interaction between type of behavior and perpetrator gender revealed that, as indicated by Hypothesis 4, in the control condition it did not matter whether the perpetrators were male ( $M = 3.75$ ,  $SD = 1.35$ ) or female ( $M = 3.94$ ,  $SD = 1.21$ ;  $p = .474$ ). However, sexual objectification ( $M = 4.78$ ,  $SD = 1.23$ ) and sexual harassment ( $M = 5.42$ ,  $SD = 1.14$ ) by male perpetrators were perceived as more severe ethical issues than by female perpetrators ( $M = 3.50$ ,  $SD = 1.45$ ;  $p < .001$ ,  $M = 4.35$ ,  $SD = 1.30$ ;  $p = .001$ ). Additionally, for female perpetrators, the control condition did not differ from the sexual objectification ( $p = 1.00$ ) or the harassment condition ( $p = .158$ ), while harassment was seen as more problematic ethical issue than objectification ( $p = .016$ ). Neutral behavior by male perpetrators was perceived as less severe than sexual objectification ( $p = .010$ ) or harassment ( $p < .001$ ), but objectification and harassment did not differ significantly from another ( $p = .061$ ). An investigation of the interaction between participant and perpetrator gender, by applying Bonferroni post hoc tests, showed furthermore that female participants evaluated any behavior by female perpetrators ( $M = 4.15$ ,  $SD = 1.39$ ) as graver ethical issues than male participants ( $M = 3.55$ ,  $SD = 1.36$ ;  $p = .010$ ). Female participants ( $M = 4.51$ ,  $SD = 1.26$ ), however, did not differ from male participants in the assessment of behavior by male perpetrators ( $M = 4.94$ ,  $SD = 1.36$ ;  $p = .082$ ). Moreover, female participants did not differ in their evaluation of male

and female perpetrators ( $p = .118$ ), while male participants perceived any behavior by female perpetrators as less severe ethical issue than the same behavior by male perpetrators—or, in other words, any behavior by male perpetrators as more severe ethical issue than the same behavior by female perpetrators ( $p < .001$ ). Hypothesis 5 was not substantiated.

With Hypothesis 6, we postulated that participants with a greater proclivity to sexually objectify would perceive sexual objectification as a less severe ethical issue and would also tend to sanction it less. Hypothesis 7 predicted that the effect of type of behavior, perpetrator gender and participants' proclivity to sexually objectify on the sanctioning of the behavior would be mediated by the recognition of the behavior as an ethical issue. To test these assumptions, a moderated moderated mediation was calculated with SPSS PROCESS (Model 12<sup>25</sup>; Hayes, 2016). Type of behavior was instantiated as a dummy-coded predictor using simple indicator coding (see Hayes, 2018). The control condition was set reference category. Perpetrator gender and the z-value of the SOOI were set as moderator. The z-value of recognition as an ethical issue served as mediator. To control for any additional influence of participant gender, it was added as a covariate.<sup>26</sup> Prior to the analysis, all variables were centered for the ease of interpretation. The overall models, depicting effects on the mediator and the criterion, were significant,  $R^2 = .22$ ,  $F(12, 219) = 5.13$ ,  $p < .001$ ,  $R^2 = .34$ ,  $F(13, 218) = 8.55$ ,  $p < .001$ . The results are displayed in Table 56.

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<sup>25</sup> To investigate eventual interaction effects of the predictors with the mediator on the criterion, also Model 73 was applied exploratorily. The results did, however, not provide any added value, which is why we continued with the more parsimonious model.

<sup>26</sup> A subsequent investigation of the same model without participant's gender as covariate did, however, only lead to very minor changes in the results.

Table 56

*Results of Moderated Mediation with Recognition of the Behavior as Ethical Issue as Mediator and Negative Sanctioning as Criterion*

Criteria with predictors, moderators, and covariates	$\beta$	$t$	$p$	95% CI	
				LL	UL
Ethical Issue					
O'	0.17	1.20	.231	-0.11	0.46
H'	0.66	4.32	.000	0.36	0.96
G	0.11	0.53	.594	-0.31	0.54
SOOI	-0.09	-0.79	.429	-0.31	0.13
O' x G	0.79	2.74	.007	0.22	1.36
H' x G	0.67	2.18	.030	0.06	1.28
O' x SOOI	0.01	0.09	.926	-0.28	0.31
H' x SOOI	0.00	0.01	.989	-0.31	0.31
G x SOOI	-0.13	-0.57	.572	-0.57	0.31
O' x G x SOOI	0.33	1.11	.268	-0.26	0.92
H' x G x SOOI	0.32	1.01	.311	-0.30	0.93
Participant Gender	-0.04	-0.32	.747	-0.29	0.21
Negative Sanctioning					
Ethical Issue					
O'	0.49	7.72	.000	0.36	0.61
H'	0.24	1.81	.071	-0.02	0.51
G	0.25	1.72	.088	-0.04	0.55
G	-0.05	-0.25	.805	-0.44	0.34
SOOI	0.22	2.06	.041	0.01	0.43
O' x G	0.29	1.06	.291	-0.25	0.83
H' x G	0.42	1.46	.145	-0.15	0.99
O' x SOOI	-0.18	-1.29	.200	-0.45	0.10
H' x SOOI	-0.23	-1.58	.116	-0.52	0.06
G x SOOI	0.56	2.70	.008	0.15	0.97
O' x G x SOOI	-0.57	-2.04	.042	-1.12	-0.02
H' x G x SOOI	-0.47	-1.60	.111	-1.04	0.11
Participant Gender	0.05	0.44	.659	-0.18	0.28

*Note.* O' = Type of Behavior: Objectification vs. Neutral Behavior, H' = Type of Behavior: Harassment vs. Neutral Behavior, G = Perpetrator Gender, CI = confidence interval, LL = lower limit, UL = upper limit.

The moderated moderated mediation resulted in one significant main effect of type of behavior on the moderator perception as an ethical issue. Correspondingly to the previous ANOVA's results, sexual harassment differed from the control condition, but sexual objectification did not. The SOOI and perpetrator gender had no significant main effect on the perception as an ethical issue. However, perpetrator gender interacted significantly with both dummy-

coded type of behavior variables. We refrained from further probing, as the previous ANOVA and its subsequent Bonferroni post hoc tests already thoroughly investigated these interactions.

For the criterion negative sanctioning, results showed that the greater the participants' proclivity to sexually objectify others (measured with the SOOI), the greater their negative sanctioning of the perpetrators of any behavior. This result indicates the opposite of what was predicted in Hypothesis 6. The model was, moreover, characterized by a significant interaction of SOOI and perpetrator gender. A pick-a-point analysis<sup>27</sup> revealed that perpetrator gender had a significant effect on sanctioning in low-, but not medium-, or high-SOOI participants,  $\beta = -0.61$ ,  $t = -2.04$ ,  $p = .043$ , 95% CI [-1.20, -0.02];  $\beta = -0.05$ ,  $t = -0.25$ ,  $p = .805$ , 95% CI [-0.44, 0.34];  $\beta = 0.51$ ,  $t = 1.86$ ,  $p = .064$ , 95% CI [-0.03, 1.08]. Participants with a low SOOI score sanctioned male perpetrators of any behavior significantly less than female perpetrators. Further probing showed that SOOI positively affected the negative sanctioning of male, but not female perpetrators,  $\beta = 0.50$ ,  $t = 2.97$ ,  $p = .003$ , 95% CI [0.17, 0.83];  $\beta = -0.06$ ,  $t = -0.50$ ,  $p = .617$ , 95% CI [-0.31, 0.19]. The greater a person's proclivity to sexually objectify, the more they sanctioned male but not female perpetrators, regardless of their behavior.

The moderated moderated mediation also indicated a significant interaction of SOOI, perpetrator gender, and the dummy-coded type of behavior variable: objectification vs. harassment. Investigating the direct effects, at the values of the moderators, helps to understand these interactions (see Table 57 to Table 59).

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<sup>27</sup> To extract the conditional direct effects despite the categorical variable type of behavior, the variables were entered into PROCESS model 8. The two dummy coded variables for type of behavior as well as all possible interaction products with the dummy coded type of behavior variables were entered as additional covariates.

Table 57

*Direct and Indirect Effects of Type of Behavior on Negative Sanctioning at the Values of the Moderators*

Type of behavior	Perpetrator Gender	SOOI	Direct Effects					Indirect Effects		
			$\beta$	$t$	$p$	95% CI		$\beta$	95% CI	
						LL	UL		LL	UL
O'	F	Low	-0.01	-0.03	.979	-0.48	0.47	-0.03	-0.29	0.23
O'	F	Medium	0.10	0.53	.594	-0.27	0.47	-0.11	-0.33	0.11
O'	F	High	0.21	0.74	.459	-0.34	0.75	-0.18	-0.52	0.13
O'	M	Low	0.85	2.67	.008	0.22	1.48	0.17	-0.14	0.54
O'	M	Medium	0.39	1.97	.050	0.00	0.78	0.11	0.07	0.49
O'	M	High	-0.08	-0.29	.771	-0.58	0.43	0.13	0.10	0.62
H'	F	Low	0.04	0.16	.874	-0.46	0.54	0.23	0.01	0.50
H'	F	Medium	0.04	0.22	.829	-0.35	0.44	0.16	-0.05	0.39
H'	F	High	0.05	0.16	.869	-0.50	0.59	0.80	-0.23	0.39
H'	M	Low	0.93	2.86	.004	0.29	1.57	0.41	0.12	0.75
H'	M	Medium	0.47	2.17	.031	0.04	0.89	0.48	0.25	0.72
H'	M	High	0.00	0.01	.991	-0.60	0.61	0.65	0.22	0.87

*Note.* CI = confidence interval, LL = lower limit, UL = upper limit, O' = Type of Behavior: Objectification vs. Neutral Behavior, H' = Type of Behavior: Harassment vs. Neutral Behavior, F = Female, M = Male.

Table 58

*Direct and Indirect Effects of SOOI on Negative Sanctioning at the Values of the Moderators*

Perpe- trator Gender	Behavior	Direct Effects					Indirect Effects		
		$\beta$	$t$	$p$	95% CI		$\beta$	95% CI	
					LL	UL		LL	UL
F	Neutral	-0.06	-0.50	.617	-0.31	0.19	-0.01	-0.14	0.12
F	Behavior	0.04	0.32	.747	-0.22	0.30	-0.09	-0.26	0.06
F	Objectification	-0.06	-0.48	.632	-0.31	0.19	-0.09	-0.23	0.01
M	Neutral	0.50	2.97	.003	0.17	0.83	-0.07	-0.21	0.89
M	Behavior	0.04	0.27	.790	-0.22	0.29	0.01	-0.15	0.17
M	Objectification	0.04	0.22	.824	-0.28	0.36	0.00	-0.19	0.14

Note. CI = confidence interval, LL = lower limit, UL = upper limit, F = Female, M = Male.

Table 59

*Direct and Indirect Effects of Perpetrator Gender on Negative Sanctioning at the Values of the Moderators*

Behavior	SOOI	Direct Effects					Indirect Effects		
		$\beta$	$t$	$p$	95% CI		$\beta$	95% CI	
					LL	UL		LL	UL
Neutral	Low	-0.61	-2.04	.043	-1.20	-0.02	0.12	-0.17	0.40
Neutral	Medium	-0.05	-0.25	.805	-0.44	0.34	0.06	-0.16	0.27
Neutral	High	0.51	1.86	.064	-0.03	1.06	-0.01	-0.29	0.30
Objectification	Low	0.25	0.93	.356	-0.28	0.76	0.34	0.03	0.65
Objectification	Medium	0.24	1.26	.207	-0.13	0.62	0.44	0.24	0.67
Objectification	High	0.23	0.89	.376	-0.28	0.75	0.54	0.26	0.87
Harassment	Low	0.28	0.99	.323	-0.27	0.83	0.29	0.03	0.55
Harassment	Medium	0.37	1.78	.077	-0.04	0.79	0.38	0.17	0.60
Harassment	High	0.47	1.54	.124	-0.13	1.07	0.47	0.14	0.79

Note. CI = confidence interval, LL = lower limit, UL = upper limit, F = Female, M = Male.

The investigation of direct effects behind the significant interaction effects of the main model revealed that sexual objectification of female perpetrators was similarly sanctioned than the neutral behavior by participants with a low, medium or high proclivity to sexually objectify

others. However, sexual objectification by male perpetrators was sanctioned more than the neutral behavior by participants with a low, but not medium or high, proclivity to sexually objectify. Moreover, sexual objectification proclivity had no effect on the negative sanctioning of female perpetrators engaging in a neutral behavior, objectification, or harassment. Sexual objectification proclivity had, however, a positive effect on the amount of sanctioning of male perpetrators behaving in a neutral, but not in an objectifying or harassing way. Moreover, perpetrator gender showed no significant influence on the negative sanctioning of perpetrators of objectification.

To investigate mediation effects, indirect effects were calculated for all conditions (see Table 57 to Table 59). Corresponding confidence intervals were bootstrapped and indicate whether the effect is significant or not. Intervals of significant effects do not include zero (Hayes, 2018). Results showed that type of behavior: objectification vs. neutral behavior indirectly affected negative sanctioning via the perception as an ethical issue, when the perpetrator was male, and the participant held a low to medium proclivity to sexually objectify. Harassing behavior (vs. neutral behavior) of female perpetrators indirectly influenced the sanctioning of low- sexual objectification proclivity participants. Harassment (vs. neutral behavior) of male perpetrators had an indirect effect on negative sanctioning irrespective of participants holding a low, medium, or high SOOI score. Sexual objectification proclivity itself had no indirect influence via the perception as an ethical issue on the amount of negative sanctioning. Perpetrator gender indirectly influenced sanctioning of objectification and harassment, but not the sanctioning of the neutral behavior, in low-, medium- and high-sexual objectification proclivity participants. Thus, Hypothesis 7, which predicted that predicted that the effect of type of behavior, perpetrator gender and participants' proclivity to sexually objectify on the sanctioning of the behavior would be mediated by the recognition of the behavior as an ethical issue, was confirmed only partially.

Hypotheses 8 predicted that perpetrators of sexual objectification and harassment would be perceived as less competent and warm and met with greater social distance than perpetrators the neutral behavior. Hypothesis 9 predicted that male perpetrators of objectification and harassment would be perceived as lesser competent and warm than female perpetrators. Moreover, Hypothesis 9 assumed that participants would prefer a greater social distance toward male than female perpetrators of objectification and harassment. Hypothesis 10 predicted a participant gender effect: in comparison to male participants, female participants would perceive male perpetrators as less competent and warm and would prefer more social distance toward them. To test this set of hypotheses, three ANOVAs were conducted with social distance, warmth, and competence as dependent variables. Type of behavior, perpetrator gender, and participant gender were implemented as independent variables. Descriptive values are depicted in Figure 16, the ANOVAs' results in Table 60.

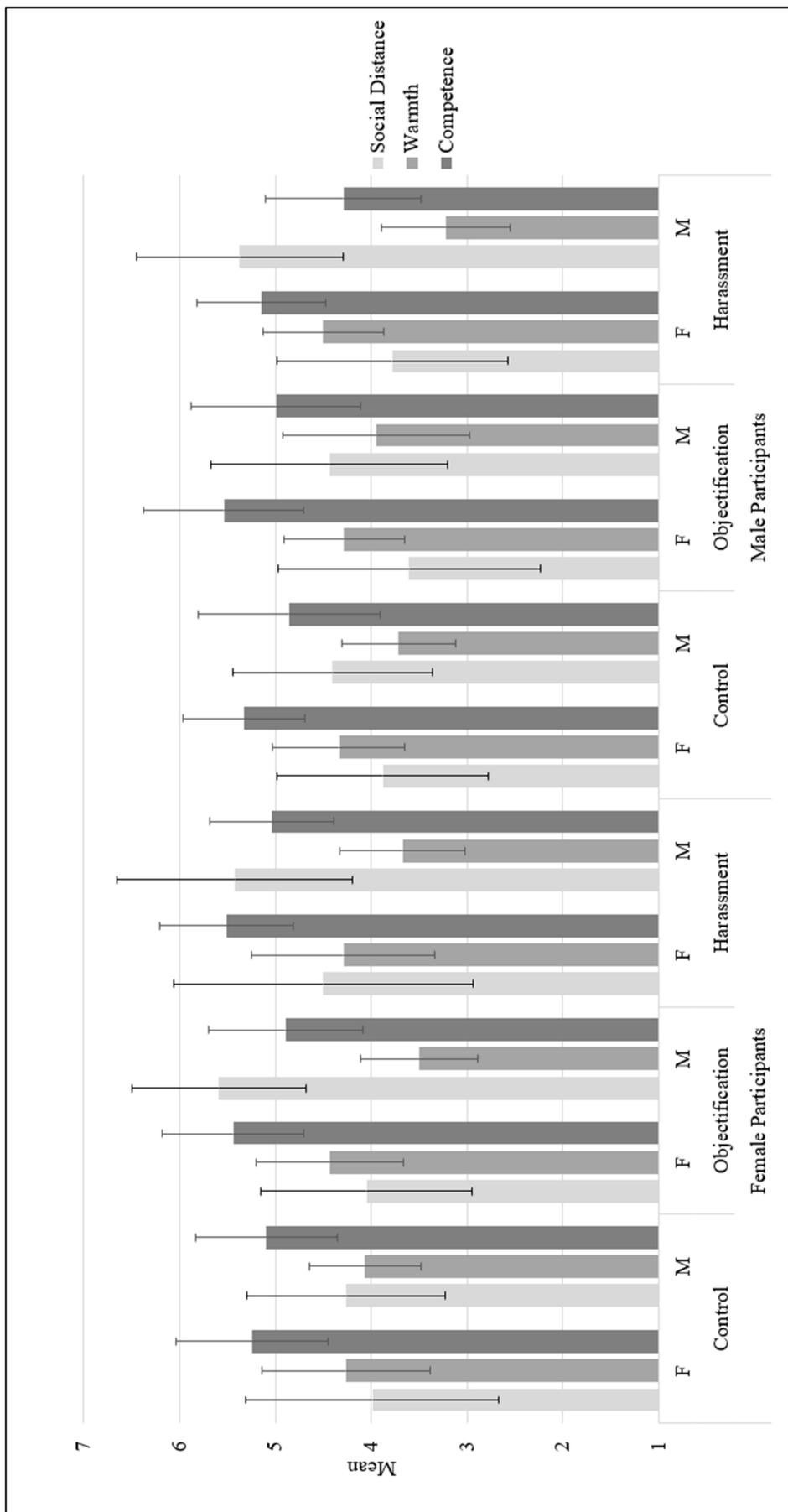


Figure 16. Mean preferred social distance, mean ascribed warmth and mean ascribed competence for the factors perpetrator's gender, participant's gender and type of behavior. Bars indicate standard deviations.

Table 60

*Results of ANOVAs on Preferred Social Distance, Ascribed Competence and Ascribed Warmth with the Factors Type of Behavior, Participant Gender, and Perpetrator Gender*

Independent Variables	Dependent Variable	Sum of Squares	<i>df</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
T	Social Distance	15.91	2	5.62	.004	.05
	Warmth	1.26	2	1.16	.314	.01
	Competence	2.00	2	1.67	.190	.01
G	Social Distance	54.58	1	38.58	.000	.14
	Warmth	27.03	1	50.01	.000	.18
	Competence	15.55	1	25.98	.000	.10
A	Social Distance	9.18	1	6.49	.011	.03
	Warmth	0.09	1	0.16	.688	.00
	Competence	1.88	1	3.14	.078	.01
T x G	Social Distance	9.21	2	3.26	.040	.03
	Warmth	2.81	2	2.60	.077	.02
	Competence	1.33	2	1.11	.330	.01
T x A	Social Distance	6.97	2	2.46	.087	.02
	Warmth	1.09	2	1.01	.365	.01
	Competence	4.50	2	3.76	.025	.03
G x A	Social Distance	0.07	1	0.05	.821	.00
	Warmth	0.42	1	0.78	.377	.00
	Competence	0.82	1	1.37	.243	.01
T x G x A	Social Distance	5.15	2	1.82	.164	.02
	Warmth	4.64	2	4.29	.015	.04
	Competence	0.43	2	0.36	.696	.00
Error	Social Distance	329.68	233			
	Warmth	125.93	233			
	Competence	139.49	233	5.62		

*Note.* T = Type of Behavior, A = Participant Gender, G = Perpetrator Gender.

To investigate whether Hypotheses 8-10 were confirmed, corresponding main effects and interaction effects were inspected more closely. The ANOVAs showed a main effect of type of behavior for social distance but not for warmth or competence. Bonferroni post hoc tests indicated that participants distanced more strongly from perpetrators of harassment ( $M = 4.81$ ,  $SD = 1.42$ ) compared to the control condition ( $M = 4.12$ ,  $SD = 1.13$ ,  $p = .003$ ). There was no difference between the control condition and the sexual objectification condition ( $M = 4.44$ ,  $SD = 1.36$ ,  $p = .354$ ), and no difference between the sexual objectification condition and the sexual harassment condition ( $p = .192$ ). Hence, Hypothesis 8 could only be confirmed

partially. Significant main effects for perpetrator gender indicated that male perpetrators of any behavior were perceived as less warm and competent ( $M = 3.69$ ,  $SD = 0.74$ ;  $M = 4.87$ ,  $SD = 0.84$ ) and were also met with greater distance ( $M = 4.91$ ,  $SD = 1.21$ ) than female perpetrators ( $M = 4.35$ ,  $SD = 0.75$ ;  $M = 5.37$ ,  $SD = 0.73$ ;  $M = 3.69$ ,  $SD = 1.28$ ). A significant interaction effect of type of behavior and perpetrator gender on social distance was investigated using Bonferroni post hoc tests. As predicted by Hypothesis 9, participants showed more social distance toward male ( $M = 4.99$ ,  $SD = 1.22$ ) than female perpetrators of objectification ( $M = 3.82$ ,  $SD = 1.25$ ,  $p < .001$ ) and harassment ( $M = 5.40$ ,  $SD = 1.14$ ;  $M = 4.16$ ,  $SD = 1.43$ ,  $p < .001$ ), but not male ( $M = 4.33$ ,  $SD = 1.02$ ) and female perpetrators of the neutral behavior ( $M = 3.93$ ,  $SD = 1.19$ ,  $p = .132$ ). However, as this interaction was not obtained for attributed warmth or competence, Hypothesis 9 was only confirmed partially. Further, Bonferroni post hoc tests revealed that there was no difference between the control condition and the objectification ( $p = 1.00$ ) or the harassment condition ( $p = .1.00$ ) in female perpetrators. Furthermore, objectification and harassment did not differ ( $p = .761$ ). For male perpetrators, preferred social distance differed between the control and the objectification condition ( $p = .027$ ) as well as the control and the harassment condition ( $p < .001$ ). The objectification and the harassment condition did not differ ( $p = .405$ ). A significant interaction of type of behavior and participant gender on the attribution of competence was investigated with Bonferroni post hoc tests. Male participants ( $M = 5.12$ ,  $SD = 0.81$ ) and female participants ( $M = 5.17$ ,  $SD = 0.76$ ) did not differ in the attribution of competence to perpetrators of the neutral behavior ( $p = .663$ ) or perpetrators of sexual objectification ( $M = 5.25$ ,  $SD = 0.90$ ;  $M = 5.15$ ,  $SD = 0.81$ ,  $p = .554$ ). However, male participants ( $M = 4.68$ ,  $SD = 0.81$ ) evaluated perpetrators of sexual harassment being less competent than female participants ( $M = 5.27$ ,  $SD = 0.70$ ,  $p = .002$ ). Bonferroni post hoc tests, investigating the significant three-way interaction between type of behavior, perpetrator gender, and participant gender on the perception of warmth, were calculated. They revealed that

contrary to Hypothesis 10, male and female participants differed only in the assessment of male perpetrators of sexual objectification ( $M = 3.94$ ,  $SD = 0.97$ ;  $M = 3.50$ ,  $SD = 0.61$ ,  $p = .042$ ), but not in the evaluation of female perpetrators of sexual objectification ( $M = 4.29$ ,  $SD = 0.63$ ;  $M = 4.43$ ,  $SD = 0.77$ ,  $p = .521$ ). Moreover, unexpectedly, male and female participants did not differ significantly in the perception of female ( $M = 4.50$ ,  $SD = 0.63$ ;  $M = 4.29$ ,  $SD = 0.96$ ,  $p = .392$ ) and male ( $M = 3.21$ ,  $SD = 0.67$ ;  $M = 3.68$ ,  $SD = 0.65$ ,  $p = .050$ ) perpetrators of sexual harassment. While there was no difference in attributed warmth by female participants to male perpetrators of objectification and sexual harassment ( $p = 1.00$ ), male participants evaluated perpetrators of objectification much warmer than perpetrators of harassment ( $p = .004$ ).

**Discussion.**

With Study 3, we aimed at further investigating people's evaluations of targets and perpetrators of sexual objectification and sexual harassment. We adopted most of the hypotheses, material, and design from Study 2. However, to extent Study 2, we implemented several changes. To investigate whether the gender of the third-person observer would have an influence on the evaluation of the behaviors, the participants' gender was balanced. Moreover, in order to have a more distinguishable reference category, Study 3 implemented a neutral control behavior instead of gossiping as a third condition. We expected this adaption to allow for better pinpointing the perception of sexual objectification as an ethical issue. Finally, the status manipulation was removed, as Study 1 and Study 2 indicated that the characters' status superseded any other attributions made on the basis of the characters' role, gender, or type of behavior. This change was especially relevant for the investigation of power attributions.

Power, the ability to influence others (Copeland, 1994), is associated with people's tendencies to sexually harass and objectify others (e.g., Bargh et al., 1995; Civile & Obhi, 2016; Civile et al., 2016). Moreover, research on norm violation demonstrated that the violation of a social norm can increase the attribution of power (van Kleef et al., 2011). We predicted that sexual objectification, as well as sexual harassment, would be identified as such norm violations. Against those backgrounds, we hypothesized that perpetrators of those behaviors would be perceived as more powerful than targets of the same behavior (Hypothesis 1). Results, however, did not confirm this hypothesis as targets and perpetrators of sexual harassment were rated alike and, moreover, targets of sexual objectification were rated as even more powerful than perpetrators (example item: "Mr. [Ms.] Krueger [Lange] can get Ms. [Mr.] Lange [Krueger] to do what he [she] wants"). This finding indicates that people might infer from the sexual objectification behavior to the attraction of the male or female perpetrator to the female or male target. By assuming that the perpetrators would be attracted to the target, participants perceived

the target as holding power over the perpetrator. Such an inference would be in line with the controversially discussed (see Green, 2013) theory of erotic capital (e.g., Hakim, 2015), which states that people possess, could (and even should) use their ‘erotic capital’ to gain influence over others. However, while the finding, that targets were attributed with more power, does not validate the theory of erotic capital, it indicates that on average, people are prone to a similar reasoning: people seem to hold the idea that being in the spotlight of a person’s sexual interest, would increase power over that person. The fact that the target of the sexually objectifying behavior was reduced to her or his mere body, did not seem to have a considerable influence on participants’ power evaluations. The belief that targets of sexual objectification hold power over perpetrators and not the other way around might even contribute to an understanding of sexual objectification as a less problematic issue.

Whether people would find sexually objectifying behavior ethically concerning, was investigated relative to the assessment of sexual harassment and a neutral behavior, which was instantiated as control condition. To our surprise was the neutral behavior, like the gossiping condition in Study 2, evaluated as a relatively severe ethical issue, as it did not deviate far from the scale midpoint. A potential reason for this outcome is that participants might have adapted their answers because they thought they were expected to identify an ethical issue (see demand characteristics, e.g., Orne, 1962). While the results still allow for drawing several conclusions, future studies should add distractor items to the behaviors as ethical issue scale.

Hypotheses 3a-b predicted that the neutral behavior was seen as the least, and sexual harassment as the most severe ethical issue. Confirming Hypothesis 3a, sexual harassment was perceived as a graver ethical issue than the neutral behavior and objectification. However, other than predicted by Hypothesis 3b, the results showed that on average, the control condition was perceived similarly ethically problematic than objectification. On the one hand, the lack of difference might be due to the mentioned demand characteristic in the neutral control condition.

On the other hand, the result could be additional evidence that people do not perceive sexual objectification as an ethically problematic issue. A further investigation of a perpetrator gender/type of behavior interaction revealed that, as hypothesized (Hypothesis 4), objectifying and harassing behavior by female perpetrators was perceived as less ethically problematic than the same behaviors by male perpetrators. Moreover, sexual objectification was evaluated as the least severe ethical issue when a female perpetrator objectified a male target. When a male perpetrator objectified a female target, however, objectification was perceived as a similarly grave issue than sexual harassment. Jones' (1991) model of ethical decision-making provides an explanation for this finding. People might *socially consent* that sexual aggression by men is a more severe ethical issue because they have learned to condemn rather male than female perpetration behavior. For instance, as male to female sexual aggression is much more prevalent (e.g., WHO: Department of Reproductive Health and Research London, 2013), media coverage of female perpetrators is indeed significantly lower (e.g., Carlyle, Scarduzio, & Slater, 2014). The fact that it played no role whether the female target heard the objectifying sentence (sexual harassment condition) or not (sexual objectification condition), suggests that the *probability of effect* (Jones, 1991)—that is, the probability to which an act causes harm (or benefits), the *magnitude of consequences* and the *temporal immediacy* only played a minor role in participants' evaluations of the male perpetration behavior as ethical issue. In contrast, in Study 2, the perception of male objectification and harassment as an ethical issue did differ. Further research is needed to determine to what extent the different decision-making factors are integrated into the assessment of behaviors as ethical issues. What was also of little importance in Study 3, was the *proximity* (see Jones, 1991) to the victim: We had hypothesized that women would perceive sexual objectification and sexual harassment by male perpetrators as a graver ethical issue than men (Hypothesis 5). As female and male participants evaluated male behaviors not different from each other, the hypothesis was not empirically substantiated. However,

while men evaluated behaviors by male perpetrators as a more severe ethical issue than behaviors by female perpetrators, women rated behaviors by male and female perpetrators alike. Against this background, one could argue for an indirect *proximity effect*: as women encounter sexual objectification and harassment more often than men (Swim et al., 2001), they might identify more strongly with the male victims, than men with the female victims. Another potential explanation for this outcome is that, in comparison to women, men tend to evaluate sexually harassing behavior by women much more positively (e.g., Struckman-Johnson & Struckman-Johnson, 1993). Moreover, while the study's finding might also be applicable to evaluations of female sexual objectification, it does not help to explain the fact that the gender difference in the present study emerged in all three behaviors. A third explanation for the present study's outcome concerns men's relatively greater benevolent sexist attitudes (e.g., Glick & Fiske, 2001b). Those could have diminished the attributed *magnitude of consequences* (Jones, 1991) to every female behavior. However, which effects really contribute to men's bias in the ethical perception of female behaviors, has to be investigated in future studies.

Previous research has demonstrated that men with a greater proclivity to sexually harass others blame perpetrators of sexual harassment less (Key & Ridge, 2011). The authors showed that this is due to the greater identification of those men with perpetrators of sexual harassment. In Study 3, we anticipated a similar effect: Hypothesis 6 predicted that participants with a greater proclivity to sexually objectify, which was measured with the SOOI, would perceive sexual objectification not as a severe ethical issue and would tend to sanction it less. Results showed no effects of the proclivity to sexually objectify on the perception of a behavior as an ethical issue. Hence, Hypothesis 6 was not substantiated. However, SOOI positively predicted the negative sanctioning of behavior: the greater participants' proclivity to sexually objectify, the more they sanctioned any of the three behaviors. An inspection of direct effects indicates that this unexpected outcome was driven by high-SOOI participants' lower sanctioning of male

vs. female perpetrators behaving in a neutral way. Furthermore, an interaction between type of behavior: objectification vs. neutral behavior, gender and objectification proclivity revealed that participants with a lower SOOI score sanctioned male perpetrators of objectifying behavior more than perpetrators of a neutral behavior. This outcome is different from the results by Colin Key and Robert Ridge (2011) who found that proclivity to sexually harass, and the accompanying identification with male harassers, decreased perpetrator blame. In the present study, it was the *lack of* objectification proclivity, which led to an *increased* sanctioning of male perpetrators. However, this and Key and Ridge's study (2011) are not directly comparable as they differ in the dependent variables, methods of analyses, and participant gender. Future studies should investigate the relationship between proclivity, identification, participant gender, blame, and sanctioning more closely.

Based on Study 2 and other experiments (Bowes-Sperry & Powell, 1999), we hypothesized that the effect of type of behavior, perpetrator gender and participants' proclivity to sexually objectify on the sanctioning of the behavior would be mediated by the recognition of the behavior as an ethical issue (Hypothesis 7). While Study 2 did not obtain an indirect effect of type of behavior via the perception as an ethical issue on perpetrator sanctioning, Study 3 did—at least under some conditions of perpetrator gender and participant's objectification proclivity. Overall, the indirect influence of type of behavior on negative sanctioning did not follow a coherent pattern. However, for male perpetrators of harassment, the effects were rather clear: malicious behavior (especially harassment) by male perpetrators was perceived as greater ethical issue than neutral behavior, which in turn lead to the negative sanctioning of the behavior. Perpetrator gender had an indirect influence via the perception as an ethical issue on the sanctioning in the objectification and harassment condition but not in the neutral control condition: Male perpetrators' behavior was perceived as greater ethical issue than female perpetrators' behavior, which in turn lead to a greater sanctioning of male perpetrators. No indirect effects

of the SOOI on the negative sanctioning were obtained. To summarize, Hypothesis 7 was only partially confirmed: The perception as an ethical issue did not mediate the influence of the sexual objectification proclivity on negative sanctioning. However, a partial mediation effect for type of behavior via ethical issue was present for male harassers and to a lesser extent for female harassers and male objectifiers. Moreover, the perception as an ethical issue fully mediated the influence of perpetrator gender on negative sanctioning of objectification and harassment.

Contrary to what was predicted, Study 2 was not able to find that perpetrators of the three types of behavior (gossiping, sexual objectification, and harassment) were perceived different on warmth and competence and that participants would prefer a different amount of social distance toward them. We explained this lack of effect by the considerable influence of the status manipulation. In Study 3, status was not manipulated, so that we predicted again that, in general, perpetrators of objectification and harassment would be perceived as holding less warmth and competence than perpetrators of the neutral behavior and that people would prefer more social distance toward them (Hypothesis 8). Results indicated no difference in attributed warmth or competence to the perpetrators. The hypothesis was partially confirmed because participants' preference for a greater social distance was present for the sexual harassment in comparison to the neutral control condition. When bringing perpetrator gender into the equation, a slightly different picture emerged: Across all types of behavior, men were perceived as holding less competence and warmth and were met with a greater social distance. As predicted by Hypothesis 9, participants indicated a preference for greater social distance toward male than female perpetrators of sexual objectification and harassment. There was no difference in attributed warmth or competence. Interaction effects with type of behavior indicated moreover that participants preferred a greater social distance toward male perpetrators of sexual

objectification and harassment compared to a neutral condition. Participants did, however, not show a different distance toward female perpetrators with respect to their behavior.

Furthermore, contrary to what was predicted by Hypothesis 10, there was no difference in attributed competence and preferred social distance as a combined function of behavior type, perpetrator, and participant gender. However, the attribution of warmth did differ as a combined function of type of behavior, perpetrator gender, and participant gender, with men attributing significantly more warmth to male perpetrators of sexual objectification than women. However, other than predicted by Hypothesis 10, female participants were not more reluctant than male participants in the attribution of warmth to male perpetrators of sexual harassment. The findings suggest that female participants' relatively greater identification with the female victim was only apparent in their relatively lower attribution of warmth to male perpetrators of sexual objectification, but not in their attribution of warmth to male perpetrators of sexual harassment. What follows is that men seemed to demonstrate disapproval of sexual harassment by men to a similar extent than women do, but reject sexually objectifying behavior by men to a lesser degree than women. This becomes evident in the relatively higher attribution of warmth to male objectifiers by male participants. Interestingly, this pattern did not emerge in the perception of the behaviors as an ethical issue, where male and female participants evaluated objectifying and harassing behavior not different from each other. This divergence suggests that it might be a worthwhile endeavor to theoretically and empirically investigate how ethical decision-making (Jones, 1991) relates to the fundamental content of social judgments (Fiske et al., 2002): in what way does the perception of someone's behavior as (un)ethical inform the respecting and liking (e.g., Fiske et al., 2007) of this person? Future studies might want to investigate this connection.

Generally, results of Study 3 regarding warmth, competence and social distance broadly match with those of Study 2: male perpetrators were on average perceived as less warm and

less competent and were met with greater social distance. The gender difference in warmth conformed with the general gender stereotype of men being less communal than women (e.g., Fiske et al., 2002). It is, however, unclear why men were generally perceived as less competent than women. The stereotype content model (Fiske et al., 2002) would predict that men should be attributed with more competence than women—at least in the neutral control condition where the results showed that men did not differ from women. It seems plausible that the salience of the characters' role as employees at a firm was enough to reduce gender stereotypes on competence (e.g., Eagly & Steffen, 1984). Vignettes of future studies should aim at avoiding role memberships other than gender, target, and perpetrator.

### **Summary and conclusion.**

Based on an adapted version of Study 2, Study 3 further investigated participants' evaluations of targets and perpetrators of sexual objectification and sexual harassment. In contrast to Study 2, Study 3 implemented a neutral control condition, did not make use of a status manipulation, and integrated participant's gender as well as their sexual objectification proclivity (measured with the SOOI) as additional variables. In doing so, Study 3 yielded several compelling findings.

First, leaving out the status manipulation did only lead to a slightly different result regarding the power attribution to targets and perpetrators: As in Study 2, perpetrators and targets of sexual harassment were perceived similarly powerful. However, contrary to what was expected, participants attributed more power to targets of sexual objectification than to perpetrators; thereby assuming that being in the center of one's sexual interest coincides with holding power over this person. This finding opens up new potential research avenues. By directly manipulating perceived power, future studies could investigate how the belief that targets of objectification are perceived as more powerful, influences the perception of objectification as a problematic issue.

Second, replacing Study 2's gossiping condition with a neutral behavior did not change the relative evaluation of the behaviors: As in Study 2, sexual objectification was perceived as a less severe ethical issue than sexual harassment but did not differ from the third (neutral control) condition. As even the control condition was perceived as a relatively grave ethical issue, future studies need to guarantee a control condition, which is rated low and not medium on ethical severity. This could be established by reducing potential demand characteristics (e.g., Orne, 1962) with the implementation of distractor items to the behaviors as ethical issue scale.

Third, like in Study 1 and Study 2, perpetrator's gender was found to exert a major influence on participants' evaluations. In general, sexual objectification and harassment by

male perpetrators were evaluated as greater ethical issues than the same behaviors by women. Moreover, participants attributed less warmth and competence to and preferred more social distance toward male perpetrators of any, even the neutral, behavior. Contrary to our expectations, participants' gender did not influence the overall perception of male perpetrators. Compellingly, however, while female participants did not differentiate between male and female perpetrators, male participants perceived any behaviors by women as a less severe ethical issue. The outcome might reflect higher levels of benevolent sexism in males (e.g., Glick & Fiske, 2001b) as well as a greater identification with objectification and harassment victims of any gender in females (see *proximity* in Jones, 1991). Future studies have to directly assess those potential influences by implementing suitable scales like the Ambivalent Sexism Inventory (e.g., Glick & Fiske, 2001b) and an instrument assessing identification with victims (e.g., van Zomeren & Lodewijkx, 2009).

Fourth, participants with a lower but not medium or higher SOOI score negatively sanctioned male perpetrators of objectifying but not harassing behavior more than male perpetrators of a neutral behavior. This outcome indicates that a lower proclivity to sexually objectify goes along with a reduced sympathy for men, who show sexually objectifying behavior. Moreover, the finding highlights the SOOI's value as a research tool for the investigation of people's proclivity to sexually objectify.

## **General Discussion of Empirical Part II**

In 2014, the US-American actress Shoshana Roberts walked silently through the streets of New-York for 10 hours. The whole walk was documented by a hidden camera, which recorded that Roberts was the target of 108 catcalls and other incidents of street-harassment (“10 hours of walking in NYC as a woman,” n.d.). A two-minute video showcasing the incidents, became viral shortly after its release, sparking numerous journalistic articles on street harassment. The video and the persons involved were extensively discussed in social media. Many people supported the actress’ cause of raising awareness for street harassment. Others, however, argued that she should be happy about the ‘compliments’ she is receiving and should not make such a fuss about it. While discussions in the comments section of YouTube, on Facebook walls and in Twitter tweets seem to magically attract strong advocates as well as strong opponents, they are not a representative representation of what people in general think. So, what do people think about such incidents?

Several studies have investigated the evaluation of sexually harassing behavior and the persons involved (e.g., Castellow et al., 1990; Cummings & Armenta, 2002; Gutek et al., 1983). To our knowledge, there is so far no research into the perception of perpetrators and targets of sexually objectifying behavior. With the three conducted experiments, we intended to close this research gap and aim to provide insights into how people perceive targets and perpetrators of sexual objectification. Following a programmatic approach, each study was moderately different from the other: Study 1 assessed participants’ evaluation of targets and perpetrators before and after a sexually objectifying act. Study 2 compared participants’ assessments of sexual objectification to sexual harassment and gossiping. Study 3 compared participants’ assessments of sexual objectification to sexual harassment and a control condition. The studies assessed attributed power, warmth, competence to as well as preferred social distance toward target and

perpetrators of the behaviors. Study 2 and Study 3 moreover investigated to what extent the behaviors were perceived as ethical issues. The three experiments yielded several key findings.

**Key findings, implications, and outlook.**

Research has indicated that sexually harassing behavior partially stems from the motivation to gain or regain power over another person (e.g., Bargh, Raymond, Pryor, & Strack, 1995). It has also been shown that priming power can lead to more sexual objectification (Civile & Obhi, 2016; Civile et al., 2016). We assumed that observers of sexual objectification and sexual harassment might be aware of the association of those behaviors with power and therefore infer that individuals engaging in these behaviors, possess or gain power. Likewise, research on norm violation suggested that people who violate a social norm, for instance, by objectifying or harassing another person, were perceived as more powerful (van Kleef et al., 2011). Contrary to our assumptions, however, findings of Studies 1-3 indicated that perpetrators were not perceived as more powerful due to their objectifying or harassing behavior. Study 1 even provided evidence that perpetrators of sexual objectification were perceived as being less powerful after objectifying another person. Correspondingly, all studies indicated that objectified or harassed targets were not perceived as less powerful after acts of objectification or harassment. The outcomes of Study 3 even suggested that participants assumed that individuals, who are objectified by someone, have more power over the objectifying person than the other way around. The overall evidence suggests that if sexual objectification did lead to a change in power attribution, perpetrators were perceived as less and targets as more powerful. Although initially unexpected, this outcome suggests a form of perpetrator exoneration and victim blame. In the same vein, Steve Loughnan and colleagues (2013) demonstrated that manipulating objectification by depicting sexualized vs. non-sexualized women, results in a greater rape victim blame to the sexualized women. Our studies indicated that already the information of how a woman or a man has been objectified, was sufficient for participants to infer that the objectified

person must hold power over the perpetrator of sexual objectification, and not the other way around. Such inference might even entail that responsibility for the sexually objectifying behavior is attributed to the target. While rape victim blame has been extensively researched (for an overview see Grubb & Turner, 2012), this study is the first to suggest a similar bias for the blame to victims of sexually objectifying behavior. However, future studies need to assess whether the increased power attribution for targets is indeed accompanied by greater victim blame. For instance, a premise for the attribution of blame might be that sexually objectifying behavior is perceived as being condemnable in the first place. Our research suggests that this might not be the case.

Study 2 and Study 3 investigated whether sexual objectification was perceived as an ethical issue. The results of both studies indicated that sexual objectification was perceived as a less severe ethical issue than sexual harassment. What is more, sexual objectification was perceived on the same level of severity as a mild form of gossiping as well as a neutral behavior. In other words, sexual objectification was not perceived as particularly unethical. The findings yielded several implications:

First, the finding that participants perceived sexual harassment as more severe ethical issue than objectification yields further support for the assumption that during ethical decision-making people rely factors described in Jones' ethical decision-making model (1991): the main difference between the depicted sexually harassing and sexually objectifying behavior was that the target did or did not hear a sexually objectifying remark of the perpetrator, imagining touching the participants bottom. Hence, it seems likely that the factors *magnitude of consequences* of the behavior, as well as the *temporal immediacy* of the consequences and *the probability of effect*, have been taken into account during the decision-making process (see Jones, 1991). Study 3 did also deliver some indication that women's relatively greater *proximity* (Jones, 1991) to or identification with female and male targets of objectification and harassment might

have played a role in their assessment of behaviors as an ethical issue. However, research already indicated that people do not differentiate between the *magnitude of consequences*, the *concentration of effect*, the *probability of effect* and the *temporal immediacy*, as suggested in a recent meta-analysis (Kish-Gephart et al., 2010). Hence, further research, which directly assesses the individual influence of the several factors on the ethical decision-making process, is imperative. Moreover, future research should investigate during, which cognitive processes the different components are used. While Jones (1991) assumed a single conscious process of moral reasoning, more recent research indicates that people first engage in intuitive unconscious moral judgment, prior to confirming their judgment via ex post facto moral reasoning (Haidt, 2001). However, the components of Thomas Jones' (1991) model and Jonathan Haidt's (2001) social intuitionist approach to moral judgment do not necessarily exclude each other. It is, for instance, possible that people unconsciously and automatically process information aligning with the components via heuristic decision-making (e.g., Gigerenzer & Gaissmaier, 2011). Heuristics allow for making fast, frugal, and accurate decisions with little effort. When morally judging a behavior like sexual objectification, people might quickly assess the situation and intuitively draw upon existing knowledge, like the *magnitude of consequences* and the *probability of effect* of such behavior. Only when an intuitive moral judgment is not sufficient, or a situation demands a more comprehensive inquiry, systematic moral reasoning should be invoked (Haidt, 2001). However, future research is needed to investigate if, what and how heuristics come into play during ethical decision-making.

The second implication, which emerges from the finding that sexual objectification was overall not perceived as an ethical issue, concerns people's knowledge about sexual objectification. Sexual objectification reduces an entire person to his or\* her body or body parts. Research has shown that objectified individuals are seen as less human and competent (e.g., Heflick et al., 2011; Loughnan et al., 2010). And yet, our studies suggested that people did not

seem to bother much about it. Even the fact that studies' vignettes were placed in a work context, where being perceived as a competent human being, might matter even more, did not seem to play a significant role. Why is it that sexual harassment was perceived as an ethical issue, but sexual objectification not at all? The reason for the vast difference between the evaluation of sexual harassment and sexual objectification as an ethical issue was perhaps—besides potentially being attributed with a different *magnitude of consequences*—due to the ample difference in public's attention to and people's knowledge about the topics. A google search (conducted in April 2019) on both terms exemplified this disparity: while "sexual harassment" led to 37,800,000 search results, "sexual objectification" led with 381,000 results to only 1 % of that. Establishing sexual objectification as a topic of greater public interest would enable people to spot sexually objectifying behavior. Similarly to the finding that awareness to sexism reduces sexist beliefs (Becker & Swim, 2011), being able to recognize sexually objectifying behavior might reduce people's own proclivity to sexually objectify (however, whether this is the case, has to be investigated). Likewise, knowledge about the far-reaching consequences of sexual objectification, including consequences of self-objectification like body shame, depression, and anger (e.g., Moradi & Huang, 2008), might help to make people understand that avoidance and negative sanctioning of sexually objectifying behavior is beneficial.

In Studies 1-3, major effects of perpetrator gender emerged. In all three studies, less warmth and less competence were attributed to male perpetrators than to female perpetrators of any behavior. Furthermore, the results indicated a preference for more social distance toward male than female perpetrators of any behavior. In Study 2 and Study 3, malicious behaviors by men were perceived as more severe ethical issues than the same behaviors by women. Study 3 demonstrated that this evaluation in favor of female perpetrators was not due to a participant gender effect. While the general gender difference in warmth and social distance might have been due to the general gender stereotype of men being less communal than women (e.g., Fiske

et al., 2002), it remained unclear why overall, men were perceived as less competent than women. The difference in the perception of male and female harassment was already discovered by Barbara Gutek and colleagues (1983) who found that harassing behavior by a man was seen as less appropriate than the same behavior by a woman. John Pryor (1985) applied attribution theory—which states that a person's behavior is interpreted in light of perceived causes (e.g., see Harvey & Weary, 1984)—to explain why same behaviors are interpreted differently when executed by different persons (and evaluated by different genders; Pryor & Day, 1988). The same explanation applies today: against the background that men are publicly held accountable for their misogyny (e.g., by the #MeToo movement) it seems plausible that harassment and objectification by a man is attributed to his presumed hostility toward women, resulting in greater social distance, reduced attribution of warmth and the perception of the behavior as a more severe issue. In contrast, sexual objectification and harassment by a woman might, for instance, be attributed to a presumed greater sex drive or lack of social skills, resulting in a less severe assessment of the behavior and her person. Interestingly, however, more recent research than the work of Gutek and colleagues (1983) found no differences in the perception of male and female perpetrators (Smirles, 2004) or even demonstrated that women harassing men were perceived as more guilty than men harassing women (Wayne et al., 2001). In conclusion, more research is needed to explain under what circumstances and on the basis of what attributions sexual objectification and sexual harassment by men and women are perceived as less or more severe issues.

Furthermore, future studies adopting a similar approach should make several additional modifications: First, the experiments only investigated one scenario: sexual objectification (and other behaviors) in a work setting. Forthcoming studies need to apply several different scenarios (e.g., sexual objectification at a club) in order to show that the demonstrated effects are not a feature of the specific setting. Additionally, other forms of sexually objectifying

behavior (e.g., evaluation of gazing behavior) need to be explored. Second, the studies only investigated interpersonal behavior between men and women. Future studies need to examine objectifying and harassing behavior directed at individuals of the same gender as the perpetrator. Third, sample size calculation assumed medium effects. This assumption was somewhat naïve, especially with regard to predicted three-way interactions. In order to thoroughly investigate potential three-way interactions, future studies need to increase power. Fourth, the studies did not compare different types of behaviors within subjects. Although this approach was beneficial in order to assess unbiased ad-hoc evaluations of a single behavior, future studies might want to investigate how sexual objectification is evaluated in direct comparison to other behaviors. That moral cognition is context sensitive and that ethical decision-making implies the contrasting to other behaviors, if available, has, for instance, been shown by Daniel Bartels (2008).

To conclude, the discussion around the video “10 hours of walking in NYC as a woman,” (n.d.), demonstrated that people have pronounced opinions about sexual harassment. This set of three programmatic experiments provided initial evidence that, when it comes to sexual objectifying behavior, there is, however, not much of disapproval. Future research should investigate what is needed to raise people’s awareness about the severe negative impact of sexual objectification.

### **Final Conclusion**

Sexual objectification is omnipresent. People, especially women, are objectified in media like magazines (e.g., Stankiewicz & Rosselli, 2008), video games (Downs & Smith, 2010), and music videos (Stevens Aubrey & Frisby, 2011). Exposure to objectifying media has been evidenced to result in self-objectification (Vandenbosch & Eggermont, 2012), increasing the possibility of eating disorders and mental depressions (cf., Moradi & Huang, 2008). But it is not only media exposure that leads to self-objectification; also, sexual objectification by others has been shown to cause self-objectification (Kozee et al., 2007). Against this background, several research projects have investigated how, why, and under what circumstances people objectify others.

However, despite the studies' diversity in approaches to the topic of sexual objectification, research on other-objectification has so far neglected two crucial aspects: First, no thoroughly validated instrument was available, for measuring people's sexual objectification proclivity. Second, although interpersonal sexual objectification often occurs with other people present (cf., Holland et al., 2016), no studies were available on how observers evaluate sexually objectifying behavior. This dissertation aimed at closing both research gaps.

Empirical Part I of this dissertation described the development and validation of the Sexual Objectification of Others Inventory (SOOI) across five consecutive studies. In comparison to other instruments, which measure people's proclivity to sexually objectify others, the SOOI has been validated thoroughly and is available in a male, female and gender-neutral version. We hope that the SOOI enables researchers to further investigate why and under what circumstances people tend to sexually objectify others.

Empirical Part II of this dissertation described three programmatically developed experiments, which investigated how people evaluate sexual objectifying behavior. For instance, the studies provided initial evidence that people perceive sexual objectification, in contrast to

sexual harassment, not much of an ethical issue. While even philosophers like Martha Nussbaum and Sandra Lee Bartky were of the opinion that sexual objectification is not morally wrong in every instance (McLeod, 2002; e.g., during consensual sex), it is, however, undisputed that, usually (i.e., outside of our bedrooms), sexual objectification can result in severe consequences for the objectified persons (cf., Moradi & Huang, 2008). In general, we believe that our findings are a first constructive step on the way of exploring under what circumstances people regard sexual objectification to be wrong or not.

Ultimately, we hope that our findings on the measurement and evaluation of sexual objectification will help in the fight against sexual objectification, sexual harassment, and sexual violence.

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## Appendices

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## Appendix A

*Materials.*

**Table A1**  
***Final Item Pool Sexual Objectification of Others Inventory (SOOI)***

Item Nr.	Female	Male	Reverse coded
1	Meine Partnerin soll sich für mich schön machen und sonst für niemand anderen.	Mein Partner soll sich für mich schön machen und sonst für niemand anderen.	
2	Bei einem One-Night-Stand ist mir das Aussehen meiner Sexualpartnerin am Wichtigsten, Persönlichkeit und Einstellungen sind ziemlich egal.	Bei einem One-Night-Stand ist mir das Aussehen meines Sexualpartners am Wichtigsten, Persönlichkeit und Einstellungen sind ziemlich egal.	
3	Bei einem One-Night-Stand ist mir relativ egal, ob meiner Sexualpartnerin gefällt was ich mache.	Bei einem One-Night-Stand ist mir relativ egal, ob meinem Sexualpartner gefällt was ich mache.	
4	Das Aussehen meiner Sexualpartnerinnen ist mir mindestens genauso wichtig wie ihre Persönlichkeit.	Das Aussehen meiner Sexualpartner ist mir mindestens genauso wichtig wie ihre Persönlichkeit.	
5	Die Vorstellung, mit Freunden einen Strip-Club zu besuchen und Frauen beim Tanzen zuzuschauen, gefällt mir.	Die Vorstellung, mit Freundinnen einen Strip-Club zu besuchen und Männern beim Tanzen zuzuschauen, gefällt mir.	
6	Es ist möglich, dass ich beim Ausgehen schon einmal eine mir weniger bekannte Frau umarmt habe, um ihr körperlich näher zu sein.	Es ist möglich, dass ich beim Ausgehen schon einmal einen mir weniger bekannten Mann umarmt habe, um ihm körperlich näher zu sein.	
7	Es würde mir Spaß machen, mit Freunden Frauen nach ihrem Aussehen und ihrer "Verführbarkeit" zu bewerten.	Es würde mir Spaß machen, mit Freundinnen Männer nach ihrem Aussehen und ihrer 'Verführbarkeit' zu bewerten.	
8	Fremden Frauen schaue ich nie hinterher.	Fremden Männern schaue ich nie hinterher.	R
9	Manchmal gebe ich vor Freunden mit dem guten Aussehen meiner Partnerin an.	Manchmal gebe ich vor Freundinnen mit dem guten Aussehen meines Partners an.	
10	Ich fasse meiner Partnerin nicht an den Hintern, wenn andere Personen anwesend sind.	Ich fasse meinem Partner nicht an den Hintern, wenn andere Personen anwesend sind.	R

(continued)

**Table A1 (continued)*****Final Item Pool Sexual Objectification of Others Inventory (SOOI)***

Item Nr.	Female	Male	Reverse coded
11	Das Aussehen meiner Partnerin ist mir sehr wichtig, weil sich das positiv auf mein Ansehen auswirkt.	Das Aussehen meines Partners ist mir sehr wichtig, weil sich das positiv auf mein Ansehen auswirkt.	
12	Ich möchte, dass meine Partnerin die Dinge anzieht, die mich ansprechen, auch wenn sie diese selbst vielleicht nicht so schön findet.	Ich möchte, dass mein Partner die Dinge anzieht, die mich ansprechen, auch wenn er diese selbst vielleicht nicht so schön findet.	
13	Ich würde einer Frau stärkere Gefühle vorspielen als tatsächlich da sind, wenn sich dadurch die Chance erhöhen würde, mit ihr im Bett zu landen.	Ich würde einem Mann stärkere Gefühle vorspielen, als tatsächlich da sind, wenn sich dadurch die Chance erhöhen würde, mit ihm im Bett zu landen.	
14	In Urlaubsländern wie Thailand gibt es ein großes Angebot an sehr günstigen weiblichen Prostituierten. Insgeheim kann ich mir vorstellen, dass ich im Urlaub von diesem Angebot Gebrauch machen würde.	In Urlaubsländern wie Thailand gibt es ein großes Angebot an sehr günstigen männlichen Prostituierten. Insgeheim kann ich mir vorstellen, dass ich im Urlaub von diesem Angebot Gebrauch machen würde.	
15	Wenn ich mich mit einer Frau unterhalte, lenken mich ihre weiblichen Vorzüge manchmal so sehr ab, dass ich kurz den Gesprächsfaden verliere.	Wenn ich mich mit einem Mann unterhalte, lenken mich seine männlichen Vorzüge manchmal so sehr ab, dass ich kurz den Gesprächsfaden verliere.	
16	Mein Interesse an einer Frau nimmt ab, je öfter ich Sex mit ihr habe.	Mein Interesse an einem Mann nimmt ab, je öfter ich Sex mit ihm habe.	
17	Meine Partnerin sollte sich gegen die Anmachen anderer Männer wehren, da sie mein ist.	Mein Partner sollte sich gegen die Anmachen anderer Frauen wehren, da er mein ist.	
18	Meine Partnerin gehört mir.	Mein Partner gehört mir.	
19	Meine Partnerin sollte auch für die Erfüllung meiner sexuellen Wünsche sorgen.	Mein Partner sollte auch für die Erfüllung meiner sexuellen Wünsche sorgen.	
20	Meine Partnerin sollte meine sexuellen Bedürfnisse erfüllen, auch wenn es ihr zunächst vielleicht widerstrebt.	Mein Partner sollte meine sexuellen Bedürfnisse erfüllen, auch wenn es ihm zunächst vielleicht widerstrebt.	
21	Meine Partnerin sollte bereit sein, immer wenn ich möchte Sex mit mir zu haben.	Mein Partner sollte bereit sein, immer wenn ich möchte Sex mit mir zu haben.	

(continued)

**Table A1 (continued)*****Final Item Pool Sexual Objectification of Others Inventory (SOOI)***

Item Nr.	Female	Male	Reverse coded
22	Meine Präferenz für eine bestimmte Altersgruppe von Frauen bleibt gleich, auch wenn ich selbst älter werde.	Meine Präferenz für eine bestimmte Altersgruppe von Männern bleibt gleich, auch wenn ich selbst älter werde.	
23	Wenn sie es nicht bemerken, schaue ich schönen Frauen gern ausgiebig auf die Brüste, den Po oder die Beine.	Wenn sie es nicht bemerken, schaue ich schönen Männern gern ausgiebig auf den Po, den Schritt oder die Muskeln.	
24	Stünde ich vor der Entscheidung, würde ich eher in eine gemischtgeschlechtliche Sauna gehen, weil es da mal etwas zu sehen gibt.	Stünde ich vor der Entscheidung, würde ich eher in eine gemischtgeschlechtliche Sauna gehen, weil es da mal etwas zu sehen gibt.	
25	Um ihr näher zu sein, greife ich meiner Partnerin auch in der Öffentlichkeit mal auf den Hintern.	Um ihm näher zu sein, greife ich meinem Partner auch in der Öffentlichkeit mal auf den Hintern.	
26	Wenn ich einen über den Durst getrunken habe, greife ich Frauen schon mal auf den Hintern, auch wenn ich sie - noch - nicht so gut kenne.	Wenn ich einen über den Durst getrunken habe, greife ich Männern schon mal auf den Hintern, auch wenn ich sie - noch - nicht so gut kenne.	
27	Wenn ich keine Aussichten auf Sex habe, bin ich eher weniger interessiert am Kontakt zu Frauen.	Wenn ich keine Aussichten auf Sex habe, bin ich eher weniger interessiert am Kontakt zu Männern.	
28	Wenn ich nicht aufpasse, nimmt mir jemand anders meine Partnerin weg.	Wenn ich nicht aufpasse, nimmt mir jemand anders meinen Partner weg.	
29	Wenn meine Blicke durch eine Sonnenbrille versteckt sind, betrachte ich die Körper von Frauen gerne länger.	Wenn meine Blicke durch eine Sonnenbrille versteckt sind, betrachte ich die Körper von Männern gerne länger.	
30	Wenn mir eine Frau auf der Straße gefällt, mache ich ihr schon mal ein Kompliment.	Wenn mir ein Mann auf der Straße gefällt, mache ich ihm schon mal ein Kompliment.	
31	Wenn mir eine Frau auf der Straße gefällt, pfeife ich ihr schon mal hinterher.	Wenn mir ein Mann auf der Straße gefällt, pfeife ich ihm schon mal hinterher.	
32	Ich finde es überhaupt nicht ansprechend, wenn sich eine Frau als Sexobjekt präsentiert.	Ich finde es überhaupt nicht ansprechend, wenn sich ein Mann als Sexobjekt präsentiert.	R

(continued)

**Table A1 (continued)*****Final Item Pool Sexual Objectification of Others Inventory (SOOI)***

Item Nr.	Female	Male	Reverse coded
33	Ich würde mich darüber freuen, im Urlaub bei einem weiblichen "Wet-T-Shirt-Contest" zuzuschauen.	Ich würde mich darüber freuen, im Urlaub bei einem männlichen 'Wet-T-Shirt-Contest' zuzuschauen.	
34	Ich freue mich jedes Jahr wieder, wenn Frauen aufgrund des besseren Wetters ein wenig mehr nackte Haut zeigen.	Ich freue mich jedes Jahr wieder, wenn Männern aufgrund des besseren Wetters ein wenig mehr nackte Haut zeigen.	
35	Beim Sex denke ich vor allem an meine eigenen Bedürfnisse.	Beim Sex denke ich vor allem an meine eigenen Bedürfnisse.	
36	Es ist mir egal, dass ich meine Augen nicht abwenden kann, wenn eine aufreizende Frau in meiner Nähe ist.	Es ist mir egal, dass ich meine Augen nicht abwenden kann, wenn ein aufreizender Mann in meiner Nähe ist.	
38	Ich schäme mich nicht dafür, wenn mir Werbung gefällt, in denen Frauen sexy dargestellt sind.	Ich schäme mich nicht dafür, wenn mir Werbung gefällt, in denen Männer sexy dargestellt sind.	

**Trigger warning**

Auf den folgenden Seiten werden verschiedenste Situationen aus den Bereichen Sexualität und Partnerschaft umschrieben. Für manche Personen könnten ein paar dieser Umschreibungen unangenehme Erinnerungen ins Gedächtnis rufen. Sollten Sie zu diesen Personen gehören, möchten wir Ihnen hiermit empfehlen, die Studie an dieser Stelle zu beenden. Damit Sie im Falle einer Beendigung trotzdem Ihre volle Versuchspersonenstunde erhalten können, bieten wir Ihnen auf der Folgeseite an, unmittelbar an einer anderen Studie zum Thema "Erster Eindruck am Arbeitsplatz" teilzunehmen. Wenn Sie mit dieser Studie fortfahren möchten, haben Sie weiterhin die Möglichkeit Ihre Teilnahme jederzeit und ohne Angabe von Gründen zu beenden.

**Table A2**

***Items Interpersonal Sexual Objectification Scale (ISOS-P; German translation of Kozee et al., 2007)***

Item
Wie oft haben Sie einer [einem] Frau [Mann] hinterher gepfiffen, während sie [er] die Straße entlangging?
Wie oft haben Sie mit einer [einem] Frau [Mann] gesprochen und ihr [ihm] dabei auf die Brüste gestarrt?
Wie oft haben Sie die äußere Erscheinung einer [einem] Frau [Mann] beurteilt?
Wie oft haben Sie auf den Körper einer [eines] Frau [Mannes] gestarrt?
Wie oft haben Sie heimlich den Körper einer [eines] Frau [Mannes] gemustert?
Wie oft haben Sie eine grobe, sexuell anzügliche Bemerkung über den Körper einer [eines] Frau [Mannes] gemacht?
Wie oft haben Sie eine[n] Frau [Mann] angehupt, als sie [er] die Straße entlanglief?
Wie oft haben Sie länger auf einen oder mehrere Bereiche des Körpers einer [eines] Frau [Mannes] geschaut?
Wie oft haben Sie unangebrachte sexuelle Äußerungen über den Körper einer [eines] Frau [Mannes] gemacht?
Wie oft haben Sie den Körper oder eine Körperstelle einer [eines] Frau [Mannes] betrachtet, anstatt statt ihren [seinen] Schilderungen zuzuhören?
Wie oft haben Sie sexuelle Äußerungen oder Anspielungen gemacht, wenn Ihnen der Körper einer [eines] Frau [Mannes] ins Auge gefallen ist?
Wie oft haben Sie eine[n] Frau [Mann] gegen ihren Willen angefasst oder liebkost?
Wie oft haben Sie eine[n] Frau [Mann] sexuell belästigt (im Job, in der Universität, etc.)?
Wie oft haben Sie intime Körperstellen einer [eines] Frau [Mannes] gegen ihren [seinen] Willen gegrapscht oder gekniffen?
Wie oft haben Sie eine sexuelle Anspielung in Form einer Geste an eine[n] Frau [Mann] gerichtet?

*Note.* Brackets indicate wording in other conditions.

**Table A3*****Items Male Privilege Awareness Scale (MPA; German translation of Case, 2007)***

Item	Reverse coded
Männer haben in Deutschland Privilegien, die Frauen nicht haben.	
Männer haben von vorneherein mehr Möglichkeiten in den Bereichen Arbeit und Bildung.	
In unserer Gesellschaft sind Frauen gegenüber Männern benachteiligt.	
Männer sind im Vorteil, weil sie auf den machtvollen Positionen sitzen.	
Bevor Männer und Frauen gleichberechtigt sein können, müssen Männer dazu bereit sein ihre Privilegien aufzugeben.	
Frauen und Männer haben die gleichen Chancen auf Erfolg in unserer Gesellschaft.	r
Im Moment sind Männer benachteiligt gegenüber Frauen.	r

**Table A4**

*Items Self- and Other-Objectification Questionnaire (SOQ, OOO; German translation of Noll & Fredrickson, 1998 and Strelan and Hargreaves, 2005 by Applied Social Psychology and Gender Research Lab, 2016)*

Item	Appearance (A) vs. Competence (C)
Gewicht	A
Körperliche Attraktivität	A
Körpermaße (z.B. Brust, Taille, Hüfte)	A
Sex-Appeal	A
Sichtbar muskulöser Körper	A
Energie (z.B. Ausdauer)	C
Gesundheit	C
Körperkraft	C
Körperliche Fitness	C
Physische Koordination	C

*Note.* Instruction SOQ: “Was sind für Sie wesentliche Körpermerkmale? Bitte erstellen Sie Ihre persönliche Top Ten Liste. Dabei soll eine Rangfolge von dem Merkmal mit der größten Bedeutung für Ihr körperliches Selbstbild bis hin zu dem Merkmal mit der geringsten Bedeutung für Ihr körperliches Selbstbild erstellt werden. Wichtiger Hinweis: Es ist egal, wie Sie sich selbst in Bezug auf dieses Merkmal bewerten. Zum Beispiel kann körperliche Fitness große Bedeutung für Ihr körperliches Selbstbild haben, unabhängig davon, ob Sie sich selbst als körperlich fit oder nicht fit betrachten. Bitte lesen Sie zunächst alle Eigenschaften durch. Legen Sie Ihre Top Ten Liste an. Dazu schieben Sie die Eigenschaften vom linken Feld in das rechte.“

Instruction OOO: “Was sind für Sie die wesentlichsten Körpermerkmale von Frauen [Männern]? Bitte erstellen Sie Ihre persönliche Top Ten Liste. Dabei soll eine Rangfolge von dem Merkmal mit der größten Bedeutung für Ihre Einschätzung von Frauenkörpern [Männerkörpern] bis hin zu dem Merkmal mit der geringsten Bedeutung für Ihre Einschätzung von Frauenkörpern erstellt werden. Wichtiger Hinweis: Es ist egal, wie Sie sich selbst in Bezug auf dieses Merkmal bewerten. Zum Beispiel kann körperliche Fitness große Bedeutung für Ihre Einschätzung von Frauenkörpern [Männerkörpern] haben, unabhängig davon, ob Sie sich selbst als körperlich fit oder nicht fit betrachten.“

**Table A5*****Items Interest in Sex- Robots (ISR; scale adapted from Kuchenbrandt & Eyszel, 2012)***

Items
einen Sex-Roboter zu besitzen.
einen Sex-Roboter kennen zu lernen.
einen Sex-Roboter zu nutzen.
einen Sex-Roboter zu testen.
einen Sex-Roboter zu kaufen.
einen Sex-Roboter zu Hause zu haben.
Zeit mit einem Sex-Roboter zu verbringen.
einen Sex-Roboter als gute/n Freund/in zu haben.
einen Sex-Roboter als Partner/in zu haben.
einen Sex-Roboter gemeinsam mit meinem Partner oder meiner Partnerin zu nutzen.
einen Sex-Roboter alleine zu nutzen.
mit einem Sex-Roboter zusammen zu leben.

Note. Instruction: "Ich könnte mir vorstellen...".

**Table A6*****Items, Means and Standard Deviations of the Objectifying Word Positivity Index (OWPI)***

1	benutzen	6.52	1.29	1.70	1.23
2	gebrauchen	6.35	1.33	1.93	1.13
3	weghauen	6.34	1.16	1.60	0.88
4	wegflanken	6.30	1.17	1.79	1.07
5	wegmachen	6.15	1.36	1.69	1.05
6	wegbuttern	6.13	1.25	1.94	1.13
7	wegstecken	6.01	1.41	1.91	1.08
8	knallen	5.80	1.21	2.18	1.21
9	aufreißen	5.68	1.34	2.24	1.09
10	nageln	5.66	1.34	2.27	1.12
11	durchbürsten	5.59	1.46	2.16	1.27
12	nehmen	5.47	1.45	3.20	1.47
13	klarmachen	5.41	1.44	2.88	1.26
14	flachlegen	5.40	1.40	2.77	1.27
15	rammeln	5.39	1.48	2.04	1.02
16	abchecken	5.37	1.54	2.87	1.17
17	rannehmen	5.34	1.46	2.79	1.45
18	besteigen	5.32	1.36	2.48	1.26

(continued)

**Table A6 (continued)**  
***Items, Means and Standard Deviations of the Objectifying Word Positivity Index (OWPI)***

Item Nr.	Item	Assessment as objectifying		Assessment as positive	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
19	besamen	5.27	1.59	2.46	1.44
20	poppen	4.95	1.58	2.68	1.29
21	ficken	4.90	1.69	3.18	1.60
22	pimperm	4.88	1.53	2.59	1.18
23	anbaggern	4.87	1.49	2.88	1.13
24	bumsen	4.68	1.61	3.07	1.37
25	pudern	4.68	1.47	2.86	1.30
26	vögeln	4.51	1.70	3.65	1.45
27	penetrieren	4.35	1.68	3.16	1.27
28	besorgen	4.28	1.66	3.58	1.54
29	treiben	4.27	1.53	3.54	1.23
30	anmachen	4.24	1.58	3.48	1.25
31	stoßen	4.22	1.56	3.66	1.27
32	begatten	4.16	1.72	3.12	1.34
33	fordern	3.99	1.79	3.61	1.46
34	blasen	3.96	1.68	4.26	1.41
35	reiten	3.95	1.65	4.09	1.46
36	schwängern	3.77	1.84	3.38	1.42
37	koitieren	3.68	1.73	3.49	1.22
38	kopulieren	3.68	1.66	3.50	1.17
39	schnackseln	3.54	1.58	3.84	1.42
40	fesseln	3.53	1.58	4.53	1.45
41	eindringen	3.45	1.62	4.21	1.30
42	erobern	3.40	1.99	5.14	1.47
43	paaren	3.32	1.67	3.47	1.29
44	fingern	3.24	1.55	4.35	1.41
45	fummeln	3.24	1.38	4.27	1.33
46	werben	3.07	1.58	4.19	1.31
47	schmachten	2.88	1.57	4.16	1.39
48	lecken	2.93	1.63	4.91	1.43
49	beischlafen	2.87	1.62	4.14	1.22
50	befriedigen	2.87	1.78	5.16	1.34
51	betören	2.86	1.43	4.58	1.43
52	begehren	2.54	1.68	5.90	1.08
53	vergnügen	2.52	1.63	5.78	1.09
54	beglücken	2.48	1.59	5.20	1.50
55	erregen	2.40	1.36	5.79	1.08
56	flirten	2.29	1.26	5.73	1.04
57	vereinigen	2.22	1.40	4.55	1.32
58	entdecken	2.19	1.34	5.62	1.20
59	sehnen	2.16	1.31	5.26	1.17
60	schmeicheln	2.11	1.25	5.44	1.24
61	kitzeln	2.05	1.21	5.30	1.34

(continued)

**Table A6 (continued)*****Items, Means and Standard Deviations of the Objectifying Word Positivity Index (OWPI)***

Item Nr.	Item	Assessment as objectifying		Assessment as positive	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
62	knuddeln	1.90	1.20	5.80	1.22
63	streicheln	1.84	1.16	6.06	0.94
64	bewundern	1.75	1.25	6.34	0.99
65	liebkosn	1.71	1.30	5.95	1.37
66	küssen	1.65	1.21	6.70	0.60
67	kuscheln	1.63	1.15	6.52	0.74
68	lieben	1.41	1.02	6.79	0.54
69	verlieben	1.30	0.81	6.65	0.66

*Note.* Item 1-32 were included into the OWPI.

***Results.*****Table A7*****Means, Standard Deviations and Gender Comparison of the Validation Scales in Study 1***

	Overall		Women		Men		Gender Comparison			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
1.	3.18	1.33	2.98	1.21	3.39	1.41	2.29	211.00	.023	0.31
2.	3.76	1.33	3.53	1.29	4.01	1.33	2.73	211.00	.007	0.37
3.	3.38	1.39	3.22	1.30	3.55	1.47	1.77	211.00	.079	0.24
4.	2.84	1.06	2.64	0.92	3.05	1.15	2.91	196.89	< .001	0.39
5.	5.45	1.11	5.58	1.00	5.31	1.21	1.78	211.00	.076	0.24
6.	1.98	0.45	1.92	0.43	2.05	0.46	2.21	211.00	.028	0.29
7.	2.73	1.21			2.73	1.21				
8.	4.74	1.19	4.82	1.09	4.66	1.29	0.99	201.40	.326	0.13
9.	0.08	11.55	-3.53	11.33	3.87	10.57	4.92	211.00	< .001	0.67
10.	2.55	0.83	2.41	0.64	2.70	0.97	2.55	176.47	.012	0.35
11.	6.21	0.71	6.29	0.67	6.12	0.74	1.78	211.00	.076	0.24
12.	0.00	0.71	-0.17	0.40	0.18	0.89	3.68	141.97	< .001	0.51
13.	4.15	1.68	3.64	1.75	4.69	1.43	4.81	206.26	< .001	0.66
14.	-2.96	11.93	-2.98	11.19	-2.94	12.71	0.02	211.00	.981	0.00

*Note.* 1. AMMSA, 2. ASI-B, 3. ASI-H, 4. EMS-S, 5. IMS-S, 6. ISOS-P, 7. LSH, 8. MPA, 9. OQ, 10. SDO6, 11. SOI: LTMO, 12. SOI: PSB, 13. SOI: STMO, 14. SOQ. For some variables Levene's tests revealed unequal variances for men and women. As a consequence, we calculated Welch's t-tests instead of Student's t-tests. Corresponding cases can be identified by degrees of freedom unequal to 211.

**Table A8**  
**Means, Standard Deviations and Gender Comparison of the Validation Scales in Study 2**

	Overall		Women		Men		Gender Comparison			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
1.	3.65	0.91	3.73	0.95	3.58	0.87	1.21	217.00	.227	0.16
2.	4.06	0.81	3.99	0.77	4.13	0.84	1.31	217.00	.190	0.17
3.	4.68	1.41	4.28	1.37	5.05	1.36	4.22	217.00	< .001	0.56
4.	4.52	1.35	4.14	1.30	4.89	1.31	3.70	162.00	< .001	0.57
5.	2.69	0.88	2.57	0.77	2.80	0.97	1.90	217.00	.058	0.26
6.	1.85	0.39	1.80	0.39	1.91	0.39	2.15	217.00	.033	0.28
7.	2.11	1.16	1.69	0.80	2.52	1.31	4.91	135.97	< .001	0.76
8.	2.64	0.66	2.50	0.61	2.77	0.67	2.61	162.00	.010	0.42
9.	6.25	0.78	6.33	0.81	6.18	0.75	1.49	217.00	.138	0.19
10.	0.00	0.65	-0.06	0.60	0.06	0.69	1.38	217.00	.169	0.19
11.	4.29	1.60	3.83	1.53	4.73	1.54	4.31	217.00	< .001	0.59

*Note.* 1. BIDR: IM 2. BIDR: SD 3. DFS Time 1 4. DFS Time 2 5. ISHMA 6. ISOS-P 7. ISR 8. OWPI 9. SOI: LTMO 10. SOI: PSB 11. SOI: STMO. For some variables, Levene's tests revealed unequal variances for men and women. As a consequence, we calculated Welch's t-tests instead of Student's t-tests. Corresponding cases can be identified by degrees of freedom unequal to 217 or 162.

**Table A9**  
**Pairwise Correlations of Validation Scales in Study 1**

Scales		Pearson's <i>r</i>
AMMSA	ASI-B	.55**
AMMSA	ASI-H	.87**
AMMSA	EMS-S	.18**
AMMSA	IMS-S	-.61**
AMMSA	ISOS-P	.40**
AMMSA	LSH	.49**
AMMSA	MPA	-.42**
AMMSA	OOQ	.19**
AMMSA	SDO6	.51**
AMMSA	SOI: LTMO	.06
AMMSA	SOI: PSB	.12
AMMSA	SOI: STMO	.02
AMMSA	ScoreSOQ	.06
ASI-B	ASI-H	.57**
ASI-B	EMS-S	.27**
ASI-B	IMS-S	-.34**
ASI-B	ISOS-P	.24**
ASI-B	LSH	.35**
ASI-B	MPA	-.22**
ASI-B	OOQ	.27**

(continued)

**Table A9**  
**Pairwise Correlations of Validation Scales in Study 1**

<i>Scales</i>		<i>Pearson's r</i>
<i>ASI-B</i>	<i>SDO6</i>	.15**
<i>ASI-B</i>	<i>SOI: LTMO</i>	.24**
<i>ASI-B</i>	<i>SOI: PSB</i>	.08
<i>ASI-B</i>	<i>SOI: STMO</i>	-.14**
<i>ASI-B</i>	<i>ScoreSOQ</i>	.10
<i>ASI-H</i>	<i>EMS-S</i>	.18**
<i>ASI-H</i>	<i>IMS-S</i>	-.65**
<i>ASI-H</i>	<i>ISOS-P</i>	.38**
<i>ASI-H</i>	<i>LSH</i>	.51**
<i>ASI-H</i>	<i>MPA</i>	-.52**
<i>ASI-H</i>	<i>OOQ</i>	.19**
<i>ASI-H</i>	<i>SDO6</i>	.50**
<i>ASI-H</i>	<i>SOI: LTMO</i>	.09
<i>ASI-H</i>	<i>SOI: PSB</i>	.09
<i>ASI-H</i>	<i>SOI: STMO</i>	-.03
<i>ASI-H</i>	<i>ScoreSOQ</i>	.09
<i>EMS-S</i>	<i>IMS-S</i>	.02
<i>EMS-S</i>	<i>ISOS-P</i>	.04
<i>EMS-S</i>	<i>LSH</i>	.08
<i>EMS-S</i>	<i>MPA</i>	.00
<i>EMS-S</i>	<i>OOQ</i>	.14**
<i>EMS-S</i>	<i>SDO6</i>	.05
<i>EMS-S</i>	<i>SOI: LTMO</i>	-.12
<i>EMS-S</i>	<i>SOI: PSB</i>	.09
<i>EMS-S</i>	<i>SOI: STMO</i>	-.16**
<i>EMS-S</i>	<i>ScoreSOQ</i>	.03
<i>IMS-S</i>	<i>ISOS-P</i>	-.34**
<i>IMS-S</i>	<i>LSH</i>	-.37**
<i>IMS-S</i>	<i>MPA</i>	.49**
<i>IMS-S</i>	<i>OOQ</i>	-.12
<i>IMS-S</i>	<i>SDO6</i>	-.61**
<i>IMS-S</i>	<i>SOI: LTMO</i>	.04
<i>IMS-S</i>	<i>SOI: PSB</i>	-.05
<i>IMS-S</i>	<i>SOI: STMO</i>	-.01
<i>IMS-S</i>	<i>ScoreSOQ</i>	-.10
<i>ISOS-P</i>	<i>LSH</i>	.48**
<i>ISOS-P</i>	<i>MPA</i>	-.17**
<i>ISOS-P</i>	<i>OOQ</i>	.22**
<i>ISOS-P</i>	<i>SDO6</i>	.25**
<i>ISOS-P</i>	<i>SOI: LTMO</i>	-.10
<i>ISOS-P</i>	<i>SOI: PSB</i>	.33**
<i>ISOS-P</i>	<i>SOI: STMO</i>	.43**
<i>ISOS-P</i>	<i>ScoreSOQ</i>	.13
<i>LSH</i>	<i>MPA</i>	-.25**

(continued)

**Table A9**  
**Pairwise Correlations of Validation Scales in Study 1**

Scales	Pearson's <i>r</i>	
LSH	OOQ	.24**
LSH	SDO6	.28**
LSH	SOI: LTMO	-.11
LSH	SOI: PSB	.30**
LSH	SOI: STMO	.27**
LSH	ScoreSOQ	.22**
MPA	OOQ	-.05
MPA	SDO6	-.43**
MPA	SOI: LTMO	-.05
MPA	SOI: PSB	-.07
MPA	SOI: STMO	.08
MPA	ScoreSOQ	.00
OOQ	SDO6	.07
OOQ	SOI: LTMO	.00
OOQ	SOI: PSB	.18**
OOQ	SOI: STMO	.21**
OOQ	ScoreSOQ	.62**
SDO6	SOI: LTMO	-.12
SDO6	SOI: PSB	.08
SDO6	SOI: STMO	.00
SDO6	ScoreSOQ	-.02
SOI: LTMO	SOI: PSB	-.27**
SOI: LTMO	SOI: STMO	-.31**
SOI: LTMO	ScoreSOQ	.00
SOI: PSB	SOI: STMO	.45**
SOI: PSB	ScoreSOQ	.04
SOI: STMO	ScoreSOQ	.16**

**Table A10**  
**Correlations of Validation Scales in Study 2**

	1	2	3	4	5	6	7	8	9	10	
1	BIDR: IM	—									
2	BIDR: SD	.14**	—								
3	DFS Time 1	-.06	.17**	—							
4	DFS Time 2	.05	.08	.74**	—						
5	ISHMA	-.13	.12	.17**	.16**	—					
6	ISOS-P	-.08	.07	.33**	.38**	.36**	—				
7	ISR	-.04	-.01	.33**	.29**	.10	.25**	—			
8	OWPI	-.07	.08	.26**	.34**	.17*	.19*	.31**	—		
9	SOI: LTMO	-.01	.03	.05	.04	.03	-.17**	-.11	.12	—	
10	SOI: STMO	-.14**	.13	.32**	.24**	.07	.34**	.36**	.21**	-.31**	—

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

**Table A11**  
***Results of post hoc mediation analysis of STMO on LSH via SOOI***

Criteria with predictors and moderators	$\beta$	$t$	$p$	95% CI	
				LL	UL
SOOI					
STMO	0.61	5.45	< .001	0.43	0.80
LSH					
STMO	-0.23	-0.24	.812	-0.20	0.15
SOOI	0.57	6.97	< .001	0.43	0.70
Direct effect from SOOI on LSH	-0.03	-0.24	.812	-0.20	0.15
Indirect effect from SOOI on LSH	0.35	-	-	0.21	0.52

*Note.* Overall model on SOOI:  $R^2 = .26$ ,  $F(1, 102) = 29.65$ ,  $p < .001$ , overall model on LSH:  $R^2 = .38$ ,  $F(2, 101) = 30.40$ ,  $p < .001$ .

**Appendix B***Materials.***Table B1**  
*Final SOOI Items German*

Item Nr.	Factor	Male	Female	Neutral	Re-verse coded
7	VO	Es würde mir Spaß machen, mit Freundinnen Männer nach ihrem Aussehen und ihrer 'Verführbarkeit' zu bewerten.	Es würde mir Spaß machen, zusammen mit Freunden Frauen nach ihrem Aussehen und ihrer "Verführbarkeit" zu bewerten	Es würde mir Spaß machen, mit Freund*innen Personen nach deren Aussehen und 'Verführbarkeit' zu bewerten.	
8	VO	Fremden Männern schaue ich nie hinterher.	Fremden Frauen schaue ich selten hinterher.	Fremden Personen schaue ich nie hinterher.	R
13	IO	Ich würde einem Mann stärkere Gefühle vorspielen, als tatsächlich da sind, wenn sich dadurch die Chance erhöhen würde, mit ihm im Bett zu landen.	Ich würde einer Frau stärkere Gefühle vorspielen, als tatsächlich da sind, wenn sich dadurch die Chance erhöhen würde, mit ihr im Bett zu landen	Ich würde einer Person stärkere Gefühle vorspielen, als tatsächlich da sind, wenn sich dadurch die Chance erhöhen würde, mit dieser Person im Bett zu landen.	
14	IO	In Urlaubsländern wie Thailand gibt es ein großes Angebot an sehr günstigen männlichen Prostituierten. Insgeheim kann ich mir vorstellen, dass ich im Urlaub von diesem Angebot Gebrauch machen würde.	In Urlaubsländern wie Thailand gibt es ein großes Angebot an sehr günstigen weiblichen Prostituierten. Insgeheim kann ich mir vorstellen, dass ich im Urlaub von diesem Angebot Gebrauch machen würde.	In Urlaubsländern wie Thailand gibt es ein großes Angebot an sehr günstigen Sexarbeiter*innen. Insgeheim kann ich mir vorstellen, dass ich im Urlaub von diesem Angebot Gebrauch machen würde.	

(continued)

**Table B1 (continued)**  
**Final SOOI Items German**

Item Nr.	Factor	Male	Female	Neutral	Re-verse coded
22	IO	Meine Präferenz für eine bestimmte Altersgruppe von Männern bleibt gleich, auch wenn ich selbst älter werde.	Meine Präferenz für eine bestimmte Altersgruppe von Frauen bleibt gleich, auch wenn ich selbst älter werde.	Meine Präferenz für eine bestimmte Altersgruppe von Sexualpartner*innen bleibt gleich, auch wenn ich selbst älter werde.	
23	VO	Wenn sie es nicht bemerken, schaue ich schönen Männern gern ausgiebig auf den Po, den Schritt oder die Muskeln.	Wenn sie es nicht bemerken, schaue ich schönen Frauen gern ausgiebig auf die Brüste, den Po oder die Beine.	Wenn sie es nicht bemerken, schaue ich schönen Personen gern ausgiebig auf den Körper.	
24	VO	Ich schaue mir gerne fremde nackte Männer an (z.B. in der Sauna).	Ich schaue mir gerne fremde nackte Frauen an (z.B. in der Sauna).	Ich schaue mir gerne fremde nackte Menschen an (z.B. in der Sauna).	
27	IO	Wenn ich keine Aussichten auf Sex habe, bin ich eher weniger interessiert am Kontakt zu Männern.	Wenn ich keine Aussichten auf Sex habe, bin ich eher wenig interessiert am Kontakt zu Frauen.	Wenn ich keine Aussichten auf Sex habe, bin ich eher weniger interessiert am Kontakt zu anderen Personen.	
29	VO	Wenn meine Blicke durch eine Sonnenbrille versteckt sind, betrachte ich die Körper von Männern gerne länger.	Wenn meine Blicke durch eine Sonnenbrille versteckt sind, betrachte ich die Körper von Frauen gerne länger.	Wenn meine Blicke durch eine Sonnenbrille versteckt sind, betrachte ich die Körper von anderen Personen gerne länger.	
32	IO	Ich finde es überhaupt nicht ansprechend, wenn sich ein Mann als Sexobjekt präsentiert.	Ich finde es überhaupt nicht ansprechend, wenn sich eine Frau als Sexobjekt präsentiert.	Ich finde es überhaupt nicht ansprechend, wenn sich eine Person als Sexobjekt präsentiert.	R

(continued)

**Table B1 (continued)**  
**Final SOOI Items German**

Item Nr.	Factor	Male	Female	Neutral	Re-verse coded
38	VO	Ich schäme mich nicht dafür, wenn mir Werbung gefällt, in denen Männer sexy dargestellt sind.	Ich schäme mich nicht dafür, wenn mir Werbung gefällt, in denen Frauen sexy dargestellt sind.	Ich schäme mich nicht dafür, wenn mir Werbung gefällt, in denen Personen sexy dargestellt sind.	

Note. VO = Visual Objectification, IO = Instrumental Objectification.

### Results.

**Table B2**  
**Means and Standard Deviations of SOI for Different Genders.**

	Overall		Women		Men		Other Gender	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1.	5.73	1.02	5.94	0.85	5.10	1.46	6.20	0.22
2.	4.76	1.47	5.13	1.23	4.31	1.54	4.80	1.42

Note. 1. SOI: LTMO, 2. SOI: STMO

**Table B3**  
**Means and Standard Deviations of SOI Across People for Participants Who Identified Most as Either Lesbian, Gay, Bisexual, Trans, Queer or with the Whole LGBTQ-Term**

	Lesbian		Gay		Bisexual		Trans		Queer		LGBTQ*	
	<i>M</i>	<i>SD</i>										
1.	6.36	0.55	5.88	0.88	5.32	1.30	6.14	0.53	5.51	0.93	5.40	1.43
2.	2.99	1.19	5.23	1.23	5.01	1.43	3.77	1.87	4.67	1.51	4.73	1.26

Note. 1. SOI: LTMO, 2. SOI: STMO

### Post hoc comparisons.

A post hoc comparison between a weighted average of women's means of Visual Objectification in Study 1 and Study 2, Time 1 ( $M_{\text{women}} = 4.42$ ,  $SD_{\text{women}} = 1.23$ ,  $n = 215$ ) with women's mean values of Study 3 (see results section of Study 3) showed significantly smaller scores for women in Study 3 compared to the averaged scores of Study 1 and Study 2,  $t(242) = 3.50$ ,  $p < .001$ .

A post hoc comparison between a weighted average of men's means of Visual Objectification in Study 1 and Study 2, Time 1 ( $M_{\text{men}} = 4.43$ ,  $SD_{\text{men}} = 1.33$ ,  $n = 217$ ) with men's mean values of Study 3 (see results section of Study 3) showed significantly greater scores for men in Study 3 compared to the averaged scores of Study 1 and Study 2, Time 1,  $t(258) = 2.85$ ,  $p = .005$ .

## Appendix C

*Materials.*

**Table C1**  
***Final SOOI Items English***

Item Nr.	Factor	Male	Female	Neutral	Re-verse coded
7	VO	I would like to evaluate women with my friends based on their appearance and 'beddability'.	I would like to evaluate men with my friends based on their appearance and 'beddability'.	I would like to evaluate people with my friends based on their appearance and 'beddability'.	
8	VO	I rarely look at women I don't know.	I rarely look at men I don't know.	I rarely look at people I don't know.	R
13	IO	I would pretend to like a woman more than I actually do if this means it will be easier to get her into bed.	I would pretend to like a man more than I actually do if this means it will be easier to get him into bed.	I would pretend to like someone more than I actually do if this means it will be easier to get the person into bed.	
14	IO	In holiday destinations like Thailand, there are many available and inexpensive female prostitutes. In secret I can imagine visiting a prostitute on holiday.	In holiday destinations like Thailand, there are many available and inexpensive male prostitutes. In secret I can imagine visiting a prostitute on holiday.	In holiday destinations like Thailand, there are many available and inexpensive prostitutes. In secret I can imagine visiting a prostitute on holiday.	
22	IO	My preference for women of a certain age remains the same, even as I age myself.	My preference for men of a certain age remains the same, even as I age myself.	My preference for people of a certain age remains the same, even as I age myself.	
23	VO	When they are not looking, I like to stare at pretty women's breasts, bottoms or legs.	When they are not looking, I like to stare at good-looking men's bottoms, crotches and muscles.	When they are not looking, I like to stare at good-looking people's bodies.	

(continued)

**Table C1 (continued)**  
***Final SOOI Items English***

Item Nr.	Factor	Female	Male	Neutral	Re-verse coded
24	VO	I like to look at naked women who I don't know (e.g., in the sauna).	I like to look at naked men who I don't know (e.g., in the sauna).	I like to look at naked people who I don't know (e.g., in the sauna).	
27	IO	If there is no chance of sex, I am less interested in contact with women.	If there is no chance of sex, I am less interested in contact with men.	If there is no chance of sex, I am less interested in contact with others.	
29	VO	If my eyes are hidden behind sunglasses, I like to stare at women's bodies longer.	If my eyes are hidden behind sunglasses, I like to stare at men's bodies longer.	If my eyes are hidden behind sunglasses, I like to stare at people's bodies longer.	
32	IO	I do not find it attractive when a woman presents herself as a sex object.	I do not find it attractive when a man presents himself as a sex object.	I do not find it attractive when persons present themselves as sex objects.	R
38	VO	I am not ashamed to admit I like adverts portraying sexy women.	I am not ashamed to admit I like adverts portraying sexy men.	I am not ashamed to admit I like adverts portraying sexy people.	

*Note.* VO = Visual Objectification, IO = Instrumental Objectification. The gender-neutral items are included for completeness as they were not presented in Study 3.

**Results.****Table C2**  
**Means, Standard Deviations and Gender Comparison of the Validation Scales in Study 4**

	Overall		Women		Men		Gender Comparison			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
1.	4.25	1.00	4.31	1.02	4.18	0.99	0.76	137.00	.448	0.13
2.	3.93	0.99	3.95	1.08	3.92	0.89	0.18	137.00	.859	0.03
3.	-	-	2.70	0.76	-	-				
4.	-	-	-	-	3.08	0.95				
5.	2.89	0.99	2.90	0.85	2.87	1.13	0.20	137.00	.842	0.03
6.	1.58	0.44	1.47	0.37	1.70	0.48	-3.19	122.43	.002	0.55
7.	6.15	12.22	1.38	12.57	11.42	9.41	-5.36	132.53	< .001	0.90
8.	6.08	1.04	6.17	1.12	5.98	0.94	1.06	137.00	.292	0.18
9.	3.78	1.49	3.29	1.39	4.31	1.43	-4.28	137.00	< .001	0.73
10.	1.14	13.25	0.10	12.65	2.30	13.89	-0.98	137.00	.329	0.17

*Note.* 1. BIDR: IM, 2. BIDR: SD, 3. COS-M, 4. COS-W, 5. ISHMA, 6. ISOS-P, 7. OOOQ, 8. SOI: LTMO, 9. SOI: STMO, 10. SOQ, 11. SOI: LTMO, 12. SOI: PSB, 13. SOI: STMO, 14. SOQ. For some variables Levene's tests revealed unequal variances for men and women. As a consequence, we calculated Welch's t-tests instead of Student's t-tests. Corresponding cases can be identified by degrees of freedom unequal to 137.

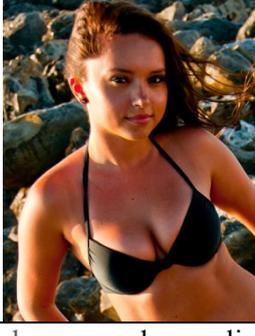
## Appendix D

*Materials.***Table D1**

*Results of pretest for BO-A items. Means and Standard Deviations for Valence, Humanization (H) and Sexualization (S) and Categorization in BO-A*

	<i>Valence</i>		<i>Humanization</i>		<i>Sexualization</i>		<i>BO-A</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<i>Freundlich</i>	6.49	0.74	5.57	1.59	4.73	1.45	
<i>Familien-Mensch</i>	6.05	0.91	6.13	0.89	3.78	1.89	
<i>Zielstrebig</i>	6.02	0.88	6.11	0.98	3.80	1.83	
<i>Schöne Augen</i>	6.00	0.93	2.56	1.66	5.10	1.72	<i>S</i>
<i>Ihr Traum ist es, einmal um die Welt zu reisen</i>	5.87	0.99	5.82	1.16	2.87	1.74	<i>H</i>
<i>Liebt es zu kochen</i>	5.87	0.88	5.26	1.26	3.03	1.72	<i>H</i>
<i>Sorgfältig</i>	5.72	0.88	5.93	1.01	3.45	1.66	<i>H</i>
<i>Knackiger Hintern</i>	5.69	0.98	2.57	1.66	5.12	1.70	<i>S</i>
<i>Schöne Brüste</i>	5.64	0.84	2.31	1.52	5.50	1.63	
<i>Macht sehr gute Schokomuffins</i>	5.48	1.01	3.54	1.74	2.72	1.60	
<i>Mag Morgensex</i>	5.43	1.13	3.47	1.71	6.10	1.13	<i>S</i>
<i>Springt herum, wenn sie glücklich ist</i>	5.30	1.52	5.23	1.43	3.90	1.81	<i>H</i>
<i>Verführerisch</i>	5.23	1.17	4.51	1.26	5.81	1.38	
<i>Toller Hüftschwung</i>	5.18	0.94	2.80	1.63	5.03	1.70	
<i>Wandert gerne</i>	5.13	1.35	5.33	1.31	2.75	1.71	<i>H</i>
<i>Untenrum glatt rasiert</i>	5.12	1.06	3.18	1.66	5.69	1.40	<i>S</i>
<i>Schlank</i>	5.11	0.91	2.97	1.72	4.73	1.76	<i>S</i>
<i>Gibt wirklich gute Blow-Jobs</i>	4.92	1.59	2.75	1.85	6.15	1.19	
<i>Gibt gute Öl-Massagen</i>	4.88	1.18	2.79	1.61	5.47	1.42	<i>S</i>
<i>Isst gern italienisch</i>	4.85	1.11	3.93	1.96	2.70	1.60	
<i>Hat ein Faible für Science-Fiction-Filme</i>	4.54	1.39	4.56	1.59	2.66	1.69	<i>H</i>
<i>Hat ein winziges Tattoo am Knöchel</i>	4.15	0.95	3.59	1.64	2.90	1.77	
<i>In ihrer Handtasche hat sie immer Kondome dabei</i>	4.03	1.40	4.57	1.30	5.55	1.41	
<i>Flirtet gerne</i>	3.97	1.41	4.80	1.26	5.22	1.40	
<i>Trinkt morgens immer Kaffee mit viel Zucker</i>	3.84	0.86	3.38	1.72	2.20	1.41	
<i>Katzen-Mensch</i>	3.56	1.48	4.53	1.62	2.75	1.69	
<i>Ein Mann, der sich mit ihren Freundinnen nicht versteht, hat bei ihr keine Chance</i>	3.42	1.18	5.10	1.40	3.17	2.03	
<i>Hatte früher einige One-Night-Stands</i>	3.20	1.19	4.56	1.53	5.20	1.67	

**Table D2**  
**Photos for BO-P**

Photo Nr.	Head	Upper Body	Full Body
1			
2			
3			
4			

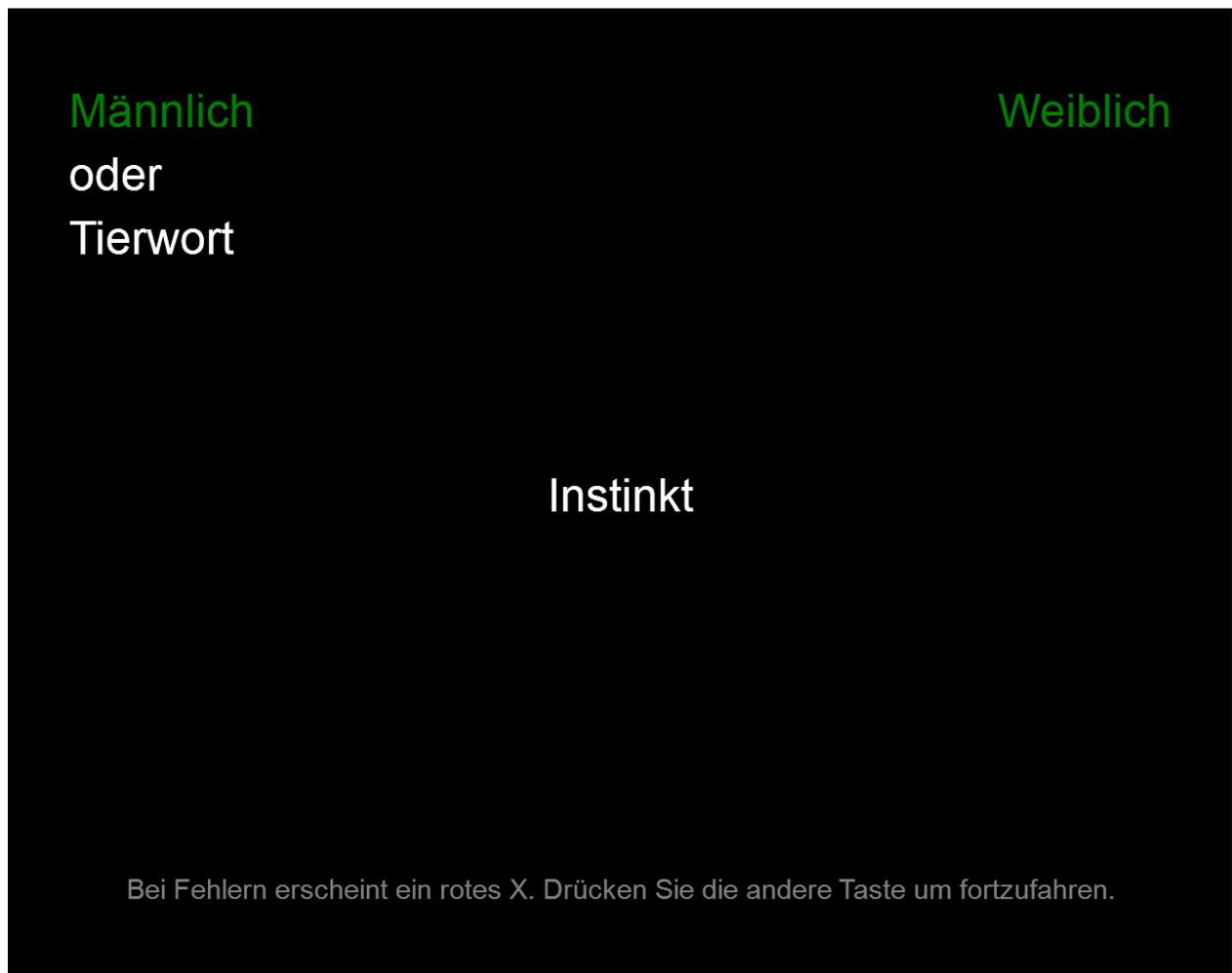
*Note.* All photos were obtained from [www.flickr.com](http://www.flickr.com) and were licensed under the creative commons license Attribution-NonCommercial-NoDerivs 2.0 Generic (CC BY-NC-ND 2.0). In accordance with the license, we provide title, author name, and link: Photo 1: unknown, walterpro, <http://bit.ly/2W2QopZ>. Photo 2: P3114491\_NOPI Dallas 0859, Zane\_Texas, <http://bit.ly/2UAUXGB>. Photo 3: Hanging out at the beach, Nathan Rupert, <http://bit.ly/2Gx1H3m>. Photo 4: Amber-Rocks-Stand-Front-5, Joey Newcombe, <http://bit.ly/2DwcsSW>.

**Table D3**

*Means, standard deviations, and sample sizes for the twelve pictures of women on the factors agency, attractiveness, experience, and warmth.*

		Photo 1			Photo 2			Photo 3			Photo 4		
		<i>M</i>	<i>SD</i>	<i>n</i>									
Agency	H	4.52	0.70	53	3.96	0.81	52	4.59	0.75	51	4.58	0.80	53
	U	4.42	0.76	51	3.98	0.76	53	4.49	0.75	52	4.48	0.72	51
	F	4.15	0.81	52	4.10	0.73	51	4.51	0.70	53	4.46	0.82	52
Attrac- tivity	H	4.66	1.16	53	4.23	1.41	52	4.62	1.12	51	5.27	1.07	53
	U	4.66	1.15	51	4.63	1.28	53	5.13	1.04	52	5.50	0.99	51
	F	5.01	1.22	52	4.57	1.23	51	5.33	1.16	53	5.52	0.88	52
Experi- ence	H	4.62	0.74	53	4.77	0.77	52	4.39	0.75	51	4.50	0.88	53
	U	4.53	0.80	51	4.86	0.91	53	4.56	0.77	52	4.59	0.81	51
	F	4.34	0.80	52	4.68	0.84	51	4.57	0.74	53	4.42	0.76	52
Warmth	H	4.80	0.91	53	4.04	0.99	52	4.41	0.98	51	4.81	0.88	53
	U	4.65	0.92	51	4.06	0.84	53	4.54	0.91	52	4.52	0.90	51
	F	4.54	0.81	52	3.92	0.88	51	4.42	1.02	53	4.38	0.75	52

*Note.* Photo numbers in accordance with Table D2. H = Head, U = Upper body, F = Full body.



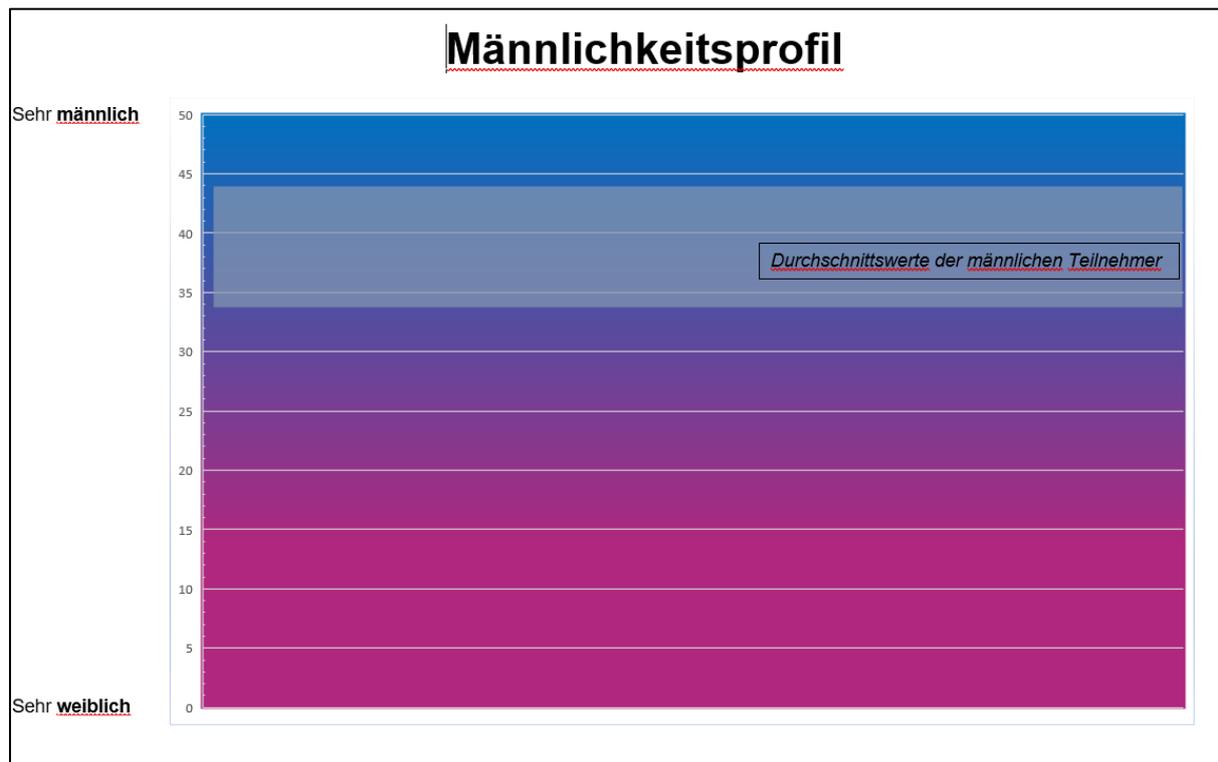
**Figure D1.** *Screenshot of the ST-IAT procedure.*

**Table D4*****Items Male Contingency Scale (MCS; translated from Burkley et al., 2015)***

<i>Item</i>
<i>Ich habe keine Selbstachtung, wenn ich nicht dem Bild von einem 'echten Mann' gerecht werde.</i>
Meine Selbstachtung wäre verletzt, wenn ich mich selbst nicht als Macho sehen würde.
<i>Mein Selbstwertgefühl leidet, wenn ich denke, mir fehle es an Männlichkeit.</i>
<i>Ich habe wenig Selbstachtung, wenn ich mich nicht wie ein 'echter Mann' verhalte.</i>
<i>Ich würde mich wertlos fühlen, wenn ich nicht handeln würde, wie es sich für einen Mann gehört.</i>
<i>Wenn ich mich männlich verhalte, finde ich mich gut.</i>
<i>Mein Selbstwertgefühl steigt, wenn ich mich machohaft fühle.</i>
<i>Ich fühle mich gut, wenn ich meine männliche Seite zur Schau stellen kann.</i>
<i>Wenn ich mich männlich fühle, finde ich mich gut.</i>
Mein Selbstwertgefühl steigt, wenn ich mich machohaft fühle.
<i>Ich fühle mich gut, wenn ich meine männliche Seite zur Schau stellen kann.</i>
<i>Wenn ich mich männlich fühle, finde ich mich gut.</i>
Ich bin stolz, wenn ich meine Männlichkeit unter Beweis stellen kann.

**Table D5*****Items for Masculinity Manipulation***

<i>Source</i>	<i>Gender</i>	<i>Item</i>
Bem (1974)	Gender-neutral	anpassungsfähig ernst freundlich glücklich hilfsbereit ineffizient sympathisch theatralisch unberechenbar
Berger (2010)	female	ängstlich einfühlsam emotional gefühlvoll leidenschaftlich liebevoll naiv orientierungslos selbstzweifelnd überempfindlich übervorsichtig zärtlich
	male	analytisch angeberisch logisch lösungsorientiert machtbesessen prahlerisch praktisch rational rücksichtslos sachlich schroff überheblich



**Figure D2.** Colored graph for masculinity manipulation (adapted from Wever, 2013).

**Results.****Table D6*****Means, Standard Deviations for Ambivalent Sexism, Masculinity Contingency, Other- and Self-Objectification and Sociosexual Orientation.***

Scale	<i>M</i>	<i>SD</i>
ASI-B	4.25	1.09
ASI-H	3.59	1.06
MCS	3.10	1.20
OOQ	0.57	11.05
SOI-R	2.96	0.84
SOQ	-5.84	11.18

**Table D7*****Results of post hoc moderated moderation analyses with SOOI as predictor, MCS, and masculinity manipulation as moderators, SOI-R as covariate BO-P as criterion.***

Criteria with predictors and moderators and covariate	$\beta$	<i>t</i>	<i>p</i>	95% CI	
				LL	UL
SOOI	0.19	1.48	.140	-0.06	0.45
MCS	0.14	1.24	.220	-0.09	0.37
MM	-0.1	-1.12	.260	-0.29	0.08
SOOI x MCS	-0.04	-0.47	.640	-0.19	0.12
SOOI x MM	-0.3	-2.61	.010	-0.53	-0.07
MCS x MM	0.33	2.93	.000	0.11	0.56
SOOI x MCS x MM	0.14	1.8	.080	-0.01	0.29
SOI-R	0.14	1.21	.230	-0.09	0.38

*Note.* CI = confidence interval, MM = Masculinity Manipulation: masculinity confirmation was coded as 0, masculinity threat as 1.

## Appendix E

### *Materials.*

#### **Vignette Time 1.**

#### **Brackets indicate phrasing in other condition.**

Stellen Sie sich vor, Sie haben Ihren ersten Arbeitstag in einem neuen Unternehmen. Ihnen wird Ihr Büro gezeigt und Sie richten sich darin ein. Das Fenster in Ihrem Büro zeigt nach Süden und deswegen ist der Raum sehr hell, allerdings ist die Aussicht nicht besonders gut, weil unter Ihrem Fenster der Betriebsparkplatz liegt. Insgesamt gefällt Ihnen das Büro aber gut, da Sie es für sich allein haben und der Raum ausreichend groß ist.

In der Mittagspause in der Kantine lernen Sie Kolleginnen und Kollegen aus Ihrer Abteilung kennen, insgesamt sind es elf Personen. Der Altersdurchschnitt in Ihrer Abteilung ist etwas höher, als Sie vermutet haben, Sie verstehen sich aber auf Anhieb gut mit den Personen in Ihrer Abteilung und kommen mit einigen Leuten über das betriebliche Sportprogramm ins Gespräch.

Auf Ihrem Flur befindet sich auch eine andere Abteilung, deren Angestellte meistens gemeinsam mit Ihrer Abteilung in der Cafeteria essen. Beim Mittagessen lernen Sie Frau [Herrn] Lange [Krüger] kennen, die Leiterin [den Leiter] der anderen Abteilung. Sie [Er] ist 35 Jahre alt und arbeitet seit sechs Jahren in ihrer [seiner] Position als Abteilungsleiterin [Abteilungsleiter]. Als leitende [leitender] Angestellte ist Frau [Herr] Lange [Krüger] immer sehr schick angezogen, an ihrem [seinem] Handgelenk trägt sie [er] eine teure Uhr. Beim Mittagessen erfahren Sie, dass sie [er] seit einigen Jahren Golf spielt und etwas außerhalb der Stadt in einem eigenen Haus mit großem Garten wohnt.

Nachdem Sie wieder in Ihr Büro zurückgekehrt sind, sehen Sie wie Frau [Herr] Lange [Krüger] in ein teures, modernes Auto steigt und vom Betriebsparkplatz wegfährt. Sie beginnen, sich mit dem Computerhandbuch der IT-Abteilung auseinanderzusetzen. Nachdem Sie sich

erfolgreich in den Computer eingeloggt und die ersten zehn E-Mails beantwortet haben, beschließen Sie, dass es Zeit für einen Kaffee ist.

In der Kaffecke lernen Sie zufällig Herrn [Frau] Krüger [Lange], einen [eine] Mitarbeiter [Mitarbeiterin] von Frau [Herrn] Lange [Krüger] kennen. Herr [Frau] Krüger [Lange] ist 32 Jahre alt und hat vor vier Jahren begonnen, für das Unternehmen zu arbeiten. Zuvor hat er [sie] in einem Schreibwarengeschäft gearbeitet, mag aber den aktuellen Job lieber. Dies hängt unter anderem damit zusammen, dass die Firma von Herrn [Frau] Krügers [Lange] Mietwohnung im Bahnhofsviertel besser mit den öffentlichen Verkehrsmitteln erreichbar ist. Durch den zeitlich verkürzten Arbeitsweg kann er [sie] regelmäßig zum Bowlen gehen. Im Vergleich zu seiner [ihrer] Chefin ist Herr [Frau] Krüger [Lange] weniger gut angezogen; man sieht, dass er [sie] beim Kauf der Kleidung auf den Preis achtet. Nach dem Gespräch mit Herrn [Frau] Krüger [Lange] stellen Sie fest, dass sich der Inhalt Ihrer Kaffeetasse erneut dem Ende neigt. Bevor Sie an Ihren Platz zurückkehren, füllen Sie Ihre Tasse noch einmal auf.

Am Abend fahren Sie erst spät nach Hause, weil Sie noch mit Kolleginnen und Kollegen aus Ihrer Abteilung in ein nahegelegenes Restaurant gehen, wo alle auf den erfolgreichen Abschluss eines Projekts anstoßen.

### **Vignette Time 2a: High-Status Perpetrator and Low-Status Victim.**

#### **Brackets indicate phrasing in other condition.**

Im Laufe der nächsten Wochen lernen Sie Ihre Abteilung besser kennen. Sie nehmen am Badminton-Programm der Firma teil und kommen schnell mit Menschen aus der gesamten Firma in Kontakt. Außerdem gehen Sie abends ab und zu in das nahegelegene Restaurant, wo ein informeller Firmenstammtisch stattfindet. Ihr Büro haben Sie mit einem großen Kalender und einigen privaten Gegenständen ausgestattet. Die Arbeit ist herausfordernd, aber Sie kommen immer besser zurecht.

Das Essen in der Cafeteria ist nicht besonders gut, dafür gibt es aber immer viel Auswahl. Es gibt verschiedene Essenssäle, und Sie gehen mit den beiden Abteilungen auf Ihrem Flur meistens in einen recht kleinen Saal, der aber eine gute Aussicht auf den nahegelegenen Park bietet.

Zur Mittagszeit kann man dort oft spielende Kinder beobachten. Um das Essen zu bekommen, muss man sich in teilweise sehr langen Schlangen anstellen und warten, bis man an der Reihe ist. Bei diesen Gelegenheiten haben Sie bemerkt, dass Frau [Herr] Lange [Krüger] oft den Po ihres [seiner] Mitarbeiters [Mitarbeiterin] Herrn [Frau] Krüger [Lange] betrachtet, wenn dieser [diese] es nicht bemerkt. Eines Tages bekommen Sie am Salatbuffet zufällig mit, wie Frau [Herr] Lange [Krüger], auf Herrn [Frau] Krüger [Lange] deutend, einer [einem] Kollegin [Kollegen] zuflüstert: „In den knackigen Hintern würde ich auch gerne mal reinkneifen“. Sie lassen sich nicht anmerken, dass Sie den Wortwechsel mitbekommen haben und nehmen sich noch etwas mehr Salat. Nach dem Mittagessen eilen Sie schnell in Ihr Büro, wo Sie eine Präsentation fertigstellen, die Sie auf einer anstehenden Dienstreise halten müssen.

**Vignette Time 2b: Low-Status Perpetrator and High-Status Victim.**

**Brackets indicate phrasing in other condition.**

Im Laufe der nächsten Wochen lernen Sie Ihre Abteilung besser kennen. Sie nehmen am Badminton-Programm der Firma teil und kommen schnell mit Menschen aus der gesamten Firma in Kontakt. Außerdem gehen Sie abends ab und zu in das nahegelegene Restaurant, wo ein informeller Firmenstammtisch stattfindet. Ihr Büro haben Sie mit einem großen Kalender und einigen privaten Gegenständen ausgestattet. Die Arbeit ist herausfordernd, aber Sie kommen immer besser zurecht.

Das Essen in der Cafeteria ist nicht besonders gut, dafür gibt es aber immer viel Auswahl. Es gibt verschiedene Essenssäle, und Sie gehen mit den beiden Abteilungen auf Ihrem Flur meistens in einen recht kleinen Saal, der aber eine gute Aussicht auf den nahegelegenen

Park bietet. Zur Mittagszeit kann man dort oft spielende Kinder beobachten. Um das Essen zu bekommen, muss man sich in teilweise sehr langen Schlangen anstellen und warten, bis man an der Reihe ist. Bei diesen Gelegenheiten haben Sie bemerkt, dass Frau [Herr] Lange [Krüger] oft den Po ihres [seiner] Chefs [Chefin] Herrn [Frau] Krüger [Lange] betrachtet, wenn dieser [diese] es nicht bemerkt. Eines Tages bekommen Sie am Salatbuffet zufällig mit, wie Frau [Herr] Lange [Krüger], auf Herrn [Frau] Krüger [Lange] deutend, einer [einem] Kollegin [Kollegen] zuflüstert: „In den knackigen Hintern würde ich auch gerne mal reinkneifen“. Sie lassen sich nicht anmerken, dass Sie den Wortwechsel mitbekommen haben und nehmen sich noch etwas mehr Salat. Nach dem Mittagessen eilen Sie schnell in Ihr Büro, wo Sie eine Präsentation fertigstellen, die Sie auf einer anstehenden Dienstreise halten müssen

**Table E1**  
*Items Sense of Power Scale (Adaption and German translation of Anderson et al., 2012)*

Item	Reverse Coded
Herr [Frau] Lange [Krüger] kann Menschen dazu bringen, ihm [ihr] zuzuhören.	
Die Wünsche von Herrn [Frau] Lange [Krüger] haben nicht viel Gewicht.	r
Herr [Frau] Lange [Krüger] kann andere dazu bringen, zu tun, was er [sie] will.	
Auch wenn Herr [Frau] Lange [Krüger] seine [ihre] Ansichten ausdrückt, haben sie nicht viel Einfluss.	r
Herr [Frau] Lange [Krüger] hat große Macht.	
Die Ideen und Meinungen von Herrn [Frau] Lange [Krüger] werden oft ignoriert.	r
Auch wenn er es versucht, kann Herr [Frau] Lange [Krüger] nicht seinen [ihren] Weg durchsetzen.	r
Wenn Herr [Frau] Lange [Krüger] es will, kann er [sie] Entscheidungen treffen.	

*Note.* Brackets indicate phrasing in other condition.

**Table E2**

*Items Warmth, Competence and Belief Scale (Adaption and German Translation of Fiske et al., 2002 and Koch, 2016).*

Item	Scale	Reverse Coded
Herr [Frau] Lange [Krüger] ist...		
konservativ.	Belief	
konventionell.	Belief	
liberal.	Belief	
modern.	Belief	
traditionell.	Belief	
weltoffen.	Belief	
begabt.	Competence	
geschickt.	Competence	
intelligent.	Competence	
kompetent.	Competence	
leistungsfähig.	Competence	
selbstbewusst.	Competence	
ehrlich.	Warmth	
einfühlsam.	Warmth	
gefühlskalt.	Warmth	r
gutmütig.	Warmth	
sympathisch.	Warmth	
warmherzig.	Warmth	

*Note.* Brackets indicate phrasing in other conditions.

**Table E3**

*Social Distance Scale (Adapted from Scheffer, 2013)*

Item
Wie gerne würden Sie mit Herrn [Frau] Lange [Krüger] für das gleiche Unternehmen arbeiten?
Wie gerne würden Sie mit Herrn [Frau] Lange [Krüger] in der gleichen Abteilung arbeiten?
Wie gerne würden Sie mit Herrn [Frau] Lange [Krüger] im selben Projekt arbeiten?
Wie gerne würden Sie mit Herrn [Frau] Lange [Krüger] ein Büro teilen?

*Note.* Brackets indicate wording in other conditions.

**Appendix F*****Materials.*****Vignette Time 2a: Gossiping Condition.****Brackets indicate phrasing in other condition.**

Im Laufe der nächsten Wochen lernen Sie Ihre Abteilung besser kennen. Sie nehmen am Badminton-Programm der Firma teil und kommen schnell mit Menschen aus der gesamten Firma in Kontakt. Außerdem gehen Sie abends ab und zu in das nahegelegene Restaurant, wo ein informeller Firmenstammtisch stattfindet. Ihr Büro haben Sie mit einem großen Kalender und einigen privaten Gegenständen ausgestattet. Die Arbeit ist herausfordernd, aber Sie kommen immer besser zurecht. Das Essen in der Cafeteria ist nicht besonders gut, dafür gibt es aber immer viel Auswahl. Es gibt verschiedene Essenssäle, und Sie gehen mit den beiden Abteilungen auf Ihrem Flur meistens in einen recht kleinen Saal, der aber eine gute Aussicht auf den nahegelegenen Park bietet. Zur Mittagszeit kann man dort oft spielende Kinder beobachten.

Um das Essen zu bekommen, muss man sich in teilweise sehr langen Schlangen anstellen und warten, bis man an der Reihe ist. Bei einer dieser Gelegenheiten bemerken Sie, dass Frau [Herr] Lange [Krüger] unauffällig den Po ihres [seiner] Mitarbeiters [Mitarbeiterin] [Chefs] [Chefin] Herrn [Frau] Krüger [Lange] betrachtet. Eines Tages bekommen Sie am Salatbuffet zufällig mit, wie Frau [Herr] Lange [Krüger], auf Herrn [Frau] Krüger [Lange] deutend, einer [einem] Kollegin [Kollegen] zuflüstert: „Der [Die] isst wirklich jeden Tag Lasagne.“

**Vignette Time 2b: Sexual Objectification Condition.****Brackets indicate phrasing in other condition.**

Im Laufe der nächsten Wochen lernen Sie Ihre Abteilung besser kennen. Sie nehmen am Badminton-Programm der Firma teil und kommen schnell mit Menschen aus der gesamten Firma in Kontakt. Außerdem gehen Sie abends ab und zu in das nahegelegene

Restaurant, wo ein informeller Firmenstammtisch stattfindet. Ihr Büro haben Sie mit einem großen Kalender und einigen privaten Gegenständen ausgestattet. Die Arbeit ist herausfordernd, aber Sie kommen immer besser zurecht. Das Essen in der Cafeteria ist nicht besonders gut, dafür gibt es aber immer viel Auswahl. Es gibt verschiedene Essenssäle, und Sie gehen mit den beiden Abteilungen auf Ihrem Flur meistens in einen recht kleinen Saal, der aber eine gute Aussicht auf den nahegelegenen Park bietet. Zur Mittagszeit kann man dort oft spielende Kinder beobachten.

Um das Essen zu bekommen, muss man sich in teilweise sehr langen Schlangen anstellen und warten, bis man an der Reihe ist. Bei einer dieser Gelegenheiten bemerken Sie, dass Frau [Herr] Lange [Krüger] unauffällig den Po ihres [seiner] Mitarbeiters [Mitarbeiterin] [Chefs] [Chefin] Herrn [Frau] Krüger [Lange] betrachtet. Eines Tages bekommen Sie am Salatbuffet zufällig mit, wie Frau [Herr] Lange [Krüger], auf Herrn [Frau] Krüger [Lange] deutend, einer [einem] Kollegin [Kollegen] zuflüstert: „In den knackigen Hintern würde ich auch gerne mal reinkneifen“. Sie können mit ziemlicher Sicherheit sagen, dass Herr [Frau] Krüger [Lange] den Wortwechsel nicht mitbekommen hat.

### **Vignette Time 2c: Sexual Harassment Condition.**

#### **Brackets indicate phrasing in other condition.**

Im Laufe der nächsten Wochen lernen Sie Ihre Abteilung besser kennen. Sie nehmen am Badminton-Programm der Firma teil und kommen schnell mit Menschen aus der gesamten Firma in Kontakt. Außerdem gehen Sie abends ab und zu in das nahegelegene Restaurant, wo ein informeller Firmenstammtisch stattfindet. Ihr Büro haben Sie mit einem großen Kalender und einigen privaten Gegenständen ausgestattet. Die Arbeit ist herausfordernd, aber Sie kommen immer besser zurecht. Das Essen in der Cafeteria ist nicht besonders gut, dafür gibt es aber immer viel Auswahl. Es gibt verschiedene Essenssäle, und Sie gehen mit den beiden Abteilungen auf Ihrem Flur meistens in einen recht kleinen Saal, der aber eine gute

Aussicht auf den nahegelegenen Park bietet. Zur Mittagszeit kann man dort oft spielende Kinder beobachten.

Um das Essen zu bekommen, muss man sich in teilweise sehr langen Schlangen anstellen und warten, bis man an der Reihe ist. Bei einer dieser Gelegenheiten bemerken Sie, dass Frau [Herr] Lange [Krüger] unauffällig den Po ihres [seiner] Mitarbeiters [Mitarbeiterin] [Chefs] [Chefin] Herrn [Frau] Krüger [Lange] betrachtet. Eines Tages bekommen Sie am Salatbuffet zufällig mit, wie Frau [Herr] Lange [Krüger], auf Herrn [Frau] Krüger [Lange] deutend, einer [einem] Kollegin [Kollegen] zuflüstert: „In den knackigen Hintern würde ich auch gerne mal reinkneifen“. Sie können mit ziemlicher Sicherheit sagen, dass Herr [Frau] Krüger [Lange] den Wortwechsel mitbekommen hat.

**Table F1**  
***Items Sense of Power Scale (Adaption and German translation of Anderson et al., 2012)***

Item	Reverse Coded
Herr [Frau] Lange [Krüger] kann Frau [Herr] Krüger [Lange] dazu bringen, ihm [ihr] zuzuhören.	
Die Wünsche von Herrn [Frau] Lange [Krüger] haben für Frau [Herr] Krüger [Lange] nicht viel Gewicht.	r
Herr [Frau] Lange [Krüger] kann Frau [Herr] Krüger [Lange] dazu bringen, zu tun, was er [sie] will.	
Auch wenn Herr [Frau] Lange [Krüger] seine Ansichten ausdrückt, haben sie nicht viel Einfluss auf Frau [Herr] Krüger [Lange].	r
Herr [Frau] Lange [Krüger] hat große Macht über Frau [Herr] Krüger [Lange].	
Die Ideen und Meinungen von Herrn [Frau] Lange [Krüger] werden von Frau [Herr] Krüger [Lange] oft ignoriert.	r
Auch wenn er es versucht, kann Herr [Frau] Lange [Krüger] gegenüber Frau [Herr] Lange nicht seinen [ihren] Weg durchsetzen.	r
Wenn Herr [Frau] Lange [Krüger] es will, kann er Entscheidungen über Frau [Herr] Krüger [Lange] treffen.	

*Note.* Brackets indicate wording in other conditions.

**Table F2**  
***Items Ethical Issue (Adaption and German translation of Bowes-Sperry and Powell, 1999)***

Item	Reverse Coded
Frau [Herr] Langes [Krügers] Verhalten ist schädlich.	
Der Vorfall hat nichts mit Ethik oder Moral zu tun.	r
Frau [Herr] Langes [Krügers] Verhalten könnte unter Umständen schädlich sein.	
Frau [Herr] Langes [Krügers] Verhalten ist unethisch.	
Frau [Herr] Langes [Krügers] Verhalten ist unmoralisch.	

*Note.* Brackets indicate wording in other condition.

**Table F3**  
*Items Negative Sanctioning*

Item	Reverse Coded
Beförderung	r
Gehaltserhöhung	r
Bezahlter Urlaub	r
Bonuszahlung	r
Entlassung	
Firmenwagen streichen	
Suspendierung	
Versetzung an einen anderen Firmenstandort	

## Appendix G

### *Materials.*

#### **Vignette 1a: Ms. Lange and Mr. Krüger.**

Stellen Sie sich vor, Sie haben Ihren ersten Arbeitstag in einem neuen Unternehmen. Ihnen wird Ihr Büro gezeigt und Sie richten sich darin ein. Das Fenster in Ihrem Büro zeigt nach Süden und deswegen ist der Raum sehr hell, allerdings ist die Aussicht nicht besonders gut, weil unter Ihrem Fenster der Betriebsparkplatz liegt. Insgesamt gefällt Ihnen das Büro aber gut, da Sie es für sich allein haben und der Raum ausreichend groß ist.

In der Mittagspause in der Kantine lernen Sie Kolleginnen und Kollegen aus Ihrer Abteilung kennen, insgesamt sind es elf Personen. Der Altersdurchschnitt in Ihrer Abteilung ist etwas höher, als Sie vermutet haben, Sie verstehen sich aber auf Anhieb gut mit den Personen in Ihrer Abteilung und kommen mit einigen Leuten über das betriebliche Sportprogramm ins Gespräch.

Auf Ihrem Flur befindet sich auch eine andere Abteilung, deren Angestellte meistens gemeinsam mit Ihrer Abteilung in der Cafeteria essen. Beim Mittagessen lernen Sie Frau Lange kennen, eine Kollegin aus der anderen Abteilung. Sie ist 35 Jahre alt und arbeitet seit sechs Jahren in diesem Unternehmen. Frau Lange hat schulterlange, dunkle Locken, trägt einen braun-roten Lippenstift und dezente Ohringe. Beim Mittagessen erfahren Sie, dass sie gerne schwimmen geht und etwas außerhalb der Stadt wohnt. Frau Lange ist sehr gut in ihrem Job.

Nachdem Sie wieder in Ihr Büro zurückgekehrt sind, sehen Sie wie Frau Lange vom Betriebsparkplatz wegfährt. Sie beginnen, sich mit dem Computerhandbuch der IT-Abteilung auseinanderzusetzen. Nachdem Sie sich erfolgreich in den Computer eingeloggt und die ersten zehn E-Mails beantwortet haben, beschließen Sie, dass es Zeit für einen Kaffee ist.

In der Kaffecke lernen Sie zufällig Herrn Krüger, einen Kollegen von Frau Lange kennen. Herr Krüger ist 32 Jahre alt und hat vor vier Jahren begonnen, für das Unternehmen

zu arbeiten. Zuvor hat er in einem Unternehmen in einer anderen Stadt gearbeitet, mag aber den aktuellen Job lieber. Dies hängt unter anderem damit zusammen, dass der Arbeitsweg für Herrn Krüger nun deutlich kürzer ist. Durch die gewonnene Zeit kann er regelmäßig mit Freunden joggen gehen. Herr Krüger hat blondes kurzes Haar, trägt einen 3-Tage-Bart und um sein Handgelenk eine sportliche Armbanduhr. Herr Krüger erledigt seine Arbeit stets vorbildlich. Nach dem Gespräch mit Herrn Krüger stellen Sie fest, dass sich der Inhalt Ihrer Kaffeetasse erneut dem Ende neigt. Bevor Sie an Ihren Platz zurückkehren, füllen Sie Ihre Tasse noch einmal auf.

Am Abend fahren Sie erst spät nach Hause, weil Sie noch mit Kolleginnen und Kollegen aus Ihrer Abteilung in ein nahegelegenes Restaurant gehen, wo alle auf den erfolgreichen Abschluss eines Projekts anstoßen.

#### **Vignette Time 1b: Mr. Lange and Ms. Krüger.**

Stellen Sie sich vor, Sie haben Ihren ersten Arbeitstag in einem neuen Unternehmen. Ihnen wird Ihr Büro gezeigt und Sie richten sich darin ein. Das Fenster in Ihrem Büro zeigt nach Süden und deswegen ist der Raum sehr hell, allerdings ist die Aussicht nicht besonders gut, weil unter Ihrem Fenster der Betriebsparkplatz liegt. Insgesamt gefällt Ihnen das Büro aber gut, da Sie es für sich allein haben und der Raum ausreichend groß ist.

In der Mittagspause in der Kantine lernen Sie Kolleginnen und Kollegen aus Ihrer Abteilung kennen, insgesamt sind es elf Personen. Der Altersdurchschnitt in Ihrer Abteilung ist etwas höher, als Sie vermutet haben, Sie verstehen sich aber auf Anhieb gut mit den Personen in Ihrer Abteilung und kommen mit einigen Leuten über das betriebliche Sportprogramm ins Gespräch.

Auf Ihrem Flur befindet sich auch eine andere Abteilung, deren Angestellte meistens gemeinsam mit Ihrer Abteilung in der Cafeteria essen. Beim Mittagessen lernen Sie Herrn Lange kennen, einen Kollegen aus der anderen Abteilung. Er ist 35 Jahre alt und arbeitet seit

sechs Jahren in diesem Unternehmen. Herr Lange hat blondes kurzes Haar, trägt einen 3-Tage-Bart und um sein Handgelenk eine sportliche Armbanduhr. Beim Mittagessen erfahren Sie, dass er gerne schwimmen geht und etwas außerhalb der Stadt wohnt. Herr Lange ist sehr gut in seinem Job.

Nachdem Sie wieder in Ihr Büro zurückgekehrt sind, sehen Sie wie Herr Lange vom Betriebsparkplatz wegfährt. Sie beginnen, sich mit dem Computerhandbuch der IT-Abteilung auseinanderzusetzen. Nachdem Sie sich erfolgreich in den Computer eingeloggt und die ersten zehn E-Mails beantwortet haben, beschließen Sie, dass es Zeit für einen Kaffee ist.

In der Kaffecke lernen Sie zufällig Frau Krüger, eine Kollegin von Herrn Lange kennen. Frau Krüger ist 32 Jahre alt und hat vor vier Jahren begonnen, für das Unternehmen zu arbeiten. Zuvor hat sie in einem Unternehmen in einer anderen Stadt gearbeitet, mag aber den aktuellen Job lieber. Dies hängt unter anderem damit zusammen, dass der Arbeitsweg für Frau Krüger nun deutlich kürzer ist. Durch die gewonnene Zeit kann sie regelmäßig mit Freunden joggen gehen. Frau Krüger hat schulterlange dunkle Locken, trägt einen rot-braunen Lippenstift und dezente Ohringe. Frau Krüger erledigt ihre Arbeit stets vorbildlich. Nach dem Gespräch mit Frau Krüger stellen Sie fest, dass sich der Inhalt Ihrer Kaffeetasse erneut dem Ende neigt. Bevor Sie an Ihren Platz zurückkehren, füllen Sie Ihre Tasse noch einmal auf.

Am Abend fahren Sie erst spät nach Hause, weil Sie noch mit Kolleginnen und Kollegen aus Ihrer Abteilung in ein nahegelegenes Restaurant gehen, wo alle auf den erfolgreichen Abschluss eines Projekts anstoßen.

### **Vignette 2a: Neutral Control Condition.**

Brackets indicate phrasing in other condition.

Im Laufe der nächsten Wochen lernen Sie Ihre Abteilung besser kennen. Sie nehmen am Badminton-Programm der Firma teil und kommen schnell mit Menschen aus

der gesamten Firma in Kontakt. Außerdem gehen Sie abends ab und zu in das nahegelegene Restaurant, wo ein informeller Firmenstammtisch stattfindet. Ihr Büro haben Sie mit einem großen Kalender und einigen privaten Gegenständen ausgestattet. Die Arbeit ist herausfordernd, aber Sie kommen immer besser zurecht. Das Essen in der Cafeteria ist nicht besonders gut, dafür gibt es aber immer viel Auswahl. Es gibt verschiedene Essenssäle, und Sie gehen mit den beiden Abteilungen auf Ihrem Flur meistens in einen recht kleinen Saal, der aber eine gute Aussicht auf den nahegelegenen Park bietet. Zur Mittagszeit kann man dort oft spielende Kinder beobachten.

Um das Essen zu bekommen, muss man sich in teilweise sehr langen Schlangen anstellen und warten, bis man an der Reihe ist. Eines Tages bekommen Sie am Salatbuffet zufällig mit, wie Frau [Herr] Lange, auf Herrn [Frau] Krüger deutend, einer [einem] Kollegin [Kollegen] zuflüstert: „Den [Die] habe ich heute schonmal im Treppenhaus getroffen“. Sie können mit ziemlicher Sicherheit sagen, dass Herr [Frau] Krüger den Wortwechsel nicht mitbekommen hat.

**Vignette Time 2b: Sexual Objectification Condition.**

**Brackets indicate phrasing in other condition.**

Im Laufe der nächsten Wochen lernen Sie Ihre Abteilung besser kennen. Sie nehmen am Badminton-Programm der Firma teil und kommen schnell mit Menschen aus der gesamten Firma in Kontakt. Außerdem gehen Sie abends ab und zu in das nahegelegene Restaurant, wo ein informeller Firmenstammtisch stattfindet. Ihr Büro haben Sie mit einem großen Kalender und einigen privaten Gegenständen ausgestattet. Die Arbeit ist herausfordernd, aber Sie kommen immer besser zurecht. Das Essen in der Cafeteria ist nicht besonders gut, dafür gibt es aber immer viel Auswahl. Es gibt verschiedene Essenssäle, und Sie gehen mit den beiden Abteilungen auf Ihrem Flur meistens in einen recht kleinen Saal, der aber eine gute

Aussicht auf den nahegelegenen Park bietet. Zur Mittagszeit kann man dort oft spielende Kinder beobachten.

Um das Essen zu bekommen, muss man sich in teilweise sehr langen Schlangen anstellen und warten, bis man an der Reihe ist. Bei einer dieser Gelegenheiten bemerken Sie, dass Frau [Herr] Lange unauffällig den Po ihres [seiner] Kollegen [Kollegin] Herrn [Frau] Krüger betrachtet. Eines Tages bekommen Sie am Salatbuffet zufällig mit, wie Frau [Herr] Lange, auf Herrn [Frau] Krüger deutend, einer [einem] Kollegin [Kollegen] zuflüstert: „In den knackigen Hintern würde ich auch gerne mal reinkneifen“. Sie können mit ziemlicher Sicherheit sagen, dass Herr [Frau] Krüger den Wortwechsel nicht mitbekommen hat.

**Vignette Time 2c: Sexual Harassment Condition.**

**Brackets indicate phrasing in other condition.**

Im Laufe der nächsten Wochen lernen Sie Ihre Abteilung besser kennen.

Sie nehmen am Badminton-Programm der Firma teil und kommen schnell mit Menschen aus der gesamten Firma in Kontakt. Außerdem gehen Sie abends ab und zu in das nahegelegene Restaurant, wo ein informeller Firmenstammtisch stattfindet. Ihr Büro haben Sie mit einem großen Kalender und einigen privaten Gegenständen ausgestattet. Die Arbeit ist herausfordernd, aber Sie kommen immer besser zurecht. Das Essen in der Cafeteria ist nicht besonders gut, dafür gibt es aber immer viel Auswahl. Es gibt verschiedene Essenssäle, und Sie gehen mit den beiden Abteilungen auf Ihrem Flur meistens in einen recht kleinen Saal, der aber eine gute Aussicht auf den nahegelegenen Park bietet. Zur Mittagszeit kann man dort oft spielende Kinder beobachten.

Um das Essen zu bekommen, muss man sich in teilweise sehr langen Schlangen anstellen und warten, bis man an der Reihe ist. Bei diesen Gelegenheiten haben Sie bemerkt, dass Frau [Herr] Lange offensichtlich den Po ihres [seiner] Kollegen Herrn Krüger betrachtet. Eines Tages bekommen Sie am Salatbuffet zufällig mit, wie Frau [Herr] Lange, auf Herrn [Frau]

Krüger deutend, zu einer [einem] Kollegin [Kollegen] sagt: „In den knackigen Hintern würde ich auch gerne mal reinkneifen“. Sie können mit ziemlicher Sicherheit sagen, dass Herr [Frau] Krüger den Wortwechsel mitbekommen hat.