



# Young Adults' Understanding of Sexual Competence: A Qualitative Study with German University Students

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## Abstract

**Introduction** Handling sexual interactions in a competent manner is a key skill for young adults, which is linked to positive aspects of sexual and general well-being. Several research conceptualizations of sexual competence have been proposed in the literature, but little is known about how young adults define sexual competence and what consequences they consider low sexual competence may have.

**Methods** In this qualitative study conducted in 2019, 571 university students (365 women, 206 men) from Germany with a mean age of 22.6 years provided open-ended answers to two questions: (Q1) What do you consider to be sexual competence? (Q2) What consequences can low sexual competence have? Combining thematic analysis and qualitative content analysis, responses were coded into 264 categories that were then condensed into 30 latent themes, with 14 themes referring to Q1 and 16 themes referring to Q2. All categories showed strong inter-coder agreement.

**Result** Participants defined sexual competence in a multi-faceted way and in partial overlap with research definitions. Gender differences emerged in four themes (needs/desires, communication, skills/abilities, and setting boundaries/limits). Participants' statements about the consequences of low sexual competence corresponded closely with their definitions of sexual competence. Gender differences emerged in five themes (risk of sexual victimization and sexual aggression, problems in sexual communication, problematic [sexual] risk behavior, negative influence on [sexual] satisfaction, and lack of skills).

**Conclusions and Policy Implications** The implications of the findings for research conceptualizations of sexual competence, for designing interventions to promote sexual competence, and for policy measures designed to reduce sexual aggression are discussed.

**Keywords** Sexual competence · Young adults · Germany · Qualitative study · Gender differences

Sexual competence, broadly defined as having the ability, skills, or knowledge to successfully engage in sexual interactions, is a key developmental challenge in adolescence and young adulthood (Hirst, 2008). High sexual competence is associated with a range of sexuality-related variables, such

as condom use, delayed sexual debut, and knowledge about one's personal sexual health (House et al., 2010; Seifen et al., 2022). It is also relevant to the promotion of responsible, consent-based sexual interactions and the reduction of the risk of sexual aggression perpetration and victimization (Schuster et al., 2022b). While several research conceptualizations of sexual competence have been proposed and empirically examined, as detailed below, young adults' subjective construction of sexual competence has received less research attention.

Most of the available evidence using a qualitative approach has explored young adults' understanding of consent, which is a facet of sexual competence (Baldwin-White, 2021; Graf & Johnson, 2021; Groggel et al., 2021; Hills et al., 2021). However, qualitative evidence of young adults' broader understanding of sexual competence is still limited. Investigating what young adults understand by sexual

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competence is relevant because this understanding may form the basis on which they evaluate the sexual behavior of partners, develop subjective norms about desirable behaviors, and shape their cognitive representations of sexual interactions in the form of sexual scripts that guide sexual behavior. Mapping out the key elements of young adults' understanding of sexual competence may provide important insights for educational interventions that seek to strengthen their competence in building positive sexual relations. It may help to identify problematic aspects, such as the underestimation of the need to obtain consent or the overestimation of peer acceptance of using coercive tactics for obtaining sex, which may need special attention in sex education programs. Finally, such an approach can help to validate and extend research definitions of sexual competence, contributing to theory building in the field of sexuality research. Therefore, the current study examined young people's conceptualizations of sexual competence as an important step toward understanding and increasing their healthy sexual development. Given the widely documented gender difference in terms of men as initiators and women as gatekeepers of sexual interactions (Hirsch et al., 2019; Jozkowski & Peterson, 2013), we place a special focus on the analysis of gender differences in the understanding of sexual competence.

## Research Conceptualizations of Sexual Competence

Labels and definitions of sexual competence vary across studies, but may be linked to a common core of facets. For example, Rosenthal et al. (1991) defined sexual competence by two aspects: sexual self-efficacy, defined as the ability to be in control of one's own behavior in sexual situations, and sexual self-esteem, defined as the feeling of being competent in asserting this control. Based on this conceptualization, research has examined both sexual self-esteem and sexual self-efficacy in relation to several sexuality-related outcomes, such as contraception use (e.g., Nelson et al., 2015), non-consensual condom removal (e.g., Boadle et al., 2020), or global well-being variables, such as happiness and general self-esteem (e.g., Horne & Zimmer-Gembeck, 2005).

Vanwesenbeeck et al. (1999) introduced the concept of *interactional competence*, defined as “a complex of communicative and social skills, capacities, sensitivities and mental and behavioral strategies that help people to arrange their heterosexual encounters in a mutually rewarding way” (p. 28), particularly regarding contraception use and sexual aggression. Subsequent research has referred to single components of interactional competence or/and its influencing factors (e.g., Boden & Horwood, 2006; de Graaf et al., 2010; Wamoyi et al., 2015). In terms of gender differences in the facets of interactional competence, women reported higher

levels of communicative skills and control in sexual interactions than did men, whereas men reported higher levels of sexual assertiveness and sexual self-esteem than did women (e.g., de Graaf et al., 2010).

Wellings et al. (2001) proposed a conceptualization of sexual competence that focused on the context and circumstances of first sexual intercourse and was defined by four aspects: no regret (the right time of first sexual intercourse), equal willingness of both partners, autonomy of the decision, and the use of a condom or other contraception methods. In a representative sample of participants aged 16–24 years, 55.8% of female participants and 45.7% of male participants were considered to lack sexual competence (i.e., they wished they had waited longer with first sexual intercourse, they used no reliable contraception, their partners were more willing than they were, or they were drunk or pressured). In a follow-up study by Palmer et al. (2017), low sexual competence at first sexual intercourse was associated among female participants with a higher likelihood of having a lifetime diagnosis of sexually transmitted infections (STIs), reporting lower sexual functioning (more distress and sexual problems), and having had an unwanted pregnancy and unwanted sexual contact in the past year. Among male participants, low sexual competence at first sexual intercourse was linked to a higher risk of testing positive for human papillomavirus at the time of the interview and lower sexual functioning in the past year.

Combining the concept of sexual competence proposed by Wellings et al. (2001) and the concept of interactional competence (Bakker & Vanwesenbeeck, 2006; Vanwesenbeeck et al., 1999), Grauvogl et al. (2015) developed a measure called Sexual Competence and Interaction Competence in Youth (SCICY), which comprises eight factors: communication about sex, refusing sex, positive sexual attitudes, beliefs about male role in sexual interactions, contraceptive use, not suppressing problems and desires regarding sex, sexual assertiveness, and sexual hedonism. Women with higher levels on a multi-faceted index of sexual functioning scored significantly higher on the total scale of the SCICY and on all components except sexual hedonism compared to women with lower levels of sexual functioning. Men were not included in this study.

Closely resembling the conceptualization of interactional competence, van de Bongardt and de Graaf (2020) proposed the term *socio-sexual competences*, which includes four main cognitive, affective, and behavioral aspects: sexual esteem, sexual assertiveness, sexual control, and sexual communication, tested with regard to steady vs. casual partners. The authors expected that young adults whose most recent sexual interaction was with a steady as opposed to a casual partner would report higher levels of socio-sexual competence than young adults with their most recent partner classified as casual. However, after controlling for the degree of being

in love as well as the type and frequency of sexual activity with the recent sexual partner, no differences in sexual esteem, sexual assertiveness, and sexual control between casual and romantic partners emerged. In terms of gender differences, male participants reported significantly higher levels of sexual esteem, whereas female participants reported significantly higher levels of control in sexual situations and sexual communication. No gender differences were found in sexual assertiveness.

Finally, the concept of *sexual agency* shows overlap with sexual competence. Definitions of sexual agency emphasize individuals' control over their own body (Cense, 2019). Recent definitions also include making informed and ethical choices for themselves and accepting responsibility for those choices. Qualitative evidence showed that developing the ability to negotiate consent was seen by young people as a critical component of sexual agency (Schobert et al., 2021).

In combination, several conclusions can be derived from the existing research conceptualizations of sexual competence. First, only a few conceptualizations that explicitly refer to sexual competence have been found in the large body of research on sexuality. Second, sexual competence is a broad and multidimensional construct overlapping with a range of established constructs, such as sexual self-esteem, sexual assertiveness, and sexual well-being. Third, all conceptualizations depict sexual competence as a combination of cognitive, emotional, and behavioral skills that are necessary to achieve positive outcomes or avoid risks related to sexual interactions. Fourth, most of the conceptualizations address the interactional or dyadic nature of sexual competence. And fifth, components of sexual competence may differ by gender, but there is a lack of consistent findings regarding the components that are similar or different across gender groups.

## The Current Study

The objective of the current study and its specific research questions originated from our research interests in predicting and preventing sexual aggression victimization and perpetration among university students (Krahé et al., 2021; Schuster et al., 2022a; Tomaszewska et al., 2022). Thus, the study was guided by the idea that strengthening sexual competence may prevent young adults from perpetrating sexual aggression and from making sexual experiences against their will.

Based on the research conceptualizations of sexual competence, we expected that young adults' definitions would, to some extent, reflect components identified in the literature, such as sexual self-esteem or self-efficacy, sexual assertiveness, control in sexual situations, sexual communication, sexual satisfaction, or protection against STIs and unwanted pregnancy. Although no consistent gender differences in

aspects of sexual competence have been found in the literature, we expected that women would refer more frequently to aspects related to being in control and self-protection in the context of sexual interactions, and men would focus more on asserting sexual needs and sexual satisfaction.

## Method

### Sample

The data for the present study were collected as part of the baseline assessment of an intervention study aimed to enhance participants' sexual competence so as to reduce sexual aggression victimization and perpetration (Schuster et al., 2022a). The intervention targeted sexuality-related cognitions (sexual scripts, sexual self-esteem, acceptance of sexual coercion) and behaviors (sexual assertiveness, risky sexual behavior, pornography use and perceived realism) established as risk factors for sexual aggression perpetration and vulnerability factors for sexual victimization. Those participants who were randomly assigned to the intervention group were asked open-ended questions about their understanding of sexual competence. After excluding 22 participants who did not provide any qualitative data, the final sample for the present analysis consisted of 571 university students (365 women, 206 men) with a mean age of 22.63 years ( $SD = 3.62$ , range: 18–35). Women were younger than men ( $M_{\text{women}} = 22.34$ ,  $SD = 3.35$ ;  $M_{\text{men}} = 23.13$ ,  $SD = 4.01$ ;  $t(562) = -2.51$ ,  $p = .012$ ). Most participants (91.4%) had German nationality. On average, they were in their fourth semester at university ( $M = 3.74$  semesters,  $SD = 3.32$ ). Most of the participants (90.3%) indicated that they were in a steady relationship or had been in one in the past, with no difference between female and male participants. The mean age of first sex was 16.78 years ( $SD = 2.09$ ), and the gender difference was not significant. In terms of sexual experience background, 70.6% of the participants reported exclusively opposite-sex contacts (women: 71.5%; men: 70.6%), 3.7% reported exclusively same-sex contacts (women: 1.4%; men: 7.8%), 20.0% reported both opposite- and same-sex contacts (women: 23.2%; men: 14.7%), 4.9% did not report any sexual contacts (women: 3.9%; men: 6.9%), and 0.9% did not answer the question. With respect to sexual orientation, 80.6% of participants self-identified as heterosexual (women: 84.6%; men: 81.9%), 10.0% self-identified as bisexual (women: 12.3%; men: 7.0%), 5.8% self-identified as homosexual (women: 3.1%; men: 11.1%), and 3.7% did not answer the question. Women reported fewer casual sexual partners ( $M = 5.46$ ,  $SD = 8.44$ ) than did men ( $M = 7.55$ ,  $SD = 11.70$ ;  $t(465) = -2.28$ ,  $p = .026$ ), but did not differ from men in the number of steady sexual

partners ( $M_{\text{women}} = 2.49$ ,  $SD = 2.03$ ;  $M_{\text{men}} = 2.37$ ,  $SD = 1.77$ ;  $t(504) = 0.67$ ,  $p = .504$ ).

## Instruments

### Sexual Competence

We developed two open-ended questions that were presented to the participants: “What do you consider to be sexual competence and how does sexual competence show itself?” (Q1) and “How does low sexual competence manifest and what consequences can low sexual competence have?” (Q2). They were asked to give free responses without any time or length restrictions.

### Demographic, Relationship, and Sexual Experience Information

Participants indicated their gender, age, nationality, academic subject, and number of semesters. They were also asked to indicate their sexual orientation; whether they were in a steady relationship or had been in one in the past; whether they ever had sexual contact with a man, a woman, or both; how old they were when they first had sex; and the number of steady and casual sexual partners.

## Procedure

The protocol and measures for the study were approved by the Ethics Committee of the University of Potsdam, Germany. Participants were recruited through the student offices or student associations of four institutions of higher education in the federal states of Brandenburg and Berlin in Germany. After introducing the purpose of the study, participants were asked to give informed consent on the first page of the questionnaire before they could proceed to the questions. The two open-ended questions listed above were presented after the baseline assessment of the target constructs of the intervention, prior to the presentation of the first intervention module. The term “sexual competence” did not feature in any of the measures preceding the open-ended questions. As participants completed the questionnaire online, they could do so at their own pace. Because the questionnaire was followed immediately by the first module of the intervention, we were unable to compute the average completion time for the questionnaire. Participants were informed that they could terminate the study at any point without giving a reason. Participants received a 25 Euro gift voucher. All materials were presented in German in an online format. Answers were also provided in German by all participants.

## Data Analysis

Responses were analyzed by using a multi-step procedure combining two established methods: thematic analysis and qualitative content analysis (Braun & Clarke, 2006; Mayring, 2000; Vaismoradi et al., 2013). Thematic analysis is based on a purely qualitative analytic process and collates codes into underlying (latent) themes based on all data relevant to the research question(s). Qualitative content analysis is based on both qualifying and quantifying data and uses the frequency of codes to find a theme. Combining these two methods allowed us, on the one hand, to address the comprehensiveness of the data as in thematic analysis and, on the other hand, to reduce its complexity as in qualitative content analysis, including the establishment of inter-rater agreement (Vaismoradi et al., 2013). All steps of coding and analyzing the data were conducted in MAXQDA Analytics Pro 20.1.1.

In the first step, the second author categorized all open-ended responses into units of meaning in line with the procedure of qualitative content analysis (Mayring, 2000; Vaismoradi & Snelgrove, 2019). This step resulted in 125 categories for Q1 and 139 categories for Q2. The list of categories is available in German from the authors on request. In the second step, all 264 categories were reviewed, sorted, and collated by the first author into underlying (latent) themes. This step is part of thematic analysis proposed by Braun and Clarke (2006). Latent themes represent units of meaning beyond participants’ semantic statements that are generated by interpretative work to extract the underlying ideas expressed in participants’ statements.

Based on a discussion among all authors, 30 themes were identified for the final codebook. Of these, 14 referred to Q1 about the definition of sexual competence, and the remaining 16 themes referred to Q2 about the manifestation and consequences of low sexual competence. To establish inter-rater reliability, two research assistants were trained in coding the original responses based on the 30 latent themes and coded a randomly selected sample of 15% of the qualitative material, following the guidelines of double-coding proposed by Mayring (2000). Cohen’s kappa was calculated with the inter-rater-agreement function in MAXQDA Analytics Pro 20.1.1., based on the coded segments of the two raters with a minimum overlap between the coded segments of 90%. After this first round of double-coding, the inter-rater reliability in terms of Cohen’s kappa was 0.62, indicating only a moderate agreement between the raters (McHugh, 2012). To improve inter-rater reliability, we identified codes with the highest rate of disagreement to discuss the differences between the coders and adjust the coding rules. Following these discussions, the material was coded again independently by the two raters. This iterative, non-linear process of analysis resulted in an improved Cohen’s kappa of 0.87, indicating strong inter-coder agreement (McHugh, 2012). In the final

step, one of the trained assistants coded the entire qualitative material based on the 30 themes.

## Results

Based on the 30 identified latent themes, the open-ended responses of 571 participants were coded into a total of 3017 coded units of meaning. Table 1 and Table 2 present frequencies for the themes that emerged from this analytic process. Gender differences in the frequencies of the extracted themes were examined via chi-square tests based on a comparison of proportions (MedCalc Software, 2022). Themes with frequencies greater than 5% (9 themes for Q1 and 12 themes for Q2) are discussed in detail below, starting with the most frequent one for each question and quoting characteristic examples for each theme from female and male participants. Further examples for each theme are presented in the Supplementary Material. Examples of

the themes mentioned with frequencies lower than 5% are presented in the lower parts of Table 1 and Table 2.

## Definition of Sexual Competence

### Awareness and Actualization of Needs/Desires

This was the theme with the highest frequency. Statements under this theme referred to two main aspects: (1) knowing and figuring out one's own and the partner's needs and wishes in sexual interactions, representing the cognitive level, and (2) expressing one's own needs and reacting to their partner's needs, representing the behavioral level. The theme was mentioned by 60.1% of the participants, with significantly higher frequencies for women than for men (63.6% vs. 53.9%). With regard to the first aspect, that is the understanding of one's own and the partner's sexual wishes, example codings for women included: "Sexual competence is...adapting to each other and figuring out together what

**Table 1** Themes for the definition of sexual competence (Q1)

Theme	Participants, % (n)	Women, % (n)	Men, % (n)	Chi-square, p
<i>Sexual competence means...</i>				
1. Awareness and actualization of needs/desires	60.1 (343)	<b>63.6 (232)</b>	<b>53.9 (111)</b>	$\chi^2=5.16$ , $p=.023$
2. Communication	46.8 (267)	<b>53.2 (194)</b>	<b>35.4 (73)</b>	$\chi^2=16.73$ , $p<.001$
3. Skills/abilities	42.7 (244)	<b>39.2 (143)</b>	<b>49.0 (101)</b>	$\chi^2=5.16$ , $p=.023$
4. Setting boundaries/limits	26.3 (150)	<b>32.9 (120)</b>	<b>14.6 (30)</b>	$\chi^2=22.71$ , $p<.001$
5. Treatment of the partner/oneself	23.6 (135)	21.6 (79)	27.2 (56)	$\chi^2=2.29$ , $p=.131$
6. Knowledge	18.7 (107)	19.2 (70)	18.0 (37)	$\chi^2=0.12$ , $p=.725$
7. Positive feelings/states	11.0 (63)	12.9 (47)	7.8 (16)	$\chi^2=3.48$ , $p=.062$
8. Gaining/having sexual experience	8.4 (48)	7.7 (28)	9.7 (20)	$\chi^2=0.68$ , $p=.409$
9. Sexual satisfaction	6.3 (36)	4.9 (18)	8.7 (18)	$\chi^2=3.23$ , $p=.072$
10. Openness	3.9 (22)	"Trying out different things—being open to new things" (#550, 21 years old)	"Be open to new experiences" (#365, 21 years old)	—
11. Consensual sex	3.2 (18)	"All sexual acts should take place only with clear consent of all parties involved" (#245, 22 years old)	"Basically, every sexual act must be consensual" (#283, 26 years old)	—
12. Missed the point/misunderstanding of the question	1.8 (10)	—	—	—
13. Self-confidence	1.1 (6)	"...a fundamentally confident approach to one's own sexuality toward the partner" (#170, 20 years old)	"Dealing confidently with sexual situations" (#386, 20 years old)	—
14. No definition/do not know	0.7 (4)	—	—	—

Significant gender differences in bold

**Table 2** Themes for the consequences of low sexual competence (Q2)

Theme	Participants, % (n)	Women, % (n)	Men, % (n)	Chi-square, <i>p</i>
1. Harm/losses regarding experiences/perception	39.9 (228)	38.4 (140)	42.7 (88)	$\chi^2 = 1.01$ , <i>p</i> = .314
2. Causing/activating negative feelings/emotions	38.5 (220)	40.8 (149)	34.5 (71)	$\chi^2 = 2.20$ , <i>p</i> = .138
3. Risk of sexual victimization and aggression	28.0 (160)	<b>31.8 (116)</b>	<b>21.4 (44)</b>	$\chi^2 = 7.05$ , <i>p</i> = .008
4. Problems in sexual communication	26.8 (153)	<b>30.4 (111)</b>	<b>20.4 (42)</b>	$\chi^2 = 6.70$ , <i>p</i> = .010
5. Problematic (sexual) risk behavior	23.1 (132)	<b>26.3 (96)</b>	<b>17.5 (36)</b>	$\chi^2 = 5.73$ , <i>p</i> = .017
6. No/poor sexual experiences	14.5 (83)	13.7 (50)	16.0 (33)	$\chi^2 = 0.56$ , <i>p</i> = .454
7. Negative influence on needs and desires	13.7 (78)	14.8 (54)	11.7 (24)	$\chi^2 = 1.07$ , <i>p</i> = .301
8. Negative influence on relationship/partner	12.6 (72)	11.2 (41)	15.0 (31)	$\chi^2 = 1.73$ , <i>p</i> = .189
9. Negative/disrespectful treatment of others	10.3 (59)	11.5 (42)	8.3 (17)	$\chi^2 = 1.45$ , <i>p</i> = .228
10. Negative influence on sexual satisfaction	10.0 (57)	<b>7.7 (28)</b>	<b>14.1 (29)</b>	$\chi^2 = 5.98$ , <i>p</i> = .015
11. Lack of skills	6.8 (39)	<b>4.9 (18)</b>	<b>10.2 (21)</b>	$\chi^2 = 5.82$ , <i>p</i> = .016
12. Negative influence on boundaries/limits	6.5 (37)	7.4 (27)	4.9 (10)	$\chi^2 = 1.35$ , <i>p</i> = .245
13. Diseases/physical consequences	4.7 (27)	“Unwanted pregnancy or infection with venereal diseases” (#87, 22 years old)	“Pregnancy, sexually transmitted diseases” (#159, 18 years old)	–
14. Consequences for knowledge/lack of knowledge	3.8 (22)	“...lack of knowledge and insecurity in dealing with these issues” (#497, 27 years old)	“Not knowing how to begin the sexual act and how to satisfy your partner” (#182, 20 years old)	–
15. Positive consequences of low sexual competence	2.1 (12)	“The person who has a low sexual competence, by limiting their counterpart, is strengthened in his/her self-esteem” (#445, 21 years old)	“To take care to initiate the partner [into the sexual activity]” (#474, 18 years old)	–
16. Exclusion/poor reputation	1.8 (10)	“Consequences regarding the perception of the partner or the person (whether one wants to sleep with the person again, whether one tells others how ‘good’ or ‘bad’ it was)” (#534, 21 years old)	“Bad ‘reputation’, people talk about experiences with you behind your back” (#162, 18 years old)	–

Significant gender differences in bold

you like” (#70, 21 years old) or “...recognize and satisfactorily meet one’s own sexual needs as well as those of one’s partner” (#584, 28 years old). Example codings for men included: “To know what you want yourself and what your partner wants” (#555, 19 years old) or “Being aware of one’s own needs and learning to assess and, as well as possible, understand those of one’s counterpart” (#334, 19 years old).

Examples for the second aspect, ways of expressing sexual needs and responding to the partner’s sexual wishes, included “Respectfully and sympathetically...” (#600, female, 27 years old) or “Sensitivity and empathy for the needs of others” (#411, male, 23 years old). Further, the issue of harmony and reciprocity in terms of satisfaction of sexual needs and wishes came up mostly in women’s statements, for example “To harmonize the partners’ wishes and satisfy them in sexual interactions if wanted by both” (#242, 22 years old). Some participants, mostly men, referred to the aspect of making compromises in terms of sexual needs, putting one’s own sexual needs aside, or not asserting one’s own needs, for example “To know and respect your own and your (potential) sex partner’s wishes and act accordingly in the spirit of compromise” (#438, 22 years old) and “...to put one’s own wishes partly behind and to be more responsive to the partner and to respect his or her wishes” (#299, 21 years old).

### Communication

The theme *communication* was mentioned by 46.8% of the participants, with significantly higher frequency for women than for men (53.2% vs. 35.4%). Statements under this theme referred to an open, direct, and clear communication in a sexual context, mostly in terms of one’s own sexual needs and wishes, for example “...to communicate one’s sexual needs in a timely and direct manner” (#499, female, 27 years old) or “Talking openly about sex” (#301, male, 24 years old). While open, direct, clear, and sensitive communication was defined as sexual competence by both gender groups, expressing that one does not want something in a sexual encounter was stated mostly by female participants, for example “... sexual competence is when you know exactly what you want and what you don’t want and communicate that” (#212, 24 years old).

### Skills and Abilities

Statements under this theme referred to a wide range of skills in terms of recognizing and interpreting sexual situations and reacting appropriately in such situations. It was mentioned by 42.7% of the participants, with men referring to this theme significantly more frequently than women did (49.0% vs. 39.2%). Example statements are: “To respond to the needs and feelings of one’s partner and to recognize/interpret his or her emotions correctly” (#524, male, 25 years old) and “To recognize when the partner feels uncomfortable and to make sure the partner feels comfortable all the time” (#520, female, 20 years

old). Some gender-specific contents emerged in participants’ statements in this category. For example, men referred to the ability of controlling and limiting themselves in sexual situations (“One has one’s own sexual drives under control” [#65, 18 years old]), and women referred to the ability to overcome or not feeling shame (“...overcoming shame and inferiority complexes” [#53, 26 years old]). Statements of both genders also referred to broader traits or qualities as a part of sexual competence, such as “Having self-confidence and freedom of choice in sexual situations” (#600, female, 27 years old), “Feeling confident while having sex” (#172, female, 20 years old), or “To have trust in oneself” (#1, male, 18 years old), but also just “Being good at sex...” (#310, female, 21 years old) or “That one is good in bed” (#555, male, 19 years old).

### Setting Boundaries/Limits

Statements under this theme referred to the expression, perception, and acknowledgement of one’s own and the partner’s boundaries and limits, and also to accepting and respecting a “no”. This theme was mentioned by 26.3% of participants, significantly more frequently by women than by men (32.9% vs. 14.6%). Example statements are: “Identify your own limits and perceive the limits of others” (#112, female, 29 years old), “A ‘no’ is to be accepted under all circumstances” (#278, female 28 years old), and “Recognize where your own boundaries and your partner’s boundaries are in sexual acts” (#100, male, 19 years old). While those aspects were equally represented in the responses of women and men, women mostly emphasized not to allow being persuaded to do something and stand by one’s own decision/word, for example “Not to be persuaded to do something and, if necessary, to change your mind and turn a ‘yes’ into a ‘no’” (#275, female, 32 years old).

### Treatment of the Partner/Oneself

This theme referred to the way in which sexually competent persons *treat/deal with their partner and themselves* in sexual situations. It was mentioned by 23.6% of participants, with no significant gender difference. Participants’ statements referred to a respectful, positive, coercion-free, and equal treating of the sexual partners, for example “... to respect him as a person and not to look at him only as an object of lust” (#394, female, 22 years old), “Taking responsibility for what has happened and seeing your partner as an equal person with her/his likes and dislikes” (#221, male, 26 years old), and of oneself, for example: “Standing by yourself and accepting yourself is very important” (#328, male, 18 years old), and “To remain true to yourself and not to allow to be pressured by the social environment” (#451, female, 20 years old).

## Knowledge

The theme *knowledge* was mentioned by 18.7% of participants, with no significant difference between women and men. Statements under this theme referred to being educated regarding the use of contraception, (prevention of) STIs, unwanted pregnancy, and other risks, for example “Be informed about dangers, diseases, and contraceptive options and to use them” (#44, female, 22 years old) and “Knowing about contraception and not requiring it only from the female part” (#424, male, 21 years old). Sexual competence also involves knowledge regarding one’s own and the partner’s body and sexual practices, for example “Profound knowledge about the female and male body” (#595, female, 25 years old) and “...factual and practical knowledge about sex and sexual situations” (#115, male, 20 years old). The aspect of knowing how to behave in sexual situations included, for example: “To know how to behave in (possible) sexual situations” (#361, male, 33 years old) and “To know how to behave properly in sexual situations without harming yourself or someone else” (#566, female, 23 years old). Finally, knowledge about sexual orientation and diversity emerged in participants’ statements, for example “To know about sexuality (sexual orientation...)” (#233, female, 22 years old) and “To be educated—knowledge about (the existence of) contraception, gender, anatomy, sexual orientation, sexual practices etc.” (#352, female, 22 years old).

## Positive Feelings/States

This theme was named by 11.0% of the participants, with no significant difference between women and men. Participants defined sexual competence as having and experiencing positive feelings and states during and after sexual encounters. Both gender groups described feelings and states, such as well-being, pleasure, being relaxed, and sexual enjoyment for themselves and their sexual partners, for example, men: “To let yourself go during sexual intercourse, to feel good and to make sure that your partner feels the same way” (#240, 32 years old), and women: “...to create a beautiful experience together” (#97, 23 years old). Although no gender difference emerged in terms of the frequency of codings of this theme, feelings of intimacy, happiness, or bonding were only stated by women, for example “...to form such a bond with someone and to be happy at the end because it was a beautiful experience for both parties” (#196, 20 years old).

## Gaining/Having Sexual Experience

Being and becoming sexually experienced as a defining feature of sexual competence was mentioned by 8.4% of the participants, with no significant difference between

women and men. Codings for both gender groups included, for example: “By sexual competence I understand that one has already gained certain experiences” (#458, female, 18 years old) and “It can show itself in the fact that one has a lot of experience. For example, by mastering many positions...” (#78, male, 21 years old).

## Sexual Satisfaction

Finally, the theme of *sexual satisfaction* was mentioned by 6.3% of the participants, again with no significant difference between women and men. Under this theme, participants referred to sexual satisfaction for themselves and their partners as a part of sexual competence, for example “To work together to achieve satisfaction of sexual desire (of both). This does not necessarily have to include orgasm” (#125, male, 25 years old) and “And you manage to satisfy both yourself and your partner” (#128, female, 19 years old).

Five further themes that were mentioned by fewer than 5% of the participants were openness, consensual sex, answers that missed the point/misunderstood the question, self-confidence, and no definition/do not know. Frequencies and examples for these themes are presented in the lower part of Table 1.

## Consequences of Low Sexual Competence

### Harm/Losses Regarding Experiences/Perception

As shown in Table 2, this theme was coded from responses of 39.9% of the participants, with no significant difference between women and men. Statements of both gender groups under this theme referred to having or experiencing some harm or loss in a sexual encounter because of low sexual competence, for example in terms of the self-concept, such as “Lowered self-confidence/self-esteem” (#74, male, 20 years old) and “...low self-esteem or poor image of one’s own body” (#61, female, 23 years old). Low sexual competence was also seen as having a negative impact on sexual experiences and performance (e.g., “You never come, you do not enjoy sex” [#480, male, 27 years old], “That you don’t have ‘real’ fun during sexual intercourse and instead you just follow the sexual preferences of the other person” [#331, female, 21 years old]). Low sexual competence may further have a negative impact on mental health, mostly because of unwanted or unpleasant experiences, or it may cause harm or injury, as stated by both genders, for example “...sexual trauma, psychological stress” (#457, male, 30 years old) and “Bad sexual experiences which can have negative psychological impact” (#390, female, 26 years old).



### Causing/Activating Negative Feelings/Emotions

This theme was mentioned by 38.5% of the participants, with no significant difference between women and men. Low sexual competence may cause or activate a wide range of negative feelings, as stated by both gender groups, for example “Uncertainty” (#352, female, 22 years old), “... anger, sadness, fear, inferiority” (#235, male, 28 years old), “Shyness” (#477, male, 24 years old), “Frustration, intimidation” (#118, female, 26 years old), or “Dissatisfaction” (#90, female, 21 years old). Although no gender differences regarding the frequency of codings were found, some gender-specific emotions emerged in participants’ responses. Examples for men included: “...fear of failure” (#428, 20 years old), “...pressure and fear, possibly disappointment” (#69, 26 years old), or “Disappointments due to too high expectations...” (#353, 22 years old). Examples for women included: “Shame, disgust with oneself, fear of sexuality” (#380, 22 years old) or “...feelings of shame or regret” (#228, 20 years old).

### Risk of Sexual Victimization and Sexual Aggression

This theme was coded for 28.0% of the participants, with significantly more codes for women than for men (31.8% vs. 21.4%). Statements under this theme referred to experiencing and engaging in sexually aggressive behaviors because of low sexual competence. Some women and men referred directly to sexual aggression, such as that low sexual competence may manifest itself in “Rape” (#354, male, 27 years old) or “Sexual harassment” (#346, female, 34 years old). Other statements, mostly made by women, referred to situations in which someone is made/persuaded to do something against their will because of their low sexual competence, for example “Being persuaded even though you don’t want to” (#44, 22 years old) and “Sexual intercourse against one’s will” (#319, 21 years old).

### Problems in Sexual Communication

This theme was mentioned by 26.8% of the participants, with significantly more codes for women than for men (30.4% vs. 20.4%). Low sexual competence may lead to misinterpreting and misunderstanding the partner or to ambiguous communication of sexual interest, for example “Difficulties to interpret the signals of others correctly” (#489, female, 21 years old) and “A great ambiguity in communication between partners” (#249, male, 21 years old). It also means no or limited communication regarding one’s own needs, desires, or other important aspects in sexual situations, such as “...low sexual competence is expressed by a lack of communication during sex as well as the relativization of one’s own needs” (#63, male, 24 years old) and “By not daring to

‘ask’ for sex, that is, not making the first step as a woman and to express own sexual needs” (#509, female, 27 years old). Additionally, failure to communicate not only sexual needs but also sexual boundaries was found in statements of women, for example “When sexual competence is low, one’s own sexual preferences and boundaries are not known or are not communicated (verbally or physically)...” (#532, 30 years old). Low sexual competence also means that there is generally poor or no communication, for example “No communication” (#4, female, 19 years old) and “Difficulties in communication” (#552, male, 22 years old).

### Problematic (Sexual) Risk Behavior

This theme referred to numerous aspects of negative or problematic behaviors or actions in sexual situations because of low sexual competence. It was mentioned by 23.1% of the participants, again with significantly more codes for women than for men (26.3% vs. 17.5%). Women’s statements referred to problems arising from low sexual competence in casual sexual contacts, for example “A lot of sex with strangers or changing partners” (#486, 22 years old). Both gender groups stated that low sexual competence also means having sex but not wanting it, not being ready for it, or regretting it, for example “...a willingness/readiness to experience/perform sexual situations that one perceives as uncomfortable or even humiliating” (#43, male, 20 years old) and “Going further than you actually want to go” (#329, female, 21 years old). In some responses, low sexual competence was linked to the risk of substance abuse, such as drugs or alcohol, for example “If you generally use a lot of drugs or alcohol to have sex” (#57, female, 26 years old) and “In addition, acts of frustration, such as alcohol consumption” (#235, male, 28 years old). Also, risky or unsafe sex was described by both gender groups as a consequence of low sexual competence, for example “Readiness to engage in less healthy sexual contact” (#49, female, 23 years old) and “Not choosing the right contraception, in the worst case not using contraception” (#480, male, 27 years old).

### No/Poor Sexual Experiences

This theme was coded for 14.5% of the participants, with no significant difference between women and men. Statements under this theme referred to having no, poor, or less sexual contact, and having less sexual experience, or not having the opportunity to try something out because of low sexual competence. Example codings are as follows: “Bad sex; fewer people want to sleep with the person” (#472, female, 18 years old) and “Having little experience with sexual contacts” (#461, male, 20 years old).

### Negative Influence on Needs and Desires

This theme was mentioned by 13.7% of the participants, with no significant gender difference. Statements referred to not recognizing, not knowing, not noticing, and not fulfilling one's own and the partner's needs and desires because of low sexual competence, for example "Not recognizing the needs of myself and my partner" (#461, male, 20 years old) and "When you have low sexual competence, you often do not know what you want" (#525, female, 19 years old).

### Negative Influence on Relationship and Partner

Statements under this theme referred to conflicts and difficulties in relationships, having no or less chance of a relationship, or having difficulties in finding a partner, having arguments with the partner, separation, or losing trust of the partner because of low sexual competence. The theme was mentioned by 12.6% of participants, with no significant difference between women and men. Example codings are: "It manifests itself through an unsatisfied partnership and can lead to a breakup if the sexual needs are not satisfied, as this is part of a relationship" (#166, female, 18 years old) and "...this would cause them to avoid trying to get in to serious relationships because, they will always feel that they cannot satisfy their partners or they are not good enough, and this thought would be very depressing!" (#140, male, 29 years old).

### Negative/Disrespectful Treatment of Others

This aspect of low sexual competence was mentioned by 10.3% of the sample, again with no significant difference between women and men. Statements under this theme referred to a lack of respect for the (sexual) partner, his or her objectification, recklessness and condemnation of the partner, abuse of power, prioritizing one's own needs, and hurting others, for example "Low sexual competence manifests itself through selfish behavior, that is, not listening to the body of the other person" (#482, female, 22 years old) and "When a person only pays attention to him- or herself during sex" (#466, male, 22 years old).

### Negative Influence on Sexual Satisfaction

This theme was mentioned by 10.0% of the participants, with men referring to it significantly more often than women did (14.1% vs. 7.7%). Statements under this theme referred to not having an orgasm, not being sexually satisfied, or not satisfying the partner because of low sexual competence, for example "One experiences no or too little sexual fulfillment" (#229, male, 28 years old) and "No orgasm, pleasure, sexual arousal" (#271, female, 19 years old).

### Lack of Skills

Statements under this theme referred to different aspects of inabilities in sexual encounters because of low sexual competence. It was mentioned by 6.8% of the participants, with a higher frequency for men (10.2%) than women (4.9%). Both gender groups referred to the inability of interpreting or assessing sexual situation, for example "Incorrect assessment of the situation" (#554, male, 18 years old) or being passive in sexual situations ("Passive behavior" [#298, female, 24 years old]). However, only men referred to deficits in control in the sexual context, for example "One is not in control of one's own sexual drives" (#71, 18 years old), and only women referred to being unable to respond to the partner, for example "Not respond to the partner" (#158, 18 years old).

### Negative Influence on Boundaries/Limits

This final theme was mentioned by 6.5% of the participants, with no significant difference between women and men. Statements under this theme referred to not respecting, not accepting, or ignoring one's own or the partner's limits and boundaries in sexual situations because of low sexual competence, for example "...you might be more inclined to go beyond your own boundaries" (#569, male, 20 years old) and "Unwanted crossing of boundaries (the partner's and one's own)" (#93, female, 23 years old).

Four further themes that were mentioned by fewer than 5% of the participants were diseases/physical consequences, consequences for knowledge/lack of knowledge, positive consequences of low sexual competence, and exclusion/poor reputation. Frequencies and example of codings are shown at the end of Table 2.

## Discussion

This study aimed at exploring young women's and men's understanding of sexual competence as a key skill for engaging in satisfying and responsible sexual interactions. Using two open-ended questions, participants were asked to describe what they considered to be sexual competence and what consequences low sexual competence can have. Based on a rich body of responses, a total of 30 themes were extracted, with 14 themes referring to the definition of sexual competence and 16 themes referring to the consequences of low sexual competence. A special focus of the analysis was on gender differences in the respective themes.

### Definition of Sexual Competence

The substantial number of themes extracted from participants' responses corresponded with the broadness and

multidimensionality of the research conceptualizations proposed in the literature. Considering themes with frequencies greater than 5%, young adults defined sexual competence in a multi-faceted way: as knowing and figuring out one's own and the partner's needs and wishes; as a clear, direct, and open communication of needs and wishes; as having skills for appropriately interpreting and reacting in sexual situations; as expressing and accepting one's own and the partner's boundaries and limits in sexual situations; as a respectful, coercion-free, and equal treating of the sexual partners; as having knowledge regarding contraception, STIs, unwanted pregnancy, other risks, and about one's own and the partner's body; as having positive feelings during and after sexual encounters; as having and gaining sexual experiences; and as sexually satisfying oneself and the partner. Together, these facets of the subjective definition of sexual competence map on to the research conceptualizations including sexual self-esteem, sexual assertiveness, sexual control, sexual communication, positive sexual attitudes, sexual hedonism, STI protection, and unwanted pregnancy (Grauvogl et al., 2015; Palmer et al., 2017; Rosenthal et al., 1991; van de Bongardt & de Graaf, 2020; Vanwesenbeeck et al., 1999; Wellings et al., 2001). A new aspect that was not well covered by the research conceptualizations emerged regarding the respectful, positive, coercion-free, and equal treating of the partners. However, this might be implicitly included in the interactional and dyadic nature of sexual competence as part of the research conceptualizations.

### Gender Differences

Significant gender differences in the definition of sexual competence emerged in four themes. Women referred to needs/desires, communication, and setting boundaries/limits more frequently than did men, and men referred to having (certain) skills/abilities more frequently than did women. Regarding the gender difference in needs/desires, defined as knowing and figuring out one's own and the partner's needs and wishes, previous empirical research on this component of sexual competence provided mixed results. While Rosenthal et al. (1991) and de Graaf et al. (2010) found higher levels of sexual initiation assertiveness in men than in women, van de Bongardt and de Graaf (2020) did not find a gender difference in sexual assertiveness. The gender difference found in the present study suggests that this component of sexual competence may be more important and desirable for women than for men because, traditionally, women are expected to be more passive in sexual interactions and not to assert their sexual needs (Eaton & Rose, 2011; Gamble, 2019; Jozkowski & Peterson, 2013; Kim et al., 2007; Sakaluk et al., 2014). Further, in this theme, women stressed the harmony and reciprocity in satisfying sexual needs and wishes of both partners, while men stressed

the issue of making compromises and not asserting one's own sexual needs. While seeking for harmony is a stereotypical female trait, recent evidence suggests that young women also actively initiate sex (Timmermans & van den Bulck, 2018) and may report even higher levels of sexual initiation assertiveness than men do (Gil-Llario et al., 2022). Complementary to that, not asserting one's own sexual needs seems to be a desirable quality for men, challenging the traditional view of the male role as the initiator of sexual interactions (e.g., Gamble, 2019; Kim et al., 2007).

Furthermore, women referred more frequently to the theme of communication and setting boundaries/limits than did men. Specifically, expressing and acknowledging one's own and the partner's boundaries and accepting a "no" from a partner as a component of sexual competence was highlighted more often by women. These gender differences regarding communication in general and expression/acceptance of boundaries in particular are largely consistent with the gender differences found in research conceptualizations of sexual competence (de Graaf et al., 2010; Rosenthal et al., 1991; van de Bongardt & de Graaf, 2020).

Women also stressed that they should stand by what they decided and not be persuaded to do something they do not want. This also corresponds with the higher levels of sexual control, defined as the ability of regulating sexual interactions, for example through expressing one's own dislikes or limits or refusing unwanted sexual contacts in women compared to men that was demonstrated in previous research conceptualizations (de Graaf et al., 2010; van de Bongardt & de Graaf, 2020). However, the recent literature on communicating sexual consent demonstrated that women still use verbal cues to communicate their consent less frequently than men do (Willis et al., 2019).

Having specific skills and abilities in terms of recognizing, interpreting, and handling sexual situations was mentioned as a part of sexual competence more often by men than by women. This is largely consistent with the initiating role of men contained in the heterosexual script (e.g., Eaton & Rose, 2011; Jozkowski & Peterson, 2013). However, in this theme, men stressed the ability of controlling and limiting themselves in sexual situations (compatible with not asserting one's own sexual needs), and women stressed the ability to overcome or not feeling shame and to assess risk in sexual interactions. This suggests, again, that not behaving according to the traditional heterosexual script is a part of both women's and men's mental representation of sexual competence.

### Consequences of Low Sexual Competence

Statements about the consequences of low sexual competence corresponded closely with participants' definitions of sexual competence, for example having problems in sexual

communication or facing the risk of sexual aggression perpetration and vulnerability to sexual victimization. The consequences were also consistent with the empirical evidence showing that deficits in components of sexual competence (e.g., sexual assertiveness) are associated with negative sexual experiences, such as sexual victimization (e.g., see Espinosa-Hernández & Vasilenko, 2021, for an overview).

### Gender Differences

Gender differences regarding the consequences of low sexual competence emerged in five themes. Women referred to the vulnerability to sexual victimization, problems in sexual communication, and problematic (sexual) risk behavior more frequently than men did, and men referred to the negative influence of low sexual competence on (sexual) satisfaction and lack of skills more frequently than women did. As prevalence rates of sexual victimization are higher for women than for men (see Krahé, 2021, for an overview), this negative consequence may be more salient for women than for men. Further, consistent with the gender difference in sexual communication and setting boundaries/limits as a part of sexual competence definitions reported above, problems in sexual communication, such as misunderstanding the partner, ambiguous communication of sexual intentions, or limited/poor/no communication of one's own needs or sexual boundaries, seemed to be more salient for women than for men. In line with this finding, previous research demonstrated the relevance of sexual communication for both gender groups, but the effect sizes in the association between sexual communication and sexual desire and orgasm were higher for women compared to men (see Mallory et al., 2019, for a meta-analysis). Furthermore, sexual refusal assertiveness was predominantly studied in female samples (see López Alvarado et al., 2020, for a review), suggesting that communicating sexual limits is primarily a female theme, which corresponds with the traditional heterosexual scripts (e.g., Jozkowski & Peterson, 2013).

Next, the result that women mentioned problematic (sexual) risk behavior more frequently than men did, particularly regarding potential problems arising in casual sexual contacts, is consistent with the empirical evidence on women's concerns about hook-up experiences or vulnerability to sexual victimization (Sutton et al., 2021; Townsend & Wasserman, 2011). Men referred more frequently than women did to the negative influence of low sexual competence on (sexual) satisfaction and the lack of skills. While concerns about not being sexually satisfied as a man conform to the traditional male role, a closer look at participants' responses revealed that men were also concerned about not satisfying their partner(s) sexually, indicating their wish to achieve mutual pleasure. And, in terms of a lack of skills, men stressed the issue of deficits

in control in sexual interaction, which is complementary to men's definition that a sexually competent man should not push/assert his own sexual needs (only). This is consistent with evidence documenting increasing equality between men and women in sexual relations (see Petersen & Hyde, 2010, for a meta-analysis).

In sum, three main conclusions can be derived from the results of the present study. First, the wide range of themes generated for the definition of sexual competence and consequences of low sexual competence maps on to existing research conceptualizations. They reflect high levels of knowledge about how to think, feel, and behave in a sexually competent manner. Second, a substantial number of themes did not differ between the genders, indicating similar mental representations by women and men of what can be considered sexually competent and what consequences low sexual competence may have. Third, gender differences found in the present study are consistent with those from the research conceptualizations of sexual competence, for example regarding setting boundaries (saying "no"), sexual communication, or control in sexual situations. However, no clear support was found for the assumption that women would more frequently refer to aspects related to self-protection in the context of sexual interactions and that men would focus more on asserting sexual needs and sexual satisfaction. With respect to asserting one's own sexual needs, a reverse pattern was found, suggesting that not adhering to the traditional heterosexual script is a desirable component of sexual competence for women and men.

### Novel Aspects of the Study and Implications for Intervention and Policy-Making

While extracting completely novel themes which were not represented in the previous research conceptualizations is difficult because the research definitions are very broad (van de Bongardt & de Graaf, 2020; Vanwesenbeeck et al., 1999), we believe that the qualitative analysis provided at least three novel insights for future educational programs strengthening young women's and men's competence in building positive sexual relations. First, it can be assumed that the most frequent themes mentioned by the participants (i.e., awareness and actualization of needs/desires, communication, skills/abilities, setting boundaries/limits, treatment of the partner/oneself, knowledge) present the *core* components of young adults' understanding of sexual competence, reflecting their motivation to gain more competence in these components. This corresponds with a recent framework for youth sexual well-being that recommends promoting a positive approach to sexuality and moving beyond prevention programs addressing predominantly condom use and STIs (Kågesten & van Reeuwijk, 2021). While some

recent intervention programs focused on teaching life skills, for example (sexual) assertiveness (Lee & Da Lee, 2019; Widman et al., 2017), they predominantly addressed safer sex practices, such as condom use. Hence, future educational programs should promote positive aspects of young women's and men's sexuality, such as communicating their sexual needs or gaining skills to interpret sexual situations. As many young people have their first sexual experiences between 14 and 15 years (Scharmanski & Hessling, 2021), addressing positive aspects of sexuality should be supported by appropriate policy measures, such as including them in sex education curricula in schools.

Second, in terms of the consequences of low sexual competence, the most frequent themes (i.e., harm/loses regarding experiences/perception, causing/activating negative feelings/emotions, risk of sexual victimization and aggression, problems in sexual communication, problematic (sexual) risk behavior) suggest that these are the consequences about which young people are most concerned. This highlights potential fears in sexual contexts that should be addressed in sexuality education. The finding is encouraging with regard to the motivational readiness for participating in rape prevention initiatives offered on college campuses.

Third, a novel aspect was provided by the analysis of gender differences, implying that overcoming or reducing gender stereotypes and still existing sexual double standards (see Endendijk et al., 2020, for a meta-analysis) could also be an important issue in sexual education or intervention programs enhancing young people's sexual competence. Previous research demonstrated that overcoming traditional sex roles may contribute to young people's sexual well-being (Casique, 2019). Furthermore, researchers have recently called for gender-transformatory approaches to sexual education including (female) sexual agency (see Vanwesenbeeck et al., 2021, for a critical overview on sexual agency). Previous research also demonstrated that sexual-health interventions that addressed the issue of gender and power were more effective than interventions that did not include these issues (see Haberland, 2015, for a review).

## Limitations

While this study validates research conceptualizations of sexual competence and provides novel aspects for intervention efforts in a sample of university students, it is not without limitations. First, this study included only female and male participants, not considering other gender groups. However, female and male participants with various sexual identities and sexual experience backgrounds were included in this study to achieve diversity in the mental representation of sexual competence. LGBTQI+ individuals may differ in their understanding of sexual competence from heterosexual individuals, as suggested by a small-scale qualitative study by Schobert et al.

(2021). To identify differences and overlap, future research should study the understanding of sexual competence in larger samples of sexual-minority participants. Second, participants were a convenience sample rather than a representative sample drawn from the student population in Germany. Third, participants represented the upper end of the formal education spectrum, so the extent to which their understanding of sexual competence may be shared by young adults without university training remains to be examined in future research.

## Conclusion

This study has shown that young adults critically engage with the concept of sexual competence and are able to provide complex and sophisticated thoughts about its key components, with both overlap and differences between women and men. Participants also showed a clear understanding of the potential negative consequences of low sexual competence. This critical awareness provides a basis for interventions designed to promote young adults' ability to engage in satisfying and mutually respectful sexual interactions as an important aspect of sexual and general well-being.

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## Declarations

**Ethics Approval and Consent to Participate** The study was approved by the Ethics Committee of the University of Potsdam, Germany (protocol code 13/2017, 26/07/2017). Informed consent was obtained from all participants.

**Competing Interests** The authors declare no competing interests.

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