

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Faculty Publications, Department of Psychology

Psychology, Department of

11-14-2022

A triangulation study of young Women's motivations for sending nudes to men

Olivia R. Checkalski

University of Nebraska-Lincoln, ocheckalski2@huskers.unl.edu

Sarah Gervais

University of Nebraska - Lincoln, sgervais2@unl.edu

Kathryn Holland

University of Nebraska - Lincoln, kholland4@unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/psychfacpub>



Part of the [Gender and Sexuality Commons](#), [Psychology Commons](#), and the [Social Psychology and Interaction Commons](#)

Checkalski, Olivia R.; Gervais, Sarah; and Holland, Kathryn, "A triangulation study of young Women's motivations for sending nudes to men" (2022). *Faculty Publications, Department of Psychology*. 1122. <https://digitalcommons.unl.edu/psychfacpub/1122>

This Article is brought to you for free and open access by the Psychology, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Faculty Publications, Department of Psychology by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

A Triangulation Study of Young Women's Motivations for Sending Nudes to Men

Olivia R. Checkalski, Sarah J. Gervais, & Kathryn J. Holland

Department of Psychology, University of Nebraska- Lincoln, United States

Corresponding author — O. R. Checkalski, 238 Burnett Hall, Lincoln, NE, 68588-0308, United States.
email Ocheckalski2@huskers.unl.edu

Abstract

Women frequently send sexualized nude images to men (i.e., nudes), but women's motivations for sending nudes are unclear because there are methodological limitations in the ways that cyber sexual activity has been defined and measured. To address these gaps in the literature, we employed a mixed method triangulation design to assess young women's motivations for sending nudes to men, and how motivations compare when measured qualitatively and quantitatively. Across our qualitative and quantitative data, we found that women endorsed a plethora of motivations for sending nudes to men—far more than any one approach captured. The open-ended responses revealed positive sexual motives otherwise missing from the quantitative scales, which tended to overrepresent negative motivations. We also identified several critical discrepancies between endorsement of similar motivations in the qualitative versus quantitative responses, especially when it came to the idea of sending nudes for fun. Based on these findings, we suggest future researchers consider using more specific, and less stigmatizing language when assessing women's motivations for sending nudes.

Keywords: Sexting, Cybersex, Motivation, Assessment, Objectification, Sexualization

Published in *Computers in Human Behavior* 140 (2023) 107561

doi:10.1016/j.chb.2022.107561

Copyright © 2022 Elsevier Ltd. Used by permission.

Submitted 28 July 2022; revised 31 October 2022; accepted 8 November 2022; published 14 November 2022.

1. Introduction

Many young women today take nude photos of themselves and send them to men for sexual purposes (i.e., *sending nudes*; Mori et al., 2020). Much of the research on this social-sexual behavior has focused on the various risks involved with sending nudes, especially the possibility of someone sharing sexual content without consent (Döring, 2014). So, what motivates women to strip down, strike a pose, snap a photo, and press send, despite the potential costs?

Although some studies have examined sexting (i.e., technology-facilitated sexual messages) more broadly, a closer inspection of the sexting literature suggests considerable conceptual and operational murkiness (Barrense-Dias et al., 2017; Drouin et al., 2013; Klettke et al., 2014; Maddocks, 2018), resulting in two critical limitations. First, some researchers examine sexting in general, rather than sending nudes in particular (e.g., Califano et al., 2022; Guest & Denes, 2022; Trub et al., 2022). This undermines our ability to assess the potentially distinct motivations that underlie sending nude photos as compared with other types of sexual content. While sending visual and written sexual material may sometimes go hand-in-hand, the visual aspect of sending nudes is uniquely exposing, time-consuming, effort intensive, and potentially objectifying (Fredrickson & Roberts, 1997).

Second, work on sexting has historically overemphasized risks and consequences (Döring, 2014), or operationalized sexting in potentially stigmatizing ways, making it less likely for positive motives (e.g., because one enjoys it) to emerge (e.g., Burkett, 2015; Van Ouytsel et al., 2017). Failing to acknowledge favorable motivations, and potential benefits, of sending nudes undermines the reputability of women's decision making. Meanwhile, neglecting unfavorable motivations and potential costs for sending nudes in a heterosexual dynamic contributes to overly optimistic expectations that could leave women vulnerable. This also perpetuates incomplete and inflexible narratives about sexual empowerment, by implying that sending nudes should always feel empowering for everyone. If given this reductive expectation, negative experiences with sexting could bear the additional disappointment of failing to feel empowering. In order to explore a more robust and balanced range of women's motivations for sending nudes to men, the current study employed a novel triangulation approach, comparing motivations measured both quantitatively and qualitatively.

1.1. Conceptualizations of sexting and sending nudes

The term sexting has been used to refer to a wide range of behaviors involving technology-facilitated sexual activity resulting in conceptual inconsistencies (Barrense-Dias et al., 2017; Drouin et al., 2013; Judge, 2012). When examining the parameters of sexting, some researchers have focused on either written-only (Brinkley et al., 2017), or image/video-only sexual messages (Graham Holmes et al., 2021). Some scholars differentiate between the two types (Foody et al., 2021) while others include both types indiscriminately (e.g., Currin, Ireland, et al., 2020). Others extend the definition beyond texting to include additional sexual exchanges facilitated by technology (e.g. video chat, Boer et al., 2021; Razi et al., 2020). Researchers have also attempted to subdivide sexting into various categories or types which are summarized in Sesar et al. (2019). Examples of such divisions include: primary/secondary/revenge (i.e., sending pics of yourself, vs. someone else, vs. a former partner non-consensually; Calvert, 2009), experimental/problematic (i.e., sending pics with romantic or sexual intent vs. criminal or violent intent; Wolak et al., 2012), and active/passive (i.e., creating and sending content vs. receiving content; Temple & Choi, 2014). There is also variety with the terms used to differentiate sending images from other kinds of sexts such as image-based sexts (Howard et al., 2021) or explicit sexts (Graham Holmes et al., 2021). In sum, researchers have used the term sexting to refer to a specific behavior or an entire category of behaviors.

While the research on sexting is a useful starting point, sending nudes is not synonymous with sexting. For example, compared to sharing written material only, taking and sending a nude uniquely exposes one's body, and may require more time and effort. Taking and sending nudes can be a complicated process in a culture that holds women to unattainable beauty standards and polices their sexuality according to paradoxical values of both sexiness and purity (Liss et al., 2019, pp. 275–316). For women living under cisheteropatriarchy, to see oneself and to be seen may be akin to evaluating oneself and of being evaluated by others. Additionally, this process occurs with the goal of creating a final product. In taking a nude, women have translated their image into a photograph thus creating a digital object that is both them and theirs.

1.2. Objectification theory and motivations for sending nudes

In order to understand why people send sexual messages and images, many researchers have focused on potential motivations (Reed et al., 2020; Sesar et al., 2019). This research has yielded some important findings such as clarifying the context in which most sexting occurs (e.g., in romantic relationships, Döring, 2014), and illuminating some of the gendered implications of sexting (e.g., Burén & Lunde, 2018; Lippman & Campbell, 2014). Likewise, studies have highlighted sexual arousal, external pressures, and validation seeking as some of the central motivations underlying sexting (e.g., Bianchi et al., 2016; Weisskirch & Delevi, 2011). Even so, because of the many ways sexting has been defined and measured, it is unclear whether previously established motivations also apply to sending nudes and whether distinct motivations underlie sending nudes compared to sexting.

When considering the underlying motivations for sending nudes specifically, objectification theory (Fredrickson & Roberts, 1997) is a useful theoretical framework. Objectification theory posits that exposure to sexual objectification—including objectifying images of women in the media and experiences with sexual objectification in interpersonal interactions—causes women to self-objectify, or adopt a third person’s perspective of their body, resulting in appearance anxiety, body shame, and reduced flow experiences (Fredrickson & Roberts, 1997; Roberts et al., 2018). When women create and send nudes, the camera lens, and subsequent picture, may function as literal manifestations of their third person’s perspective. In other words, photographing or filming themselves renders women both artist and muse potentially facilitating the adoption of a third person’s perspective as they position their body and compose the shot. Despite the potential overlap between sending nudes and self-objectification, very few have studied these together (see Bianchi et al., 2017; Liong & Cheng, 2019; Speno & Aubrey, 2019). Thus, it could be valuable to consider specific motivations for sending nudes through the lens of objectification theory.

Objectification theory primarily posits that self-objectification is connected to negative experiences such as body image issues (e.g., body shame, body/self-surveillance, appearance anxiety; Roberts et al., 2018) which have in turn been found to relate to decreased sexual

self-esteem, sexual satisfaction, and sexual functioning (Calogero & Thompson, 2009; Steer & Tiggemann, 2008). Consequently, self-objectification may correspond with women sending nudes to men to receive external validation of their appearance and experience positive feelings (or at least a decrease in negative feelings, see Bianchi et al., 2017; Howard et al., 2019). This should not necessarily be considered a negative or oppressed motivation, but rather a reasonable one in a culture insistent on imbuing women with guilt, shame, and self-consciousness. Self-objectification also takes place within a sociocultural context that dictate scripts for sexual behavior (e.g., heterosexual sexual scripts; Liss et al., 2019; Simon & Gagnon, 1986), for instance defining “successful sex” as penetrative vaginal intercourse ending promptly with a cisgender man’s orgasm. Such scripts encourage women to prioritize men’s pleasure over their own (Sakaluk et al., 2014; Muehlenhard & Shippee, 2010). Thus, some women may feel obligated to perform pleasure and functionally service men in the form of sending nudes.

Sending nudes may also be motivated by a sense of power for some, by offering predictability and control within the framework of sexual objectification. Fredrickson and Roberts (1997) posited that women may exert limited control in patriarchal cultures by modulating their sex appeal to receive positive treatment in their interactions with others (e. g., during heterosexual sexual encounters), which may be another key motivation for sending nudes. For example, if a woman sends a man an image of her breasts, and the recipient responds affirmatively, she might feel empowered by the influence she exerted over her partner and by the experience of receiving positive treatment from an appreciative partner (see also Erchull & Liss, 2013; Liss et al., 2011). Additionally, women may feel a sense of predictability gained through self-sexualizing behaviors, and a sense of agency in driving their own portrayal—if even in an ostensibly sexualizing manner. For example, only revealing what they are comfortable showing in a nude image or dictating other aesthetic elements of the image. Likewise, for those who deviate in some way from western beauty standards (i.e., most people), taking and sending nudes may be experienced as a subversion of these restrictive standards. In other words, to sexualize a body that society deems undeserving of sexual attention may be an act of reclamation. If society tells women that sexy is good, and

also that their bodies are bad, then to see the body as sexy may be akin to seeing the body as good. In summary, a nuanced application of objectification theory suggests that women may have many motivations for sending nudes to men, such as to receive external validation, to sexually pleasure the recipient, and to increase their sense of power, control, and predictability.

1.3. Measuring motivations quantitatively

Researchers have tried to examine correlates of various motivations for sending nudes (e.g., body esteem, attachment, e.g., Califano et al., 2022; Currin, Golden, & Hubach, 2020). However, a significant barrier to conducting such research is that the few established scales focus on sexting more generally, including the sending of both text and images, instead of sending nudes specifically. One way to overcome this limitation in the literature is to modify existing measures of sexting motivations—the Sexting Motivation Questionnaire (Bianchi et al., 2016) and a check-all-that apply item (Reed et al., 2020)—to ask the participant to explicitly focus on sending nudes when answering the items. The Sexting Motivations Questionnaire (SMQ) has been employed most broadly by researchers exploring topics ranging from moral disengagement to relational attachment (e.g., Califano et al., 2022; Currin, Golden, & Hubach, 2020). The SMQ includes three motivational clusters: Sexual Purposes, Instrumental/Aggravated Reasons, and Body Image Reinforcement (Bianchi et al., 2016). A strength of this scale for understanding why women send nudes is the inclusion of the Body Image Reinforcement cluster in which all items have a direct bearing on sending nudes (e.g., “to verify whether my body is okay”). Items in the other two clusters are more general (e.g., “for flirting or hooking up”), but straightforward modifications to the measure instructions could be made to focus on sending nudes specifically (e.g., replacing “sext” with “nude”).

Despite these strengths, the SMQ contains weaknesses that may undermine our understanding of why women send nudes. For instance, the items in the Sexual Purposes cluster do not differentiate between women’s desire to arouse themselves, their partner, or both. In fact, this cluster measures a desire to generally increase “passion” or “intimacy” in a relationship or to experience personal arousal,

but excludes partner arousal. This is a notable absence for our purposes, given how women may prioritize the sexual needs of their partners above their own (Fredrickson & Roberts, 1997; Simon & Gagnon, 1986) when sending nudes. Relatedly, the Sexual Purposes cluster includes both “to feel wanted” and “to feel sexually aroused” under the same umbrella. Feeling wanted, for some, could cast the self as a sexual object to be desired by another while the motive to feel aroused is decidedly more focused on seeing the self as sexual subject. Differentiating between the two (as well as other motives) is important for researchers interested in sexual subjectivity, sexual objectification, and sending nudes.

As opposed to the SMQ which is in a traditional scale format, Reed et al. (2020) measured motivations to sext with a select-all-that-apply list of items. While no list of potential motivations is exhaustive, it captures many of the core motivations that the SMQ covers, as well as ones it does not. For instance, Reed et al. (2020) provided the only item considering substance use (i.e., “I was drunk/high at the time”). It also accommodates playful or lighthearted motivations like “to be fun/flirtatious” while also acknowledging potential sources of social influence like “pressure from friends.” Distinctively, the measure also names specific uses of sexting as a means to an end with items like “To show that you care about someone” and “To prove you trust someone.” Finally, the measure hints at reciprocal motivations: “In response to a photo/video you received from someone.” For these reasons, modifying this item to assess sending nudes may reveal motivations that are absent on other scales.

A drawback of this measure is that it does not account for how much women endorse the various motivations. This could cause interpretability issues with understanding the precedence of each motivation within participants. Likewise, the original authors further classified motives as coercive (e.g., “Someone repeatedly asked for it until you gave in”) or non-coercive (e.g., “To get positive feedback or compliments”) following data collection and reported on how many participants endorsed at least one of each. However, a close inspection of this distinction reveals that some motives were categorized as noncoercive when they could reasonably represent coercion for some participants (e. g., “I was drunk/high at the time” or “To prove that you trust someone”). Notably, only three of the 17 options are designated

as coercive, representing a considerable imbalance in the opportunities to endorse coercive versus non-coercive motivations.

In sum, there are ample benefits to modifying existing measures of sexting to explicitly focus on sending nudes. For example, general benefits include straightforward analyses and the ability to have participants consider motivations that may not readily come to mind, but that indeed apply to them. Meanwhile, a drawback to using sexting measures is that they may fail to comprehensively capture the motivations specific to sending nudes. Additionally, the inherent priming that occurs when presenting a set of predetermined motivations could prove problematic when existing scales favor negatively valenced motivations. Modifications to focus on sending nudes would not address this negative slant. Furthermore, the SMQ does not allow participants to add motivations that are not already listed. For these and other reasons, some researchers have favored a qualitative approach.

1.4. Examining motivations qualitatively

Qualitative approaches address some of the concerns associated with responding to a predetermined set of motivations, and they let participants speak for themselves—which is particularly important for topics that may be stigmatizing. Because of the limitless possible responses, the same open-ended question has the potential to elicit different motivations over time and across various populations of interest. However, participants may only mention the most salient motivations that come to mind. Additionally, researchers need to be mindful of how they ask about sending nudes and how comfortable participants feel while collecting data on a topic that may be sensitive or awkward for some participants.

When asking people about sending nudes in an open-ended format, the description of sending nudes is especially important for ensuring good quality data and a positive participant experience. If made to feel self-conscious about their sexual behavior, participants may underreport how frequently they send nudes or not report the full range of motivations. For instance, Van Ouytsel et al. (2017) found that adolescents primarily mentioned negative motivations for sending nudes. However, the researchers asked about “pressures” for sending nudes

without also asking about autonomous or positive motivations. It is unclear whether the negative motivations discussed in qualitative research represent the entirety of women's experiences or is, in part, a methodological artifact related to the researchers' primary focus on negative motivations.

1.5. Overview of the present research

To address the limitations in the extant literature, the present research used a novel triangulation approach to understand women's motives for sending nudes. We asked a large sample of college women to report in an open-ended format on their motives for sending nudes and then quantified these responses using content analysis. Additionally, we examined women's motives for sending nudes by modifying commonly used quantitative measures of motives for sexting to specifically focus on sending nudes. We explored the following research questions by triangulating the qualitative and quantitative data:

1. What are women's motivations for sending nudes to men?
2. How do women's motivations for sending nudes to men compare and contrast when measured qualitatively versus quantitatively?

2. Method

In this study, we investigated our research questions using a convergent parallel mixed method design, a traditional format for triangulation, with qualitative and quantitative data collected simultaneously, analyzed separately, and then integrated primarily during the interpretation stage (Creswell & Plano Clark, 2011; Morse, 1991). In this format, the qualitative and quantitative strands are of relatively equal importance, both contributing valuable information to the final interpretation—each enriched by the other (Creswell & Plano Clark, 2011). Therefore, a triangulation approach is well suited to our goal of comparing qualitative and quantitative reports of women's motivations for sending nudes to men (Morse, 1991).

2.1. Participants

This sample was comprised of 207 undergraduate students recruited from a Psychology Department participant pool. The university is located in the midwestern region of the USA, in a college town. To be eligible for the study, they had to self-report (1) being 19 years of age or older, (2) a woman, and (3) having sent at least one nude to a man in their lifetime. Their ages ranged from 19 to 27 ($M = 20.3$, $SD = 1.5$) and around half were in a committed relationship ($n = 105$, 50.2%). While categories are often insufficient in capturing the complexities of personal identity, we also collected more information about participants' gender identity, gender presentation, sexual orientation, and race and ethnicity (reported in **Table 1**). The majority of participants identified as cisgender, though some participants also identified as transgender or neither cisgender nor transgender. Most participants also identified as heterosexual, but a significant minority identified as bisexual. Many participants identified as White, and of the participants who were Biracial or Multiracial, most were Latina/o/x or Hispanic and White. Other more specific combinations of racial and ethnic identities are not disclosed to protect the anonymity of participants.

2.2. Procedure

Participants were recruited from a psychology department participant pool as part of a larger mixed method survey study on women's motivations, attitudes, and experiences with sending nudes. After providing informed consent, participants were given a brief screener to determine eligibility. Those who were ineligible were thanked for their time and routed out of the study. Next, participants provided detailed demographic information. Then, participants completed the qualitative items regarding nudes. Next, participants completed the modified scales measuring motives for nudes (Bianchi et al., 2016; Reed et al., 2020). Finally, participants provided remaining comments or thoughts on the survey and were thanked for their time. Participants were compensated with course credit.

Table 1 Participant Demographic Characteristics.

	<i>n</i>	%
Gender		
Cisgender	190	91.8
Transgender	4	1.9
Binary	1	0.5
Non-Binary	3	1.4
Neither Cis nor Trans	12	5.8
Binary	10	4.8
Non-Binary ^a	1	0.5
Neither Binary nor Non-Binary	1	0.5
Chose not to respond	1	0.5
Gender Presentation		
Very/mostly feminine	135	65.2
Somewhat feminine	56	27.1
Equally feminine and masculine	15	7.3
Very/mostly masculine	1	0.5
Sexuality		
Heterosexual/straight	162	78.2
Bisexual	27	13.0
Unsure/questioning	8	3.9
Pansexual	5	2.4
Lesbian	2	1.0
Participant specified identity ^b	2	1.0
Asexual	1	0.5
Race and Ethnicity		
White	145	70.0
Latina/o/x or Hispanic	18	8.7
Asian/Asian American/Pacific Islander	16	7.7
African American/Black	11	5.3
Middle Eastern/Arab/Turkish/Iranian	4	1.9
Participant specified identity ^c	1	0.5
Bi/Multi Racial	12	5.8

Note. *N* = 207. Participants were on average 20.3 years old (*SD* = 1.5).

Note. Participants were able to select multiple racial and ethnic categories.

a. Participant specified identity: Gender Fluid.

b. Participants specified their identities: "No Label"; "Demi Sexual".

c. Participant specified identity: Native Hawaiian.

2.3. Materials

2.3.1. Qualitative item

We assessed motivations for sending nudes (defined for participants as “sexual photographs of your body, or of a specific body part, in which you are completely or partially naked”) with one open-ended item that read: “As thoroughly as possible, please describe the reasons that you have sent nudes to men.”

2.3.2. Sexting motivations questionnaire

The Sexting Motivations Questionnaire (SMQ; Bianchi et al., 2016) is a 13-item measure that assesses sexting motives along a five-point scale (1 = *Never*, 3 = *Sometimes*, 5 = *Always*). The definition of sexting included nudes, suggestive text messages, or videos, so we modified the scale to focus only on nudes, replacing the word sexts with nudes for the current study. The SMQ contains three subscales that are scored separately and demonstrated good internal consistency when they were originally created: Sexual Purposes (e.g., “to increase passion in my dating relationship”, $\alpha = 0.84$), Instrumental/Aggravated Reasons (e.g., “in exchange for something I need”, $\alpha = 0.87$), and Body Image Reinforcement (e.g., “to test whether I am sexually attractive”, $\alpha = 0.89$). The modified subscales also showed good to excellent reliability in the current study (0.86, 0.85, and 0.94, respectively).

2.3.3. Sexting motivation item

The sexting motivation item (SMI; Reed et al., 2020) assesses motivations for sexting among adolescents in the context of romantic relationships, where the definition of sexting included both nudes and other sexually explicit content. This item was originally presented in a two-question series. The first question asked participants whether they had sexted, and if they had, the second question assessed 17 motivations for doing so (compiled based on reported motivations in the National Campaign to Prevent Teen and Unplanned Pregnancy, 2008). For example, response options include “In response to a photo/video you received from someone” and “To show that you care about someone.” The dual question format would have been redundant in our study because all participants indicated they had sent a nude at the outset. Therefore, we only utilized the motivation question and

changed the instructions from “Why did you do this [sext]” to “Why did you send nudes?” We also replaced “boyfriend or girlfriend” and “dating partner” with “someone” for two of the motives to make them relevant to single women and because people send nudes to non-relationship partners. Participants could select all the items that applied to their motivations for sending nudes. As in Reed et al. (2020), we then categorized the motivations participants selected as either coercive (e.g., “Pressure from friends” and “Someone repeatedly asked for it until you gave in”) or non-coercive (e.g., “To be fun/flirtatious” and “As a sexy present for a someone”).

2.4. Analysis approach

2.4.1. Qualitative data

We analyzed the open ended data using qualitative content analysis, an approach which allows researchers to categorize participants’ responses according to a coding structure (which can be data-driven and/ or concept-driven) to provide a clear description of the concepts that are present (Schreier, 2013; Stemler, 2000). For the present study, we used content analysis to catalogue and then count the various motivations reported for sending nudes expressed in each response. This approach eased comparison between the qualitative responses, and quantitative items.

We began by reading through all the responses to the qualitative item to familiarize ourselves with these data. During this process we noted commonalities in the responses as a starting point for generating initial codes. The research team (the authors and an undergraduate research assistant) then practiced coding small random subsets of the data with these initial codes to assess fit and generate additional codes from common ideas reported by participants. We created a codebook that named, defined, and provided examples of each code. In addition to inductive (or data-driven) codes, we also employed a deductive (or concept-driven) approach to generate more codes. Specifically, we identified and added motivations captured in the quantitative scales that were not already represented in the codebook. This enabled us to compare how often participants spontaneously reported those motivations with their endorsement of corresponding items in the quantitative scales. We

then began the process of coding the data with a trained research assistant applying all relevant codes to applicable text. For instance, the codes “Felt Cute” and “For Partner Pleasure” would be applied to the excerpt, “Feeling good about my own body and also knowing I brought them sexual pleasure.” The codebook was also amenable to changes that arose throughout the coding process. Such changes included broadening or narrowing definitions of codes and adding new codes when necessary.

The codebook in its final form included 25 codes generated using both inductive and deductive approaches. To assess inter-rater reliability, the first author and a trained research assistant dual-coded a random 20% of the responses. We then calculated a Cohen’s Kappa coefficient (Cohen, 1960) using the dual coded responses. We first obtained a Kappa for each individual code and then averaged across all codes. The overall Kappa, which controls for chance agreement, was 0.83 which is classified as almost perfect (range 0.81–1.00; Cohen, 1960). In addition to categorizing and explaining the specific motivations in the qualitative data (via content analysis), we also quantified these data for the analysis by counting the number of participants who expressed each motivation. For example, the “Validation” motivation code was expressed by 29 participants (14%). By quantifying or counting the qualitative data, it was more directly comparable to the quantitative data from the scales, thus facilitating the study aim of comparing and contrasting participants’ motivations for sending nudes.

2.4.2. Quantitative

For the SMQ, we created mean scores by averaging the individual items for each subscale and used these to report on the endorsement of the various motivations and attitudes. For the SMI, which was a select-all-that-apply format, we reported overall endorsement of the various motivations listed. As per Reed et al. (2020), we also reported on the proportion of participants who endorsed at least one coercive motivation, at least one non-coercive motivation, and at least one of each type of motivation (coercive and non-coercive). However, we interpreted the coercive versus non-coercive aspect of the motivations with caution given the original authors classified 14 of the 17 motivations as non-coercive, and only three as coercive.

To better enable comparison of the qualitative and quantitative strands during interpretation (see section 4; Discussion), we also conducted additional coding to dichotomize the individual items on the SMQ. Specifically, we dichotomized responses to indicate whether participants had endorsed each item or not (i.e., *Never* was coded as 0, while *Sometimes-Always* on both scales was coded as 1). This item-by-item analysis made the SMQ consistent with the format of the SMI and content analysis codes, thus facilitating more direct comparisons of the presence or absence of a motivation, as well as group-level prevalence of each motivation.

3. Results

We sought to answer two related questions. First, what are women's motivations for sending nudes to men? Second, how do women's motivations for sending nudes to men compare and contrast when measured qualitatively versus quantitatively? We answered the first question by describing people's responses on the close-ended motivation questions including the SMQ and SMI, and through a content analysis on the open-ended motivation questions. We answered the second question by comparing participants' responses on the close-ended measures to the open-ended measures.

3.1. Qualitative findings

We report the full results of our content analysis, including names and frequencies of each motivation in **Table 2**. With respect to our first research question, why do women send nudes to men, the most common motivation code by far for the qualitative data was "Relationship Norm/ Expectation" ($n = 73$, 35.3%) and describes when the participant sent nudes as an obligation or inherent part of being in a romantic relationship (e.g., "This man is my boyfriend").

The next most common motivations were: "Because They Asked" ($n = 43$, 20.8%), "Long Distance/Separation" ($n = 36$, 17.4%), and "Validation" ($n = 29$, 14.0%). "Because They Asked" refers to being motivated by a single, or recurring requests for nudes, which often reflected participants' exact words (e.g., "They explicitly asked for them"). "Long

Table 2 Qualitative Motivations and Endorsement Frequency.

<i>Motivation Code</i>	<i>n</i>	<i>%</i>
Relationship Norm/Expectation	73	35.3
Because They Asked	43	20.8
Long Distance/Separation	36	17.4
Validation	29	14.0
Felt Cute	23	11.1
Seek Affection and Hold interest	22	10.6
Partner Pleasure	20	9.7
Because I Wanted To	18	8.7
Fun/Entertainment	17	8.2
Pressure	17	8.2
Get Attention	12	5.8
Connect with Partner	12	5.8
Mutual Pleasure	10	4.8
Reciprocity	9	4.3
Personal Pleasure	7	3.4
Foreplay	7	3.4
Give Him a Gift	6	2.9
Sexual Exploration	5	2.4
Don't Know Reason	3	1.4
Power	3	1.4
Violence Victimization	2	<1
In Exchange For Something	1	<1
Violence Perpetration	0	
Drugs or Alcohol	0	
Prove Something	0	

Note. *n* = Number of participants who expressed given code.

Distance/Separation" includes motivations based on an inability to engage in in-person sex (e.g., "Because I want to keep our sex life exciting even though we live three hours away from each other"). "Validation" describes participants sending nudes as a way of seeking compliments or approval of their bodies, of their general attractiveness, or their sex appeal (e.g., "I wanted to be complimented and admired and made to feel beautiful").

Slightly less frequently, participants expressed the following motivations: "Felt Cute" (*n* = 23, 11.1%), "Seek Affection and Hold Interest" (*n* = 22, 10.6%), "Partner Pleasure" (*n* = 20, 9.7%), "Because I Wanted To" (*n* = 18, 8.7%), "Fun/Entertainment" (*n* = 17, 8.2%),

and "Pressure" ($n = 17, 8.2\%$). The "Felt Cute" motivation code refers to being motivated by a preexisting state of confidence, self-assuredness, or satisfaction with oneself/one's body (e.g., "I thought I looked good and wanted to show off my body"). "Seek Affection and Hold interest" is when participants were motivated to maintain the interest of the recipient, or to be considered as a romantic candidate (e.g., "To keep a man interested and talking to me"). "Partner Pleasure" applied when the only mention of arousal in their motivation was about the recipient of the nude (e.g., "I sent them to pleasure my boyfriend"). "Because I Wanted To", refers to when the motivation they described was simply the desire to do it (e.g., "Because it felt right in the moment"). "Fun/Entertainment" describes motivation to send nudes for the sake of enjoyment (e.g., "It is fun and makes you feel good about yourself" or "I have sent them just for fun"). The "Pressure" code was applied when participants' description of why they sent nudes explicitly described feeling pressured by friends or partners, or described not feeling able to say no (e.g., "I didn't know how to say no").

Next, participants endorsed the following motivations with moderate to low frequency: "Get Attention" ($n = 12, 5.8\%$), "Connect with Partner" ($n = 12, 5.8\%$), "Mutual Pleasure" ($n = 10, 4.8\%$), "Reciprocity" ($n = 9, 4.3\%$), "Personal Pleasure" ($n = 7, 3.4\%$), and "Foreplay" ($n = 7, 3.4\%$). "Get Attention" represents a motivation to make the recipient of the nude to turn their focus toward the sender (e.g., "I was bored and wanted attention"). "Connect with Partner", indicated a desire to foster greater intimacy or closeness with the recipient of the nude (e.g., "helped me feel more sexually intimate and connected"). "Mutual Pleasure" applied when the participant mentioned both their own arousal and that of the recipient as their motivation to send nudes (e.g., "To increase mine and my partner's sexual pleasure/interaction"). "Reciprocity" is when a participant's motivation was because they were receiving nudes in return, or, more often, they sent a nude with the hopes of being sent a nude (e.g., "I was receiving them back"; "to receive a picture in return"). "Personal Pleasure" applied when the person only mentioned their own arousal as a motivation to send nudes (e.g., "I was aroused"). Finally, "Foreplay" included a motivation to increase arousal leading up to sex or to initiate sex (e.g., "As a precursor to sexual activities").

Participants endorsed the following codes with lower frequency: "Give Him a Gift" ($n = 6$, 2.9%), "Sexual Exploration" ($n = 5$, 2.4%), "Don't Know Reason" ($n = 3$, 1.4%), and "Power" ($n = 3$, 1.4%). Based on an item from Reed et al. (2020), "Give Him a Gift," was the motivation to send a nude based on a desire to do something nice or thoughtful for the recipient (e.g., "I did it as a gift"). "Sexual Exploration" included being motivated by a curiosity about sending nudes or using nudes as a means of exploring sexuality/new sexual avenues (e.g., "new to exploring my sexuality, trying it out" or "I also sent these when I was too scared to engage in sexual activity physically"). The "Don't Know Reason" code applied where participants described not having a specific motivation or stated that they did not know why they sent nudes (e.g., "no reason really"). "Power" included being motivated by the desire to feel powerful or gain some sort of control (e.g., "it makes me feel powerful to know that seeing me can have an effect on them").

Finally, the least common codes (expressed by less than 1% of participants or not at all) were: "Violence Victimization" ($n = 2$, <1%), "In Exchange For Something" ($n = 1$, <1%), "Violence Perpetration" ($n = 0$), "Drugs or Alcohol" ($n = 0$), and "Prove Something" ($n = 0$). "Violence Perpetration", "Drugs or Alcohol", and "Prove Something" were all deductive (content-driven) codes derived from the SMI items. "Violence Victimization" was expressed by two participants and applied when the person named violence or coercion as the reason they sent nudes (e.g., "[sent nudes] So he wouldn't break up with me or become more abusive"). While some of the instances where the pressure code applied could be considered coercive and violent, we limited the application of this code to responses that specifically named violence or coercion to avoid placing a label on the women's experience that they might not use themselves. Finally, "In Exchange For Something", included sending nudes in exchange for money, gifts, or favors, and was stated as a motivation for only one participant ("He was going to pay me").

In response to our first question, the qualitative analyses suggested that women have many motivations for sending nudes, spontaneously generating over 20 separate motives. Relationship motives were the most prevalent while violent motives, instrumental motives and drugs or alcohol use rarely (if ever) spontaneously emerged as motivations for sending nudes.

3.2. Quantitative findings

We also addressed the first research question quantitatively by assessing women's motives for sending nudes on modified versions of existing sexting measures. Scores on the SMQ ranged from one to five and average endorsement of the motivational clusters were: Sexual Purposes ($M = 2.87$, $SD = 1.06$), Instrumental/Aggravated Reasons ($M = 1.20$, $SD = 0.45$), and Body Image Reinforcement ($M = 1.85$, $SD = 1.02$). The Sexual Purposes mean was just below the mid-point indicating that participants sometimes sent nudes for Sexual Purposes. Both the Body Image Reinforcement and Instrumental/Aggravated clusters were markedly lower (just above the floor of the scale), indicating that participants rarely or almost never sent nudes for instrumental/aggravated or body image reinforcement purposes.

In addition to an analysis of the scores for this measure, we also conducted an item-by-item analysis of the SMQ by dichotomizing the responses (i.e., *Never* coded as 0, *Sometimes-Always* coded as 1) to indicate whether participants had endorsed each item or not. With this approach, the most common motivations to send nudes on the SMQ were "to increase intimacy in my dating relationship" ($n = 167$, 80.7%), "to increase passion in my dating relationship" ($n = 159$, 76.8%), "to feel sexually aroused" ($n = 155$, 74.9%), and "to feel wanted" ($n = 153$, 73.9%). Meanwhile, "to hurt or damage someone" ($n = 15$, 7.2%) and instrumental purposes such as "in exchange for money or gifts" ($n = 24$, 11.6%), and "in exchange for something I need" ($n = 21$, 10.1%) were rarely endorsed (see **Table 3**). These items are not necessarily akin to separate codes in the qualitative analysis. Conceptual overlap between separate quantitative items (e.g., in exchange for money or gifts; in exchange for something I need) may fall under the same qualitative code (e.g. "In Exchange For Something"). Conversely, some items within a single motivational cluster differed markedly (e.g., to feel wanted is a different motivation than to increase intimacy).

Next, we analyzed the number of participants endorsing each item on the SMI. The most commonly endorsed motivations from the SMI were "To be fun/flirtatious" ($n = 147$, 71.0%), "To feel sexy" ($n = 133$, 64.3%), "To get positive feedback or compliments" ($n = 109$, 52.7%), and "As a sexy present for someone" ($n = 108$, 52.2%). The least commonly endorsed items were "It was a joke" ($n = 14$, 6.8%),

Table 3 Frequency of Participants Endorsing Motivations on the Dichotomized SMQ.

<i>Item</i>	<i>Motivational Cluster</i>	<i>n</i>	<i>%</i>
to increase intimacy in my dating relationship	Sexual Purposes	167	80.7
to increase passion in my dating relationship	Sexual Purposes	159	76.8
to feel sexually aroused	Sexual Purposes	155	74.9
to feel wanted	Sexual Purposes	153	73.9
for flirting or hooking up	Sexual Purposes	135	65.2
to verify whether my body is okay	Body Image Reinforcement	95	45.9
to test whether I am sexually attractive	Body Image Reinforcement	95	45.9
to test whether I am attractive enough	Body Image Reinforcement	85	41.1
because I am forced by someone	Instrumental/Aggravated Reasons	46	22.2
to obtain small favors from people	Instrumental/Aggravated Reasons	28	13.5
in exchange for money or gifts	Instrumental/Aggravated Reasons	24	11.6
in exchange for something I need	Instrumental/Aggravated Reasons	21	10.1
to hurt or damage someone	Instrumental/Aggravated Reasons	15	7.2

Note. *n* = Number of participants who endorsed the item from sometimes to always.

"I don't know" ($n = 14$, 6.8%), "Pressure from friends" ($n = 13$, 6.3%), and "Other" ($n = 4$, 1.9%). The authors who created this item, categorized fourteen of these options as non-coercive, three as coercive, and then reported on the percentage of participants that endorsed at least one of each type of motivation (coercive and non-coercive), and at least one coercive *and* one non-coercive motivation. In this sample, 111 (53.6%) participants endorsed at least one coercive motivation, 191 (92.3%) endorsed at least one non-coercive motivation, and 104 (50.2%) endorsed at least one coercive and one non-coercive motivation. For the number of participants who endorsed each of the motivations on the SMI, see **Table 4**. The top motivations participants endorsed on this item ("To be fun/flirtatious", "To feel sexy", "To get positive feedback or compliments" and "As a sexy present for someone") were all categorized as non-coercive by the authors who designed the item, thus providing an interesting contrast to the negative portrayal of sending nudes in other work and in the media at large.

In summary, the motivations endorsed on the quantitative measures each provided additional insight into why women send nudes to men which was our first research question. The quantitative measures prompted some motivations that participants did not mention when responding to our open-ended question (e.g. "I was drunk/high

Table 4 Frequency of Participants Endorsing Motivations on the SMI.

<i>Motivation</i>	<i>n</i>	<i>%</i>
To be fun/flirtatious	147	71.0
To feel sexy	133	64.3
To get positive feedback or compliments	109	52.7
As a sexy present for someone	108	52.2
*Someone repeatedly asked for it until you gave in	94	45.4
To get or keep someone's attention	90	43.5
In response to a photo/video you received from someone	86	41.5
*Someone pressured you to send it	82	39.6
To show that you care about someone	60	29.0
I was drunk/high at the time	47	22.7
To get someone to like you	46	22.2
To prove that you trust someone	38	18.4
To get noticed	38	18.4
It was a joke	14	6.8
I don't know	14	6.8
*Pressure from friends	13	6.3
Other	4	1.9

Note. *n* = Number of participants who selected that response option.

* Motivations with asterisks were categorized as coercive by the creators of this item. All others were considered non-coercive.

at the time", or "To prove that you trust someone"). When prompted, these items were endorsed by some participants suggesting that the use of specific close ended questions could help capture motivations that do not come readily to mind for participants.

3.3. Comparison of quantitative and qualitative findings

Our second research question asks: how do women's motivations for sending nudes to men compare and contrast when measured qualitatively versus quantitatively? To help visualize endorsement of comparable items across measurement approaches, and to facilitate the integration of the qualitative and quantitative findings (see section 4; Discussion), we tabled various types of motivations that were identified across the qualitative and quantitative assessments by grouping similar motivations on each assessment (see Table 5). For example, one type of motivation was "Fun" (that women sent nudes for the fun

of it), which we identified in the qualitative data (i.e., “Fun/Entertainment” code) and the SMI data (e.g., the “To be fun/flirtatious” item), so the frequency of participant endorsement of these motivations are included in the table under the “Fun” category. We created the labels for the overarching, conceptual motivation types (i.e., in the first column) primarily by drawing from the items themselves. Notably, this table contains only those items and codes describing a concept that appeared in more than one measurement approach. With respect to our second research question, these analyses revealed that some motives for sending nudes were only captured by one measurement modality. For example, violence perpetration, drug and alcohol use, and proving something were only endorsed on the quantitative measures but were not reported spontaneously in the qualitative responses. Meanwhile, “Sexual Exploration”, “Felt Cute”, and “Foreplay” only emerged from the content analysis of the qualitative responses. Likewise, of the motives that emerged on multiple measures, prevalence was markedly different depending on the type of assessment with much higher rates emerging on the quantitative compared to the qualitative measures. We interpret these findings next in the discussion.

4. Discussion

Many women have sent nudes to men, but few researchers have studied what motivates them to do it. Although there is research on motives for sexting in general (e.g., Bianchi et al., 2016; Reed et al., 2020), there is limited research focused on sending nudes specifically. An application of objectification theory (Fredrickson & Roberts, 1997) to sending nudes suggests that women may send nudes to men primarily to receive validation, and for men’s pleasure, but also that women may be motivated by seeking predictability, power, and control. The present research addressed limitations with existing measures of motivations used in the field by adapting and implementing both qualitative and quantitative measurement approaches to triangulate women’s motives for sending nudes. Specifically, we examined why women send nudes (Research Question 1) in the most comprehensive assessment to date and also compare and contrast the motives that emerged quantitatively and qualitatively (Research Question 2).

Regarding the first research question, we found that the reasons women send nudes are complicated and many. The most common motivation reported qualitatively was "Relationship Norm/Expectation", followed by "Because They Asked", "Long Distance Relationship/Separation", and "Validation". For the SMI, the most common motivations ("To be fun/flirtatious", "To feel sexy", "To get positive feedback or compliments", and "As a sexy present for someone") were all categorized as non-coercive and represent potentially positive/agentive motivations. With the modified SMQ, the most endorsed motivational cluster on average was Sexual Purposes, followed by Body Image Reinforcement, and finally Instrumental/Aggravated Reasons. Whereas when analyzed item by item, the most common motivations in the SMQ were "to increase intimacy in my dating relationship", "to increase passion in my dating relationship", "to feel sexually aroused," "to feel wanted", and "for flirting or hooking up". Generally speaking, these findings suggest that women send nudes for a multitude of reasons, with the present study documenting over 25 distinct motivations across the different assessments.

With respect to our second research question, the open-ended data provided the broadest assessment of women's motives for sending nudes, followed by the SMI, and SMQ. This is perhaps not surprising, given the codes for the open-ended data were generated both inductively from participant responses, and deductively from adapted scale items. It is notable, however, that when considered together, each of the other measurement approaches had noticeable gaps in content (see **Table 5**). For example, the SMQ omits motives for fun or reciprocity, and the SMI misses sexual arousal and relationship motives.

Several motivations that participants reported qualitatively were completely missing from the quantitative measures. Interestingly, these motivations were potentially positive, agentive, or constructive: "Felt Cute", "Foreplay", "Sexual Exploration" and "Long Distance/Separation". For example, "Foreplay" and "Sexual Exploration" both suggest an active engagement in a sexual experience. Likewise, "Long Distance/ Separation" represents a creative way to engage in remote sex, and "Felt Cute" was about feeling good about oneself. Also, the content analysis of the qualitative data uniquely differentiated between the target of pleasure (e.g., "Partner Pleasure", "Mutual Pleasure", and

Table 5 Comparison of Participant Endorsement of Motivation Types Across All Assessments.

Motivation Type	Qualitative Motivation Code	%	SMQ Motivation Items	%	SMI Motivation Item	%
Fun	Fun/Entertainment	8.2	-	-	To be fun/flirtatious	71.0
Flirt	-	-	for flirting or hooking up	65.2	To be fun/flirtatious	71.0
SexualArousal	Partner Pleasure	9.7	to feel sexually aroused	74.9	-	-
	Mutual Pleasure	4.8	-	-	-	-
Instrumental	Personal Pleasure	3.4	-	-	-	-
	In Exchange For Something	0.5	to obtain small favors from people in exchange for money or gifts	13.5	-	-
	-	-	in exchange for something I need	11.6	-	-
Substances	Drugs or Alcohol	0	-	10.1	-	-
	Validation	14.0	to test whether I am attractive enough	41.1	I was drunk/high at the time	22.7
Relationship	-	-	to test whether I am sexually attractive	45.9	To get positive feedback or compliments	52.7
	-	-	to verify whether my body is okay	45.9	To feel sexy	64.3
	Relationship Norm/Expectation	35.3	to increase passion in my dating relationship	76.8	-	-
	Connect with Partner	5.8	to increase intimacy in my dating relationship	80.7	-	-
Reciprocity	Long Distance/Separation	17.4	-	-	-	-
	Reciprocity	4.3	-	-	In response to a photo/video you received from someone	41.5
Gift	Give Him a Gift	2.9	-	-	As a sexy present for someone	52.2
	Pressure	8.2	-	-	Someone pressured you to send it	39.6
Victimization & Coercion	-	-	-	-	Pressure from friends	6.3
	Violence Victimization	1	because I am forced by someone	22.2	Someone repeatedly asked for it until you gave in	45.4
Perpetration	Violence Perpetration	0	to hurt or damage someone	7.2	-	-
	Get Attention	5.8	-	-	To get noticed	18.4
Affection	-	-	-	-	To get or keep someone's attention	43.5
	Seek Affection and Hold interest	10.6	to feel wanted	73.9	To get someone to like you	22.2
Proof	Prove Something	0	-	-	To prove that you trust someone	18.4

Note. This table only contains those items describing a concept that appeared in at least one other measurement approach. SMQ items were dichotomized for consistent format.

“Personal Pleasure”), which enabled us to evaluate how frequently various targets of pleasure were mentioned. In contrast, only one of the two quantitative measures had an item describing Personal Pleasure as a motivation, though it does not specify the target of the pleasure (the SMQ includes “To feel sexually aroused”). These data suggested that when women mentioned sexual pleasure as a motivation to send nudes, it was most often to arouse their partner (9.7%), sometimes to arouse themselves and their partner (4.8%), and very rarely for the sole purpose of arousing themselves (3.4%). When asked to generate motivations spontaneously and unprompted, women mentioned their partners enjoyment far more often than their own.

When comparing analogous items across measurement approaches, we identified noteworthy differences in frequency. One such difference was evident in items addressing the idea of fun. While the “Fun/Entertainment” code only appeared in 8.2% of the participants’ qualitative responses, the SMI item “To be fun/flirtatious” was endorsed by 71.0% of participants. A potential explanation for this discrepancy in endorsement is that when asked to report their motivations in an open-ended format, the “Fun/Entertainment” motivations were less salient, but when prompted by the SMI item, participants remembered this motivation. However, the SMI item is also double-barreled including both “fun” and “flirtatious”, making it unclear whether participants were endorsing one or both motivations. In addition to the SMI item, the SMQ also has an item addressing flirting as a potential motivation, and it was endorsed at very similar rates (65.2% “for flirting or hooking up” on the SMQ vs. 71.0% for “To be fun/flirtatious” on the SMI). While our content analysis did not include a flirtation motivation code, three of the 17 qualitative responses that mentioned fun also mentioned flirting, suggesting fun and flirting motivations may go hand-in-hand for some but not others. Future researchers should separate out fun and flirtation to enable further exploration of how these motivations overlap and diverge. Furthermore, researchers should keep in mind that women who enjoy flirting and attention from men are not necessarily disempowered or less informed than women who do not—and vice versa.

Items addressing relationship dynamics were among the most endorsed motivations across all measurement approaches. For example, “Relationship Norm/Expectation” was the most common motivation

reported qualitatively (35.3%). Likewise, the SMQ items “to increase intimacy in my dating relationship” (80.7%) and “to increase passion in my dating relationship” (76.8%), which could be conceptualized as relationship maintenance, were the most commonly endorsed motivations on this measure. However, this observation would have been missed if we had only evaluated and reported endorsement of the SMQ subscales—none of which are about relationships. Taken together, these findings indicated that many women are motivated to send nudes to men by their desire to maintain or improve their relationship. Researchers designing new measures should include nuanced relationship motives, and those using the SMQ should consider conducting additional item by item analyses.

The motivation of external validation, or seeking affirmation from others, was endorsed somewhat consistently across the different measurement approaches. “Validation” (14%) was in the top five most common motivations discussed in the qualitative data (e.g., “They made me feel better about myself and that someone actually thought I was pretty and liked me”), and was moderately well endorsed by participants on the SMQ items: “to test whether I am attractive enough” (41.1%), “to verify whether my body is okay” (45.9%), and “to test whether I am sexually attractive” (45.9%). The SMQ Body Image Reinforcement cluster was also the second most endorsed of the three clusters (though it was near the floor of the scale). Relatedly, the SMI item, “To get positive feedback or compliments” (52.7%), was endorsed by around half of participants. Women reported that getting validation from others was motivating across the various measurement modalities, perhaps suggesting that this is an especially important part of why many women send nudes to men. This likely reflects the larger culture where women’s apparent value is based on the standards and approval of White cisgender straight men. It is likely impossible to totally separate enjoyable sexual experiences, validation seeking, and objectification, so future researchers should investigate the ways these are inextricably intertwined under White cisheteropatriarchy. While sending nudes, as one participant writes, “for male validation”, is an ostensibly objectifying motivation, researchers should consider how feeling valued for one’s appearance may actually be benign, appropriate, or even beneficial in certain contexts (e.g., when one feels valued for

other traits as well, during a sexual encounter, or in a romantic relationship; Meltzer & McNulty, 2014). Indeed, one participant explained that “[sending nudes] helped me connect with my own sexuality and get comfortable with my body. By seeing someone else find my body beautiful and desirable, it helped me see myself that way and appreciate my body for other, non-sexual reasons as well. Overall, it gave me a lot more confidence and emotional validation.”

There were also a few motives that were endorsed in the quantitative data but did not come up in the qualitative data. None of the participants mentioned drugs or alcohol as a motivation in their qualitative responses, yet 23.3% of the sample selected the SMI option “I was drunk/ high at the time”. It may be that participants had not reflected on the involvement of substance use in their motivations until prompted, or that participants did not consider substance use as a motivation but rather a contextual/conditional factor. This suggests that researchers interested in the role of substance use in sexting and sending nudes may need to prompt participants. Likewise, the “Prove Something” code, which was a concept-driven code created based on a motivation identified in the SMI (i.e., “To prove that you trust someone”) did not apply to any qualitative responses, yet 18.8% of participants selected the corresponding SMI item. This is likely because when participants discussed trust or intimacy in their open-ended responses, they described collaborating on or building with their partner (captured by the “Connect with Partner” code) as opposed to “proving” trust or intimacy as a motivation to send nudes. Finally, only one participant mentioned “In Exchange For Something” in their qualitative response, yet more participants endorsed the related SMQ items “to obtain small favors from people” (13.5%), “in exchange for money or gifts” (11.6%), and “in exchange for something I need” (10.1%). This finding suggests these may have been secondary or less salient motivations for the women who endorsed them. The overall low prevalence of reporting on instrumental uses could also be due to cultural stigma around sex work. Researchers interested in instrumental uses should prompt participants and take steps to mitigate the potential influence of anti-sex work attitudes.

4.1. Theoretical implications

As part of their original objectification framework, Fredrickson and Roberts (1997) theorized that women would prioritize male desire and sensation above their own. In examining women's motivations for sending nudes, their prediction rang true in the prevalence of various targets of pleasure across participants: partner first ("... to cheer him up, make him happy, help him reach climax, and just because he wanted a picture of me"), mutual second ("we were both sexually attracted to each other and it was mutual"), personal third ("Because I was horny"). Consistent with our conceptualization, one participant also differentiated pleasure along similar lines "... to be mutually turned on, to please a man, to initiate sex, just to be turned on." Indeed, our observation about the prevalence of mentioning various targets of pleasure would have been impossible to make without these distinctions. Insights on prioritization within participants rather than between them could be further investigated by prompting women to consider how they rank these various targets of pleasure.

Additionally, we found that a few women were motivated by a sense of power and control (e.g., "[Nudes] are fun and can be used to create power in a relationship"). Another participant wrote: "I wanted to exert a sense of power over the men I sent nudes to; I could make them desire me and they would do anything to get a picture." These findings demonstrate the idea that under cisheteropatriarchy women may exert control by modulating their sex appeal for personal benefit (i.e., via sending nudes). This could be adaptive in a society that objectifies women on a structural and interpersonal level, making experiences objectification practically unavoidable for women regardless of their individual behaviors while also restricting avenues to empowerment. At the same time, it is also noteworthy that this only emerged with 3 participants (1.4%), suggesting that it may only be top of mind for a subset of women such as those who view sex as a source of power. Relatedly, the "Power" motivation coinciding with motivations "To Feel Sexy" and "Felt Cute" aligns with prior work on women's enjoyment of sexualization and viewing sex as a source of power (Liss et al., 2011). These findings may warrant additional exploration of the power, control, and predictability mechanism of objectification theory.

4.2. Recommendations for researchers

The findings from this study also provide insight into future measurement approaches for research on sexting and sending nudes. First, we recommend that researchers consider what aspect of sexting they are interested in (written only, image only, or both) and specify accordingly. Likewise, when deciding how to measure motivations, researchers should weigh whether they are more interested in salience or comprehensiveness. If researchers are interested in learning about the most salient motivations for sexting or for sending nudes, then a qualitative approach could be favorable, whereas if they are interested in garnering individual participant's endorsement across a comprehensive list of motivations, a quantitative approach may be better. Regardless of approach, it is essential that researchers reflect on their own biases about sending nudes so they can better account for the nuanced range of reasons that women engage in this behavior, which include negative, neutral, and positive motivations. It is also critical that researchers avoid stigmatizing language. Finally, we recommend that future researchers develop measures specifically for sending nudes, given that existing quantitative measures do not capture several important motivations we identified for sending nudes in the qualitative data.

4.3. Limitations and future directions

While this work yielded several new insights into motives for sending nudes, it is not without limitations. Because our sample was primarily White, cisgender, heterosexual women from an undergraduate participant pool, our findings may not apply to the experiences of people who do not share those identity characteristics. While generalizability is not the goal of qualitative research, transferability is a relevant consideration for these qualitative findings—that is, how your findings may or may not apply to other contexts (Kuper et al., 2008).

In terms of gender and sexual diversity, the sample was primarily cisgender heterosexual women, with a significant minority of cisgender bisexual women. The prevalence of these gender and sexual identities was unsurprising given the study's focus on the dynamics of women sending nudes to men, but our findings do little to clarify the

potentially unique motivations for sending nudes among transgender women or in queer dynamics. For example, perhaps sending nudes could feel gender affirming or elicit gender euphoria for some transgender people. Conversely, some may find the experience dysphoric. The lack of racial and ethnic diversity is another limitation related to the sample, especially given potentially unique sociocultural pressures, racialized stereotypes, and culturally situated values about sexuality that may influence motives (Ruvalcaba et al., 2020). For example, among Black women, additional pressures to adhere to respectability politics or an awareness of the “Jezebel” stereotype could influence cyber-sexual behavior and experiences (e.g., Leath et al., 2021; Pitcan et al., 2018). The age range of our sample is consistent with research suggesting the developmental groups most likely to sext—emerging adults (Mori et al., 2020). While adolescents are another age group with high rates of sexting (Klettke et al., 2014; Mori et al., 2022), we did not recruit adolescents in the current study due to practical concerns when collecting data for sex research with people below the age of consent in the state where the research was conducted. With these limitations in mind, we acknowledge that our results are not necessarily applicable to all women’s motives for sending nudes but rather apply primarily to young, White, cisgender women in college. Future research should prioritize expanding beyond this population.

An additional methodological limitation is that we modified validated measures of sexting to assess motivations for sending nudes without prior information about how such changes might influence the psychometric properties of these validated scales. However, several items on these scales, or the subscales themselves, already focused on images or videos without using the word “nudes” (e.g., the Body Image Reinforcement subscale on the SMQ). Furthermore, the internal consistency of the SMQ, as evidenced by good to excellent Cronbach’s alphas, was similar to (or better than) those reported in the original SMQ validation paper (Bianchi et al., 2016). While our emphasis on the phrase “sending nudes” (which was clearly defined for participants) was a departure from the terms used in the validated versions of these measures (e.g., “sexts”), other researchers have challenged the relevance of the word “sexting” for young participants (Walker et al., 2013). Additionally, modification of existing measures/items for various reasons is a relatively common practice in sexting

research (e.g., Maes & Vandebosch, 2022). Future research could also further examine the psychometric properties of the modified versions of the SMQ to ensure that they are psychometrically sound (e.g., via exploratory or confirmatory factor analysis).

Potential next steps for this research include the development of a scale that measures motivations for sending nudes specifically, includes positive motives, and is designed specifically for use with women. Relatedly, the field is currently ill-equipped to examine motives in gender diverse samples and should develop scales to better account for the role of gender in sending nudes. Additionally, these findings offer an initial exploration of an under explored mechanism of self-objectification that could be fertile grounds for further research on objectification and sexual empowerment. More broadly, future research should consider how objectification theory and sexual scripts apply to other cybersexual phenomena, and what we can learn about other classic social scientific theories by transposing them into new digital contexts.

5. Conclusions

The purpose of the present research was to examine why women send nudes to men using a novel triangulation approach. In addition to the motivations highlighted in previous studies (e.g., pressure, relationships expectancies), the present research revealed that some women also send nudes because they were already feeling good about their bodies, wanted to initiate sex, or wanted to explore their sexuality remotely. These findings contrast with the general emphasis on negative motivations in the sexting literature and undermine the notion that sending nudes is mainly, exclusively, or inherently detrimental to women. Triangulating qualitative and quantitative data in a single study also highlighted that women send nudes for many reasons, and that different measurement approaches may inform which, and how often, certain motivations emerge in their sample. Additionally, we provided guidance for a more affirming and comprehensive approach to the measurement of this behavior in future research—which is generally to consider sending nudes separately from sexting to better account for women’s unique experiences of looking at oneself, and

being looking at, in an objectifying culture, and to ask about this behavior in a nonstigmatizing manner. In offering a more robust and nuanced picture of women's motivations to send nudes, we find that women are not thoughtlessly sending images of their bodies to others, but rather are acutely aware of their motivations.

Author credit — Olivia R. Checkalski: Conceptualization, Methodology, Formal analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Project administration. **Sarah J. Gervais:** Conceptualization, Methodology, Writing – Original Draft, Writing – Review & Editing, Supervision. **Kathryn J. Holland:** Conceptualization, Methodology, Formal analysis, Data Curation, Writing – Review & Editing, Supervision.

Competing interests — The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability — The data that has been used is confidential.

Acknowledgments We would like to thank Velma Lockman for her diligent and thoughtful work coding these data. Without her contributions, this work would not have been possible.

References

- Barrense-Dias, Y., Berchtold, A., Surís, J.-C., & Akre, C. (2017). Sexting and the definition issue. *Journal of Adolescent Health, 61*(5), 544–554. <https://doi.org/10.1016/j.jadohealth.2017.05.009>
- Bianchi, D., Morelli, M., Baiocco, R., & Chirumbolo, A. (2016). Psychometric properties of the sexting motivations questionnaire for adolescents and young adults. *Rassegna di Psicologia, 33*(3), 5–18. <https://doi.org/10.4558/8067-01>
- Bianchi, D., Morelli, M., Baiocco, R., & Chirumbolo, A. (2017). Sexting as the mirror on the wall: Body-esteem attribution, media models, and objectified-body consciousness. *Journal of Adolescence, 61*(C), 164–172. <https://doi.org/10.1016/j.adolescence.2017.10.006>
- Boer, S., Erdem, Ö., de Graaf, H., & Götz, H. (2021). Prevalence and correlates of sext-sharing among a representative sample of youth in The Netherlands. *Frontiers in Psychology, 12*, 655796. <https://doi.org/10.3389/fpsyg.2021.655796>
- Brinkley, D. Y., Ackerman, R. A., Ehrenreich, S. E., & Underwood, M. K. (2017). Sending and receiving text messages with sexual content: Relations with early sexual activity and borderline personality features in late adolescence. *Computers in Human Behavior, 70*, 119–130. <https://doi.org/10.1016/j.chb.2016.12.082>

- Burén, J., & Lunde, C. (2018). Sexting among adolescents: A nuanced and gendered online challenge for young people. *Computers in Human Behavior*, 85, 210–217. <https://doi.org/10.1016/j.chb.2018.02.003>
- Burkett, M. (2015). Sex(t) talk: A qualitative analysis of young adults' negotiations of the pleasures and perils of sexting. *Sexuality & Culture: An Interdisciplinary Quarterly*, 19 (4), 835–863. <https://doi.org/10.1007/s12119-015-9295-0>
- Califano, G., Capasso, M., & Caso, D. (2022). Exploring the roles of online moral disengagement, body esteem, and psychosexual variables in predicting sexting motivations and behaviours. *Computers in Human Behavior*, 129, Article 107146. <https://doi.org/10.1016/j.chb.2021.107146>
- Calogero, R. M., & Thompson, J. K. (2009). Potential implications of the objectification of women's bodies for women's sexual satisfaction. *Body Image*, 6(2), 145–148. <https://doi.org/10.1016/j.bodyim.2009.01.001>
- Calvert, C. (2009). Sex, cell phones, privacy, and the first amendment: When children become child pornographers and the Lolita effect undermines the law. *CommLaw Conspectus: Journal of Communications Law and Policy*, 18, 1–66.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37–46. <https://doi.org/10.1177/001316446002000104>
- Creswell, J. W., & Plano Clark, V. L. (2011). Choosing a mixed methods design. In *Designing and conducting mixed methods research* (2nd ed., pp. 53–106). SAGE Publications.
- Currin, J. M., Golden, B. L., & Hubach, R. D. (2020). Predicting type of sext message sent in adults 25 and older using motivations to sext and relational attachment. *Current Psychology*, 41(3), 1526–1533. <https://doi.org/10.1007/s12144-020-00680-w>
- Currin, J. M., Ireland, M. E., Cox, K., & Golden, B. L. (2020). Sexually aroused: A mixed-methods analysis of how it feels for romantic and sexual partners to send and receive sext messages. *Computers in Human Behavior*, 113, Article 106519. <https://doi.org/10.1016/j.chb.2020.106519>
- Döring, N. (2014). Consensual sexting among adolescents: Risk prevention through abstinence education or safer sexting? *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 8(1). <https://doi.org/10.5817/CP2014-1-9>
- Drouin, M., Vogel, K. N., Surbey, A., & Stills, J. R. (2013). Let's talk about sexting, baby: Computer-mediated sexual behaviors among young adults. *Computers in Human Behavior*, 29(5), A25–A30. <https://doi.org/10.1016/j.chb.2012.12.030>
- Erchull, M. J., & Liss, M. (2013). Exploring the concept of perceived female sexual empowerment: Development and validation of the sex is power scale. *Gender Issues*, 30(1–4), 39–53. <https://doi.org/10.1007/s12147-013-9114-6>
- Footy, M., Mazzone, A., Laffan, D. A., Loftsson, M., & O'Higgins Norman, J. (2021). It's not just sexy pics": An investigation into sexting behaviour and behavioural problems in adolescents. *Computers in Human Behavior*, 117, Article 106662. <https://doi.org/10.1016/j.chb.2020.106662>

- Fredrickson, B. L., & Roberts, T.-A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21(2), 173–206.
- Graham Holmes, L., Nilssen, A. R., Cann, D., & Strassberg, D. S. (2021). A sex-positive mixed methods approach to sexting experiences among college students. *Computers in Human Behavior*, 115, Article 106619. <https://doi.org/10.1016/j.chb.2020.106619>
- Guest, C., & Denes, A. (2022). Too much too soon?: Perceived appropriateness of sexting across stages of relationship development and attachment tendencies among emerging adults. *Computers in Human Behavior*, 137. <https://doi.org/10.1016/j.chb.2022.107429>
- Howard, D., Klettke, B., Clancy, E., & Fuller-Tyszkiewicz, M. (2021). What are you looking at? Body image esteem and sexting behaviors among emerging Australian adults. *Computers in Human Behavior*, 124, Article 106915. <https://doi.org/10.1016/j.chb.2021.106915>
- Howard, D., Klettke, B., Ling, M., Krug, I., & Fuller-Tyszkiewicz, M. (2019). Does body dissatisfaction influence sexting behaviors in daily life? *Computers in Human Behavior*, 101, 320–326. <https://doi.org/10.1016/j.chb.2019.07.033>
- Judge, A. M. (2012). Sexting" among U.S. adolescents: Psychological and legal perspectives. *Harvard Review of Psychiatry*, 20(2), 86–96. <https://doi.org/10.3109/10673229.2012.677360>
- Klettke, B., Hallford, D. J., & Mellor, D. J. (2014). Sexting prevalence and correlates: A systematic literature review. *Clinical Psychology Review*, 34(1), 44–53. <https://doi.org/10.1016/j.cpr.2013.10.007>
- Kuper, A., Lingard, L., & Levinson, W. (2008). Critically appraising qualitative research. *BMJ*, 337(7671), 687–689. <https://doi.org/10.1136/bmj.a1035>
- Leath, S., Jerald, M. C., Perkins, T., & Jones, M. K. (2021). A qualitative exploration of jezebel stereotype endorsement and sexual behaviors among black college women. *Journal of Black Psychology*, 47(4–5), 244–283. <https://doi.org/10.1177/0095798421997215>
- Liong, & Cheng, G. H.-L. (2019). Objectifying or liberating? Investigation of the effects of sexting on body image. *The Journal of Sex Research*, 56(3), 337–344. <https://doi.org/10.1080/00224499.2018.1438576>
- Lippman, & Campbell, S. W. (2014). Damned if you do, damned if you don't... if you're a girl: Relational and normative contexts of adolescent sexting in the United States. *Journal of Children and Media*, 8(4), 371–386. <https://doi.org/10.1080/17482798.2014.923009>
- Liss, M., Erchull, M. J., & Ramsey, L. R. (2011). Empowering or oppressing? Development and exploration of the enjoyment of sexualization scale. *Personality and Social Psychology Bulletin*, 37(1), 55–68. <https://doi.org/10.1177/0146167210386119>
- Liss, M., Richard, K., & Erchull, M. (2019). Sex and sexuality. In K. Barton (Ed.), *Psychology of women and gender* (pp. 275–316). W.W. Norton & Company.

- Maddocks, S. (2018). From non-consensual pornography to image-based sexual abuse: Charting the course of a problem with many names. *Australian Feminist Studies*, 33 (97), 345–361. <https://doi.org/10.1080/08164649.2018.1542592>
- Maes, C., & Vandenbosch, L. (2022). Physically distant, virtually close: Adolescents' sexting behaviors during a strict lockdown period of the COVID-19 pandemic. *Computers in Human Behavior*, 126, Article 107033. <https://doi.org/10.1016/j.chb.2021.107033>
- Meltzer, A. L., & McNulty, J. K. (2014). Tell me I'm sexy...and otherwise valuable: Body valuation and relationship satisfaction. *Personal Relationships*, 21(1), 68–87. <https://doi.org/10.1111/pere.12018>
- Mori, C., Cooke, J. E., Temple, J. R., Ly, A., Lu, Y., Anderson, N., Rash, C., & Madigan, S. (2020). The prevalence of sexting behaviors among emerging adults: A meta-analysis. *Archives of Sexual Behavior*, 49(4), 1103–1119. <https://doi.org/10.1007/s10508-020-01656-4>
- Mori, C., Park, J., Temple, J. R., & Madigan, S. (2022). Are youth sexting rates still on the rise? A meta-analytic update. *Journal of Adolescent Health*, 70(4), 531–539. <https://doi.org/10.1016/j.jadohealth.2021.10.026>
- Morse, Janice (1991). Approaches to Qualitative-Quantitative Methodological Triangulation. *Nursing Research*, 40(2), 120–123.
- Muehlenhard, & Shippee, S. K. (2010). Men's and women's reports of pretending orgasm. *The Journal of Sex Research*, 47(6), 552–567. <https://doi.org/10.1080/00224490903171794>
- Pitcan, M., Marwick, A. E., & Boyd, D. (2018). Performing a vanilla self: Respectability politics, social class, and the digital world. *Journal of Computer-Mediated Communication*, 23(3), 163–179.
- Razi, A., Badillo-Urquiola, K., & Wisniewski, P. (2020). Let's talk about sext: How adolescents seek support and advice about their online sexual experiences. In *Proceedings of the 2020 CHI conference on human factors in computing systems* (Vols. 1–13). <https://doi.org/10.1145/3313831.3376400>
- Reed, L. A., Boyer, M. P., Meskunas, H., Tolman, R. M., & Ward, L. M. (2020). How do adolescents experience sexting in dating relationships? Motivations to sext and responses to sexting requests from dating partners. *Children and Youth Services Review*, 109, Article 104696. <https://doi.org/10.1016/j.childyouth.2019.104696>
- Roberts, T.-A., Calogero, R. M., & Gervais, S. J. (2018). Objectification theory: Continuing contributions to feminist psychology. In C. B. Travis, J. W. White, A. Rutherford, W. S. Williams, S. L. Cook, & K. F. Wyche (Eds.), *APA handbook of the psychology of women: History, theory, and battlegrounds* (pp. 249–271). American Psychological Association. <https://doi.org/10.1037/0000059-013>
- Ruvalcaba, Y., Stephens, D. P., Eaton, A. A., & Boyd, B. (2020). Hispanic women's perceptions of teenage sexting: Qualitative analyses using a sexual scripting framework. *Culture, Health and Sexuality*, 23(9), 1182–1197. <https://doi.org/10.1080/13691058.2020.1767805>

- Sakaluk, J. K., Todd, L. M., Milhausen, R., Lachowsky, N. J., & Undergraduate Research Group. (2014). Dominant heterosexual sexual scripts in emerging adulthood: Conceptualization and measurement. *The Journal of Sex Research, 51*(5), 516–531. <https://doi.org/10.1080/00224499.2012.745473>
- Schreier, M. (2013). Qualitative content analysis. In U. Flick (Ed.), *The SAGE handbook of qualitative data analysis* (pp. 170–183). Sage.
- Sesar, K., Dodaj, A., & Šimić, N. (2019). Motivational determinants of sexting: Towards a model integrating the research. *Psychological Topics, 28*(3), 461–482. <https://doi.org/10.31820/pt.28.3.1>
- Simon, W., & Gagnon, J. H. (1986). Sexual scripts: Permanence and change. *Archives of Sexual Behavior, 15*(2), 97–120. <https://doi.org/10.1007/BF01542219>
- Speno, A. G., & Aubrey, J. S. (2019). Adolescent sexting: The roles of self-objectification and internalization of media ideals. *Psychology of Women Quarterly, 43*(1), 88–104. <https://doi.org/10.1177/0361684318809383>
- Steer, A., & Tiggemann, M. (2008). The role of self-objectification in women's sexual functioning. *Journal of Social and Clinical Psychology, 27*(3), 205–225. <https://doi.org/10.1521/jscp.2008.27.3.205>
- Stemler, S. (2000). An overview of content analysis. *Practical Assessment, Research and Evaluation, 7*(17). <https://doi.org/10.7275/z6fm-2e34>
- Temple, J. R., & Choi, H. (2014). Longitudinal association between teen sexting and sexual behavior. *Pediatrics, 134*(5), 1287–1292. <https://doi.org/10.1542/peds.2014-1974>
- The National Campaign to Prevent Teen and Unplanned Pregnancy and CosmoGirl.com. (2008). In *Sex and Tech: Results from a survey of teens and young adults*.
- Trub, L., Doyle, K. M., Hubert, Z. M., Parker, V., & Starks, T. J. (2022). Sexting to sex: Testing an attachment based model of connections between texting behavior and sex among heterosexually active women. *Computers in Human Behavior, 128*, Article 107097. <https://doi.org/10.1016/j.chb.2021.107097>
- Van Ouytsel, Joris, Van Gool, Ellen, Walrave, Michel, Ponnet, Koen, Peeters, Emilie, et al. (2017). Sexting: adolescents' perceptions of the applications used for, motives for, and consequences of sexting. *Journal of Youth Studies, 20*(4), 446–470. <https://doi.org/10.1080/13676261.2016.1241865>
- Walker, S., Sancı, L., & Temple-Smith, M. (2013). Sexting: Young women's and men's views on its nature and origins. *Journal of Adolescent Health, 52*(6), 697–701. <https://doi.org/10.1016/j.jadohealth.2013.01.026>
- Weisskirch, R. S., & Delevi, R. (2011). "Sexting" and adult romantic attachment. *Computers in Human Behavior, 27*(5), 1697–1701. <https://doi.org/10.1016/j.chb.2011.02.008>
- Wolak, J., Finkelhor, D., & Mitchell, K. J. (2012). How often are teens arrested for sexting? Data from a national sample of police cases. *Pediatrics, 129*(1), 4–12. <https://doi.org/10.1542/peds.2011-2242>