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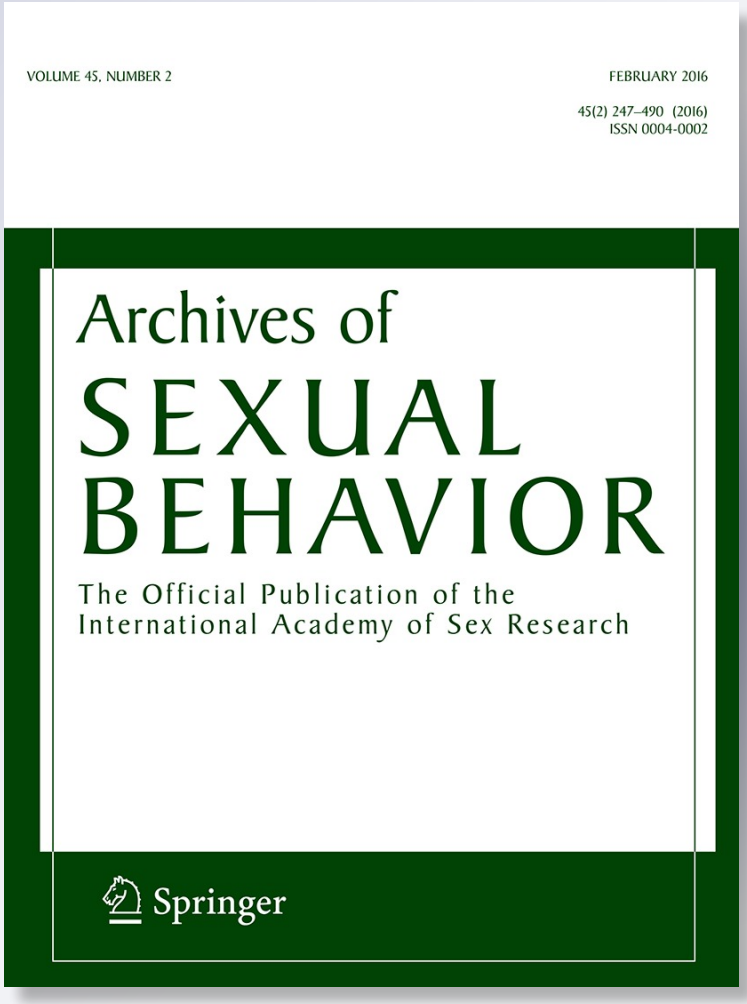

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ORIGINAL PAPER

Associations of Sexual Subjectivity with Global and Sexual Well-Being: A New Measure for Young Males and Comparison to Females

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Abstract Sexual subjectivity refers to multiple aspects of sexual self-perceptions, including sexual body-esteem, perceptions of efficacy and entitlement to sexual desire and pleasure, and sexual self-reflection (Horne & Zimmer-Gembeck, 2006). Previous research on sexual subjectivity has shown that it is elevated in young women who report better global well-being and have more sexual experience. However, research has not focused on young men. Thus, two studies were conducted to develop a new measure to assess young men's sexual subjectivity (Study 1, $N = 304$ men) and to examine associations of sexual subjectivity with general and sexual well-being among young men and women (Study 2, $N =$ 208 men and 214 women). In Study 1, five elements of men's sexual subjectivity were found, which paralleled the elements found in previous research with young women. In Study 2, sexual subjectivity, especially two elements of sexual body-esteem and self-efficacy in achieving pleasure, was significantly associated with enhanced global and sexual well-being in both men and women. Gender did not moderate these associations, supporting sexual subjectivity as an aspect of sexual health in all young adults. As anticipated, men reported greater entitlement to self-pleasure and self-efficacy in achieving pleasure, but women reported greater entitlement to pleasure with partners. Women's feelings of less efficacy but more entitlement to pleasure with partners suggest that feelings of entitlement may not be consistent with their experiences. Future research with young men and women will be important for understanding sexual health and development during late adolescence and early adulthood.

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Introduction

Although important throughout the lifespan, sexuality and sexual health are very salient during adolescence and early adulthood (Impett & Tolman, 2006; O'Sullivan & Majerovich, 2008; Savin-Williams & Diamond, 2004). At this time of life, young people experience numerous biological, social, and cognitive changes that guide and shape their romantic interests, sexuality, and sexual behavior (Collins, Welsh, & Furman, 2009; Zimmer-Gembeck & Helfand, 2008). This can include sexual risk-taking behavior and challenges with rational decision-making in situations that evoke strong emotions (Diamond, 2006; Rosenthal & Smith, 1997; Steinberg et al., 2006; Zimmer-Gembeck, Ducat, & Collins, 2011b). Moreover, romantic and sexual experiences during these years of life can play important roles in the overall quality of the transition from childhood to adulthood (Chilman, 1990; Collins et al., 2009; Collins & van Dulmen, 2006; Vrangalova & Savin-Williams, 2010; Zimmer-Gembeck, 2002). Taken together, the rapid progress of sexual and related developmental changes during adolescence and young adulthood makes it important to define sexual health at this time of life in order to eventually identify strategies that can be implemented to promote and optimize it.

Theory and research has been making substantial advances towards the conceptualization of sexual health and a research agenda focused on positive sexual development (Diamond, 2006; Haffner, 1998; Halpern, 2006). Most of these models of sexual health focus on health protective behaviors, but all recognize the importance of self-esteem, self-efficacy, sexual expectations, and supportive interpersonal relationships (e.g., Hensel, Fortenberry, O'Sullivan, & Orr, 2011; Tolman & McClelland, 2011;

Tolman, Striepe, & Harmon, 2003; Zimmer-Gembeck, Ducat, & Boislard-Pepin, 2011a). For example, understanding the onset and progress of sexual behavior continue to be important to a comprehensive understanding of sexual development, but it is also recognized that maintaining an exclusive focus on behavior does not provide information that is required to promote healthy sexual development (Gavin, Catalan, David-Ferdon, Gloppen, & Markham, 2010). In fact, researchers have concluded that sex education focusing on sexual risk-taking behavior alone has short-term, moderate effects on reducing adolescent sexual risk behavior, but does little to promote positive sexual development (Mullen, Ramirex, & Strouse, 2002).

In the two studies reported here, the purpose was to address the psychological aspects of young adult sexuality through further exploration of the concept of *sexual subjectivity*. Sexual subjectivity is not a new concept but only has been a focus of quantitative research in recent years (e.g., Zimmer-Gembeck et al., 2011a) following theoretical development (Horne & Zimmer-Gembeck, 2006; Tolman, 2002) and qualitative research (e.g., Martin, 1996). For example, Martin defined sexual subjectivity as "the pleasure we get from our bodies and the experiences of living in a body" (p. 10), as well as describing sexual subjectivity as referring to being the subject rather than the object of sexual desire. Martin conducted qualitative research to describe what it meant to be sexually subjective in adolescence and theoretical models have been developed in which young women's sexual subjectivity was defined as an entitlement to sexual pleasure and sexual safety (Tolman, 2002, 2012). Thus, sexual subjectivity could be most simply defined as young people's understanding of themselves as sexual beings.

In past theory and qualitative research, sexual subjectivity has been used to refer to more than cognitive views of the sexual self and the idea shares much conceptual overlap with work on the sexual self-concept (Anderson & Cryanowski, 1994; O'Sullivan, Meyer-Bahlburg, & McKeague, 2006). Further, both sexual subjectivity and sexual self-concept have been described as multidimensional constructs. For example, Hensel et al. (2011) theorized that there are three dimensions of sexual self-concept: sexual openness, sexual esteem, and sexual anxiety. These dimensions were linked to female adolescent sexual behavior, with more experience significantly associated with greater sexual openness and esteem and less sexual anxiety. Similarly, sexual subjectivity has been defined as multidimensional, encompassing cognitive and emotional "elements" related to the sexual self (Horne & Zimmer-Gembeck, 2006). These elements have included (1) perceptions of sexual body-esteem, (2) feelings of entitlement to sexual desire and pleasure, and (3) sexual self-reflection. Similar to the findings for sexual self-concept, both cross-sectional (Horne & Zimmer-Gembeck, 2005) and longitudinal (Zimmer-Gembeck et al., 2011a) research studies have found that young women with earlier onset and a greater variety of sexual experiences have higher concurrent sexual subjectivity, as well as increasing sexual subjectivity over time. Also, those higher in sexual subjectivity are concurrently higher in global well-being, such as self-esteem, life satisfaction, and identity achievement (Horne & Zimmer-Gembeck, 2005, 2006). Overall, the development of sexual subjectivity and the sexual self-concept can be important tasks of adolescence and early adulthood (Cyranowski & Anderson, 1998; Zimmer-Gembeck et al., 2011a). It has been argued that their development is necessary for understanding, organizing, and directing future positive intimate and sexual relationships (Anderson & Cryanowski, 1994; Hensel et al., 2011; O'Sullivan et al., 2006).

These studies of sexual subjectivity and self-concept represent significant progress toward an understanding of how young women view their sexual selves. Nevertheless, research has more rarely focused on young men. To begin to address this gap, there were four aims of the two studies reported here. The first aim was to develop a new measure that could be used to reliably assess sexual subjectivity in young men. Using this new measure, a second aim was to examine whether men's sexual subjectivity was significantly associated with the same measures of general well-being (self-esteem, life satisfaction, and identity achievement) that were significantly associated with women's sexual subjectivity in previous research (Horne & Zimmer-Gembeck, 2005, 2006). It was expected that, as found for young women, men's sexual subjectivity would be significantly associated with greater self-esteem, life satisfaction, and identity formation.

The third aim was to investigate whether sexual subjectivity was significantly associated with greater sexual well-being, including more sexual esteem and fewer feelings of disappointment and sadness about the sexual aspects of life (*sexual depression*), among both men and women. In addition, condom use self-efficacy was examined given that it has been identified as one aspect of intended actions linked to health protective behaviors (Baele, Dusseldorp, & Maes, 2001; van Empelen & Kok, 2008). Hence, we included condom use self-efficacy as an additional aspect of sexual well-being and expected that sexual subjectivity would be significantly associated with more efficacy regarding condom use and associated behaviors (e.g., purchasing and carrying condoms).

Finally, the fourth aim was to compare sexual subjectivity between men and women. We expected gender differences in sexual subjectivity, given the evidence that there are differences in timing of sexual development (Michaud, Suris, & Deppen, 2006), sexual beliefs and practices (Carvajal et al., 1999; DeGaston, Weed, & Jensen, 1996; Forste & Hass, 2002; Hiller, 2005; Hyde & Oliver, 2000; Peterson & Shibley-Hyde, 2010), motivations for relationships and sexual behavior (Moore & Rosenthal, 1992; Rose & Rudolph, 2006), and cultural and social practices related to sex and relationships (Horne & Zimmer-Gembeck, 2006; Peterson & Shibley-Hyde, 2010; Tolman, 2002). In the current study, men were expected to have higher sexual self-esteem and feel more entitled to pleasure. We did not anticipate a gender difference in sexual self-reflection given that all late adolescents and young adults would be fairly new to sexual

behavior and reflection may be important for understanding novel experiences regardless of gender (Zimmer-Gembeck et al., 2011a).

Study 1

Method

Participants

Following a pilot study to develop new items to assess young men's sexual subjectivity (see below), 304 Australian men between the ages of 17 and 25 years ($M = 21.0$, $SD = 2.34$) completed questionnaires. Overall, 88 % of participants were Australian/white/Caucasian, 94 % described themselves as heterosexual, 78 % were full time students, 95 % had completed Year 12 level education or higher, 48 % lived with their parents and 65 % had biological parents who were married. Overall, 88 % (n = 268) reported a history of sexual intercourse and another 6 % reported a history of oral sex but no vaginal intercourse. Thirty-six other individuals exited the online survey before completion (e.g., after demographic and introductory questions) and were not included in the sample. Four participants had some random missing data (e.g., one to three items). These participants were maintained in the study by forming scores after mean substitution was used to replace missing items.

Measures

Men's Sexual Subjectivity To develop the Male Sexual Subjectivity Inventory (MSSI), 15 new items were added to the existing 20-item Female Sexual Subjectivity Inventory (FSSI) (Horne & Zimmer-Gembeck, 2006), resulting in a total initial item pool of 35 items. In particular, three new items were constructed that were relevant to men's sexual self-esteem, nine items were added to tap men's sexual entitlement, and five items were added to assess men's sexual self-reflection. New MSSI items were developed based on a review of the literature, discussions with four experts in the field of adolescent and young adult sexual development, and a pilot study with 10 men aged 18–25 years. In the pilot study, participants discussed the meaning of sexual subjectivity and provided verbal feedback regarding sexual subjectivity item clarity and sensitivity. Based on the participants' feedback, some items were revised to reduce ambiguity and increase clarity. No items were perceived to be overly sensitive.

Each of the items was expected to provide information about the multidimensional theoretical construct of sexual subjectivity and be relevant to late adolescent and young adult men. All of the items had response options ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). The additional items included within the MSSI were devised for the purpose of this study and were developed in accordance with the conceptual definitions used in the FSSI: sexual body-esteem, entitlement to sexual desire and pleasure, and sexual reflection.

The first element, *sexual body-esteem*, referred to the understanding and esteem related to physical sexuality and the body. Sexual pleasure is less likely if an individual objectifies their body and their sexual self and allows others to judge their right to feel attractive and sexually desirable. Items tapped self-perceptions of body-esteem in the sexual context (Horne & Zimmer-Gembeck, 2006).

The second element, *sexual desire and pleasure*, related to experiencing pleasure from the body. Young people usually experience increasing feelings of sexual arousal and desire as they experience pubertal changes (Brooks-Gunn & Paikoff, 1997). Rather than aiming to measure sexual desire as such, this element included three subcomponents: (1) entitlement to self-pleasure, (2) entitlement to sexual desire and pleasure with a partner, and (3) sexual self-efficacy.

The third element, *sexual self-reflection*, was founded on the notion that experiences of our bodies and the associated pleasures depend on cognitive and emotional interactions and reflections (Martin, 1996). Cognitive reflection is something that also develops throughout adolescence and young adulthood, with adolescents' ability to think in a more sophisticated manner (Keating, 1990). Some have argued that being able to critically reflect on experiences and make decisions about future sexual strategies and behaviors may be an important component of healthy sexual development (Cyranowski & Andersen, 1998).

Self-Esteem The 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1979) was used to measure self-esteem. A sample item is "I feel I have a number of good qualities." Responses options ranged from 1 (S*trongly disagree*) to 5 (*Strongly agree*). Five negatively worded items were reversed before all items were averaged to form a total score. Higher scores indicated higher levels of self-esteem. In the current study, Cronbach's α was .85.

Satisfaction with Life The Satisfaction with Life Scale was used to measure global satisfaction with life (Diener, Emmons, Larson, & Griffin, 1985). The scale included five items (e.g., "In most ways, my life is close to my ideal"). Response options ranged from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Items were averaged with higher scores indicating more satisfaction with life. In the current study, Cronbach's α was .81.

Identity Achievement The 12-item identity achievement subscale of the Erikson Psychosocial Stage Inventory (Rosenthal, Gurney, & Moore, 1981) was used to measure identity achievement. An example item is "I can't decide what I want to do with my life." Response options ranged from 1 (S*trongly disagree*) to 5 (*Strongly agree*). Six negatively worded items were reversed before items were averaged so that higher scores indicated greater identity achievement. In the current study, Cronbach's α was .82.

Procedure

Over half of the participants ($n = 166$) were recruited on a large university campus in common areas. After a research assistant approached potential participants, they were provided with information sheets and consent forms. Research assistants verbally described that the survey was anonymous, confidential, and that participants could withdraw at any time. After giving informed consent, campus participants completed a hard copy of the survey at outside tables under the supervision of the researcher. Surveys were returned in an envelope or folded for privacy. Time required to complete the questionnaire was 20 min. Participants received a chocolate following completion of the survey.

The remaining participants ($n = 138$) were recruited via flyers and online advertisements to university sports clubs, university e-mail, and university Facebook sites. Interested participants contacted a research assistant via email or through Facebook and were then given a link to an online version of the survey. Once surveys were completed, participants emailed the research assistant with contact details to receive a coffee voucher.

Results

Factor Structure and Reliability

The 35 items of the MSSI were subjected to principal components analysis (PCA) with oblique rotation (i.e., direct oblimin). Prior to performing the PCA, the suitability of data for factor analysis was assessed (Tabachnick & Fidell, 2001). The Kaiser–Meyer–Oklin value was .84, exceeding the recommended value of .6. Bartlett's Test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix. The number of factors to rotate was initially decided using the criterion of an eigenvalue greater than 1, but the scree test and interpretability of the factor solution were also used as criteria.

Prior to factor analyses, four items were removed because they had low correlations with other items. Following the initial factor analysis, another seven items were removed, with one item removed because it did not load highly on any factor and six items removed because they formed factors with only one or two items. After removing these 11 items and repeating the analysis, a clear set of five factors was found. However, additional items were removed, which had the lowest loadings on factors, to maintain four items loading highly on each of the five factors. In the final PCA (see Table 1), four items loaded highly on each of the five factors. Eigenvalues ranged from 1.2 to 4.6 for the five factors and the total variance accounted for in the items was 63.8 %. Overall, 13 of the remaining items were items from the FSSI; two of these items had been slightly modified (*I would be able to ask a partner to provide the sexual stimulation I need*, rather than *I am able to ask a partner to provide the sexual stimulation I need*; *I don't think about my sexual behavior very much*, rather than *I don't think about my sexuality very much*). The other seven items were new. As can be seen in Table 1, all items loaded above |.52| on a single factor, with no crossloadings >.30.

Factor 1: Self-Efficacy in Achieving Sexual Pleasure

The four items on the first factor had loadings ranging from .74 to .81 and accounted for 23.1 % of the variance. This factor was consistent with *self-efficacy in achieving sexual pleasure* (see Table 1). Cronbach's α was .82. Three items were from the FSSI.

Factor 2: Sexual Body-Esteem

The four items on the second factor had loadings from |.63| to |.83| and accounted for 15.7 % of the variance. This factor was consistent with *sexual body-esteem*. Cronbach's α was .78. Two items were from the FSSI.

Factor 3: Sense of Entitlement to Sexual Self-Pleasure

The four items on the third factor had loadings from .76 to .87 and accounted for 11.9 % of the variance. This factor was consistent with the *sense of entitlement to sexual self-pleasure*. The Cronbach's α was .82. Two items were from the FSSI.

Factor 4: Sexual Self-Reflection

The four items on the fourth factor had loadings from .63 to .75 and accounted for 7.2 % of the variance. This factor was consistent with *sexual self-reflection*. Cronbach's α was .69. Three items were from the FSSI.

Factor 5: Sense of Entitlement to Sexual Pleasure with Partners

The four items on the fifth factor had loadings from .52 to .83 and accounted for 5.9 % of the variance. This factor was consistent with *sense of entitlement to sexual pleasure with partners*. Cronbach's α for these four items was .78. Three items were from the FSSI.

Correlations Between MSSI Subscale Scores

After reversing two items on the sexual body-esteem subscale and all five items on the sexual self-reflection subscale, averaging appropriate items formed the five MSSI composite subscale scores. For all subscales, higher scores indicated more sexual subjectivity. Correlations between the five subscales were modest (see Table 2).

Table 1 Study 1 factor loadings for the Male Sexual Subjectivity Inventory (N = 304)

Scales and items	Sexual self-efficacy	Sexual body-esteem	Entitle pleasure-self	Sexual self-reflection	Entitle pleasure-partner
1. If I were to have sex with someone, I'd show my partner what I want[a]	.81				
2. I would be able to ask a partner to provide the sexual stimulation I need[a]	.75				
3. If it happened, I know I would be able to be clear about my sexual desires with a partner	.75				
4. I would not hesitate to ask for what I want sexually from a romantic partner[a]	.74				
5. I worry that I am not sexually desirable to others[b]		−.83			
6. I worry about my sexual attractiveness[c]		−.80			
7. I am confident that a romantic partner would find me sexually attractive[a]		−.68			
8. I am not concerned about how I look when naked		−.63			
9. I believe self-masturbation can be a positive experience			.87		
10. I believe self-masturbating can be an exciting experience[a]			.82		
11. It is okay to enjoy self-masturbation			.78		
12. It is okay for me to meet my own sexual needs through self-masturbation[a]			.76		
13. I rarely think about the sexual aspects of my life[b]				.75	
14. My sexual behavior and experiences are NOT something I spend time thinking about[b]				.75	
15. I try not to think about my sexual experiences[c]				.72	
16. I don't think about my sexual behavior very much[b]				.63	
17. I would be concerned if my partner did not care about my sexual needs and feelings					.83
18. It would bother me if a sexual partner neglected my sexual needs and desires[a]					.82
19. If a partner were to ignore my sexual needs and desires, I'd feel hurt[a]					.81
20. I would expect a sexual partner to be responsive to my sexual needs and feelings[a]					.52
Eigenvalue	4.6	3.2	2.4	1.5	1.2
Variance accounted for (%)	23.1	15.7	11.9	7.2	5.9
Cronbach's α	.82	.78	.82	.69	.78

Loadings below .30 are not shown

[a] Item from the Female Sexual Subjectivity Inventory

[b] Reversed item from the Female Sexual Subjectivity Inventory

[c] Reversed item

Correlates of the Five MSSI Subscales

Correlations of the MSSI subscales with general well-being measures are shown in Table 2. Self-efficacy in achieving sexual pleasure and sexual body-esteem had positive and significant correlations with all measures, with *r*'s from .29 to .61, all *p*s < .01. Sense of entitlement to sexual self-pleasure was significantly correlated with greater self-esteem and life satisfaction. The remaining two factors of sexual subjectivity (sense of entitlement to sexual pleasure from partners and sexual self-reflection) did not correlate significantly with general well-being.

FSSI Items When Completed by Young Men

To determine whether the original FSSI items may provide similar quality subscales when used with young men, the 20 FSSI items were also submitted to a PCA with oblique rotation. Six factors were extracted with eigenvalues ranging from 1.0 to 3.9. These six factors accounted for slightly less variance (63.1 %). The factors extracted were similar to the five FSSI elements, except items designed to tap sexual self-reflection loaded on two separate factors. Loadings were all .49 or above, but Cronbach's α's tended to be lower, ranging from .46 to .75.

Table 2 Study 1 intercorrelations of men's sexual subjectivity and general well-being (N = 304)

Measures	1	2	3	4	5	M^a	*SD*
Sexual subjectivity							
1. Sexual self-efficacy	–					3.72	.69
2. Sexual body-esteem	.46**	–				3.53	.72
3. Entitlement self-pleasure	.18**	.08	–			3.89	.71
4. Sexual self-reflection	.16**	−.03	.30**	–		3.58	.67
5. Entitlement pleasure-partner	.23**	−.05	.11	.30**	–	3.75	.61
General well-being							
6. Global self-esteem	.29**	.61**	.13*	.02	−.01	3.88	.58
7. Identity achievement	.30**	.51**	.10	−.06	−.11	3.81	.51
8. Life satisfaction	.29**	.56**	.13*	−.01	−.05	3.45	.72

* $p < .05$. ** $p < .01$

[a] All variables ranged from 1 to 5

Study 2

Method

Participants

Participants included 422 Australian young adults (208 men and 214 women) between the ages of 18 and 25 years (men $M = 20.5$, $SD = 2.35$; women $M = 21.3$, $SD = 2.27$). Overall, 79 % of the men were Australian/white/Caucasian, 94 % described themselves as heterosexual, 84 % were full time students, 92 % had completed year 12 level education or higher, 58 % lived with their parents, and 67 % of young men reported they had married biological parents. Of the women, 94 % were Australian/white/Caucasian, 91 % described themselves as heterosexual, 74 % were full time students, 98 % had completed year 12 level education or higher, 40 % lived with their parents, and 58 of young women reported they had married biological parents. Overall, 93 % (n = 394) reported a history of sexual intercourse and another 3 % reported a history of oral sex but no vaginal intercourse.

Measures

Measures included the MSSI for men and the same measures of self-esteem, life satisfaction, and identity achievement used in Study 1. In addition, Study 2 participants completed the following measures.

Female Sexual Subjectivity Young women completed the 20-item FSSI to assess their sexual subjectivity. The FSSI included the same five elements as the MSSI. Cronbach's α's ranged from .75 to .86. Response options ranged from 1 (*Strongly disagree*) to 5 (*Strongly agree*).

Sexual Esteem Feelings of esteem related to the sexual domain were measured with the 10-item Sexual Esteem Scale (Snell & Papini, 1989). An example item is, "I think of myself as a good sexual partner." Response options ranged from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Negatively worded items were reversed and all items were averaged to obtain an overall score. Higher scores indicated higher levels of sexual esteem. In the current study, Cronbach's α's were .89 and .87 for men and women, respectively.

Sexual Depression The tendency to feel disappointed and unhappy about sexual aspects of life was measured with the 10-item Sexual Depression Scale (Snell & Papini, 1989). An example item is, "I am disappointed about the quality of my sex life." Response options ranged from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Positively worded items were reversed and items were averaged to obtain an overall score. Higher scores indicated higher levels of sexual depression. In the current study, Cronbach's α's were .88 and .91 for young men and women, respectively.

Condom Use Self-Efficacy The Global Condom Use Self-Efficacy Measure was used to assess participant's beliefs regarding their capacity to access and use condoms (Baele et al., 2001). This measure consisted of 19 items that tapped perceived efficacy in condom use (e.g., "I feel confident that I am able to use a condom correctly"), purchasing and carrying condoms (e.g., "I wouldn't mind purchasing condoms in a department store"), assertiveness (e.g., "I feel I am able to convince my partner to use a condom when we have sex together"), and control over emotions and arousal related to using condoms (e.g., "I feel able to use a condom with my partner without breaking the mood"). This scale was slightly modified to use clearer language and shorten the content of some items. Response options ranged from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Negatively worded items were reversed and items were averaged to obtain a composite score. Higher scores indicated higher levels of efficacy. In the current study, Cronbach's α were .88 and .80 for men and women, respectively.

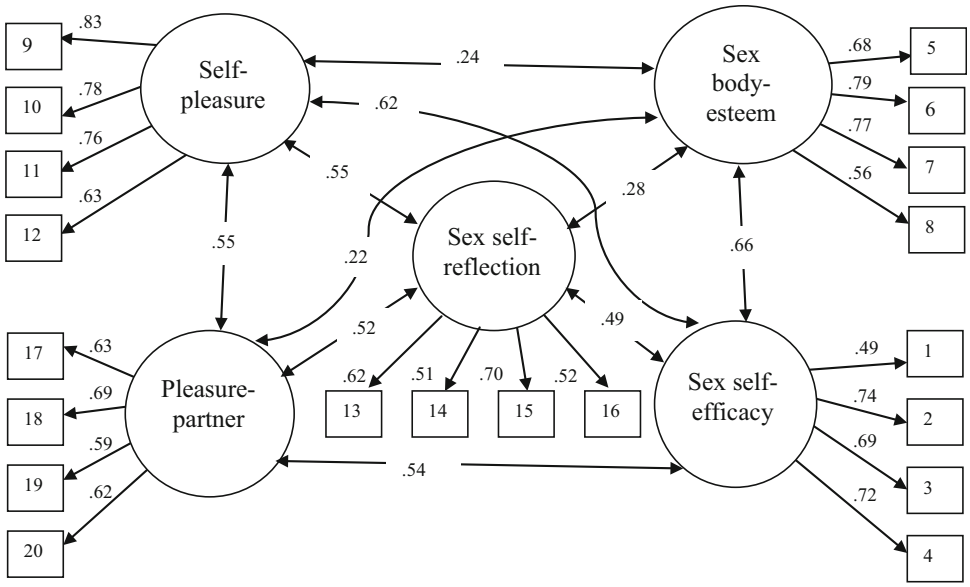

Fig. 1 Results of the Study 2 confirmatory factor analysis of the Male Sexual Subjectivity Inventory (MSSI) ($n = 208$ men). See Table 1 for the items on the MSSI

Procedure

The same study recruitment procedures used in Study1 were used in Study 2. Over half of the participants (62 %, $n = 262$) were recruited on a large university campus. The remaining participants ($n = 160$) were recruited via advertisement and completed an electronic version of the same survey. The time required to complete the questionnaire was about 20 min.

Results

Confirmatory Factor Analysis of the MSSI

To examine the factor structure of the MSSI, confirmatory factor analysis was completed using AMOS software (IBM Corporation) with maximum likelihood estimation. Model fit was assessed using the χ^2 test statistic, χ^2 test statistic divided by the degrees of freedom, Comparative Fit Index (CFI) (Bentler, 1990), and Root Mean Square Error of Approximation (RMSEA) (Browne & Cudeck, 1993). The CFI compares the specified model with the independence model (Byrne, 2009). CFI estimates can range from 0 to 1, with values above .9 indicating acceptable fit to the data. The RMSEA takes into account the error of approximation, with values of 0.05 or less indicative of a close fit of the model and values between .05 and .08 are considered indicative of a fair fit. Dividing the χ^2 by the degrees of freedom has also been suggested as a measure of model fit with a ratio of <3 an acceptable fit (Byrne, 2009).

The CFA of the MSSI consisted of five latent variables with 20 single-item indicators identified in Study 1 (see Fig. 1). Prior to analysis, some items were reversed so that higher scores on each item indicated more sexual subjectivity. Most fit statistics indicated that the data fit the model well, $\chi^2(154) = 243.0$, $p < .01$, $\chi^2/\text{df} = 1.6$, CFI = .94, and RMSEA = .053 (90 % CI .040–.065, $p = .34$. Factor loadings ranged from .49 to .83, with all but one loading over .50. All loadings were significantly larger than 0, $p < .01$. The correlations between the latent factors were also freed and ranged from .22 to .66, all $ps < .01$, with the highest association between sexual body-esteem and self-efficacy in achieving sexual pleasure. In addition, six correlations between measurement errors were freed, which improved the fit of the model.

Cronbach's α's were .78 for sexual body-esteem, .83 for entitlement to sexual self-pleasure, .72 for entitlement to sexual pleasure with partners, .76 for self-efficacy in achievement sexual pleasure, and .73 for sexual self-reflection. Averaging appropriate items formed the five MSSI subscale scores. Intercorrelations between sexual subjectivity subscales are shown in Table 3, with correlations for men below and for women above the diagonal. All but one correlation was significant among men, with correlations ranging from .13 to .49. All correlations were significant among women, with correlations ranging from .17 to .51.

Gender Differences in Sexual Subjectivity

Men's and women's sexual subjectivity means and *SD*s are shown in Table 4. There were significant gender differences in three of the five elements of sexual subjectivity. Young men, relative to women, reported a greater sense of entitlement to sexual self-pleasure and sexual self-efficacy in achieving sexual pleasure. However, in contrast to what was expected, young women had a higher level of sense of entitlement to sexual pleasure with partners. Men and women also differed in self-esteem, sexual esteem, and sexual depression. Men reported more positive global self-esteem and sexual esteem. Women reported greater sexual depression.

Table 3 Study 2 correlations between sexual subjectivity and general and sexual well-being for men (n = 208) and women (n = 214)

Measures	1	2	3	4	5	6	7	8	9	10	11
Sexual subjectivity											
1. Sexual self-efficacy	–	.42**	.29**	.19**	.30**	.44**	.29**	.44**	.48**	−.47**	.32**
2. Sexual body-esteem	.49**	–	.23**	.17**	.15*	.70**	.56**	.57**	.46**	−.51**	.21**
3. Entitlement self-pleasure	.49**	.20*	–	.51**	.28**	.20**	.10	.17*	.14*	−.22**	.18**
4. Sexual reflection	.31**	.17*	.36**	–	.41**	.08	.06	.07	.11	−.17*	.20**
5. Entitlement-partner	.36**	.13	.41**	.31**	–	.25**	.23**	.17**	.19**	−.14*	.21**
General and sexual well-being											
6. Global self-esteem	.42**	.60**	.25**	.15*	.15*	–	.78**	.73**	.40**	−.53**	.23**
7. Identity achievement	.35**	.42**	.17**	.20**	.15*	.69**	–	.63**	.34**	−.40**	.19**
8. Life satisfaction	.29**	.39**	.14*	.13	.11	.56**	.46**	–	.32**	−.47**	.14*
9. Sexual esteem	.51**	.59**	.31**	.33**	.18*	.53**	.46**	.29**	–	−.46**	.40**
10. Sexual depression	−.51**	−.62**	−.31**	−.38**	−.31**	−.61**	−.53**	−.44**	−.71**	–	−.31**
11. Condom self-efficacy	.36**	.12	.32**	.28**	.21**	.33**	.41**	.27**	.25**	−.30**	–

Correlations for men are below the diagonal and correlations for women are above the diagonal

* $p < .05$. ** $p < .01$

Correlations of Sexual Subjectivity with Other Measures

Correlations of sexual subjectivity with measures of general well-being (self-esteem, life satisfaction, and identity achievement) were estimated for men separate from women (see Table 3). As expected, these correlations showed that men and women who reported higher sexual subjectivity also reported higher self-esteem, identity achievement, and life satisfaction. Overall, 13 of the possible 15 correlations were significant for men and 11 of the possible 15 correlations were significant for women. The strongest associations were between sexual body-esteem and general well-being measures (*r*'s ranged from .39 to .60 for men and from .56 to .70 for women) and between sexual self-efficacy and general well-being measures (*r*'s ranged from .29 to .42 for men and from .29 to .44 for women). The most inconsistent associations were with sexual self-reflection, which was not significantly associated with men's life satisfaction and not significantly associated with any measure of women's general well-being.

Correlations of sexual subjectivity with measures of sexual well-being and condom use self-efficacy were also estimated for men separate from women (see Table 3). Associations were significant across all sexual subjectivity subscales with the exception of the association between sexual self-reflection and sexual esteem among women and between men's sexual body-esteem and condom use self-efficacy.

Unique Associations of Sexual Subjectivity Elements and Gender Moderation

Multiple regression analyses were conducted to isolate the unique associations of sexual subjectivity with measures of general and sexual well-being, after controlling for demographic variables (see Table 5). These models were also used to test whether gender was a moderator of any association of sexual subjectivity with general or sexual well-being. To test gender moderation, the SPSS macro Process (Hayes, 2013) was used. One interaction (e.g., sexual self-efficacy × gender) was tested at a time, with all demographic variables and each element of sexual subjectivity simultaneously entered into the model. No sexual subjectivity element × gender interaction was significant. Thus, there was no evidence that the associations of sexual subjectivity with general or sexual well-being differed between men and women.

Because gender moderation was not supported, Table 5 provides the results from six models testing the unique associations of sexual subjectivity with well-being among all participants. For measures of general well-being (see the first three models in Table 5), two elements of sexual subjectivity were significantly associated with well-being in each model. Sexual self-efficacy and sexual body-esteem were each significantly associated with two measures of well-being, with participants who reported higher sexual self-efficacy reporting greater self-esteem and life satisfaction, and participants who reported more sexual self-esteem reporting greater self-esteem and identity achievement. Moreover, entitlement to pleasure with partners was significantly associated with greater identity achievement and sexual self-reflection was significantly associated with greater life satisfaction. Entitlement to self-pleasure was the only element of sexual subjectivity that was not significantly associated with any measure of general well-being.

In the three models of sexual well-being (see Table 5), multiple sexual subjectivity elements were uniquely significantly associated with more sexual esteem, less sexual depression, or greater condom use self-efficacy. In particular, those reporting greater sexual self-efficacy also reported more sexual esteem, less sexual depression, and greater condom use self-efficacy. Those reporting greater sexual body-esteem also reported more

Table 4 Study 2 means and SDs and comparisons between men and women (N = 422)

Measure	Men ($n = 208$)		Women ($n = 214$)		Gender difference	Cohen's d
	M[a]	SD	M[a]	SD	$t(420)$	
Sexual subjectivity						
Sexual self-efficacy	3.65	.63	3.40	.81	3.43**	0.34
Sexual body-esteem	3.42	.65	3.28	.86	1.71	0.18
Entitlement self-pleasure	3.88	.67	3.15	.38	13.94**	1.34
Sexual reflection	3.50	.69	3.44	.81	<1	0.08
Entitlement-partner	3.69	.65	4.00	.52	−5.56**	−0.53
General and sexual well-being						
Global self-esteem	3.84	.56	3.59	.74	3.95**	0.38
Identity achievement	3.67	.42	3.57	.64	1.84	0.18
Life satisfaction	3.48	.63	3.45	.78	<1	0.04
Sexual esteem	3.58	.74	3.20	.76	5.23**	0.51
Sexual depression	2.29	.61	2.43	.63	−2.33*	−0.23
Condom use self-efficacy	3.73	.54	3.76	.47	<1	−0.06

* $p < .05$. ** $p < .01$

[a] All variables ranged from 1 to 5

sexual esteem and fewer symptoms of sexual depression. Finally, entitlement to self-pleasure was significantly associated with greater condom use self-efficacy and sexual self-reflection also accounted for unique variance in sexual depression and condom use self-efficacy. Entitlement to sexual pleasure with partners was the only element of sexual subjectivity that was not uniquely significantly associated with sexual well-being.

Discussion

Our two studies were the first to use a self-report measure to assess sexual subjectivity in young men, while also testing whether (1) sexual subjectivity was a correlate of well-being among both young men and women, (2) sexual subjectivity differed between young men and women, and (3) the associations of sexual subjectivity with well-being differed in men compared to women. The MSSI was found to have a clear five-factor structure, including subscales labeled sexual body-esteem, three subscales related to feelings of entitlement (pleasure with partners, self-pleasure, and self-efficacy in achieving pleasure), and sexual self-reflection. These five subscales, referred to as "elements," were parallel to the five subscales of the FSSI developed for young women (Horne & Zimmer-Gembeck, 2006). The MSSI subscales had good reliability, especially in Study 2. In addition, as was found with the FSSI for women in previous research (Horne & Zimmer-Gembeck, 2005, 2006; Zimmer-Gembeck et al., 2011a), sexual subjectivity was associated with elevated general well-being and, in Study 2, both young men and women with greater sexual subjectivity reported better sexual well-being.

Gender Differences in Sexual Subjectivity

After developing and testing the MSSI in Study 1, we assessed sexual subjectivity in both young men and women in Study 2 and made gender comparisons. As we had anticipated, young men reported a greater sense of entitlement to sexual self-pleasure, with a large effect size. These findings were consistent with results from the Sex in Australia Survey (Richters, Grulich, de Visser, Smith, & Rissel, 2003), the British National Survey of Sex Attitudes and Lifestyle (Gerressu, Mercer, Graham, Wellings, & Johnson, 2008), and a meta-analysis of gender differences in sexuality (Petersen & Shibley-Hyde, 2010) regarding higher rates of autoerotic behavior in men than in women.

We found two other gender differences in sexual subjectivity, but the effect sizes were small to moderate. First, as expected, young women reported less self-efficacy for achieving pleasure than young men. Perhaps feeling less efficacious is one manifestation of less clarity about sexual feelings and more difficulties communicating desires, both of which have been found to be more common among young women compared to men (Impett & Peplau, 2003; Tolman, 2002). Even older women report less enjoyment from partnered sexual interactions than men. As research indicates, 9 out of 10 men consistently orgasm during sexual interactions with their partner compared to 2 out of 10 women (Galinsky & Sonenstein, 2011).

Second, despite feeling less efficacy, young women, compared to men, reported a greater sense of entitlement to sexual pleasure with partners. Some researchers have argued, and evidence supports, that girls and young women do sometimes, or even frequently, engage in sexual behavior that is not satisfying or pleasurable (Burns, Futch, & Tolman, 2011; Lamb, 2010;

Table 5 Results of regressing measures of global and sexual well-being on five elements of sexual subjectivity, controlling for demographics (N = 422)

	1. Self-esteem		2. Identity achievement		3. Life satisfaction		4. Sexual esteem		5. Sexual depression		6. Condom efficacy	
	B (*SE*)	*β*	*B* (*SE*)	*β*	*B* (*SE*)	*β*	*B* (*SE*)	*β*	*B* (*SE*)	*β*	*B* (*SE*)	*β*
Gender	−.14 (.07)	−.10*	−.11 (.06)	−.10	.10 (.08)	.07	−.23 (.08)	−.15**	.01 (.06)	.01	.13 (.06)	.13*
Sexual subjectivity												
Sexual efficacy	.14 (.04)	.15**	.06 (.04)	.09	.34 (.04)	.39**	.31 (.05)	.30**	−.21 (.04)	−.25**	.17 (.04)	.25**
Sexual body-est	.47 (.03)	.57**	.30 (.03)	.45**	.00 (.06)	.00	.33 (.04)	.35**	−.31 (.03)	−.41**	.01 (.03)	.01
Entitlement-self	.06 (.05)	.06	−.03 (.05)	−.04	.03 (.06)	.03	.03 (.06)	.03	−.03 (.05)	−.03	.10 (.05)	.13*
Sex reflection	−.06 (.04)	−.07	.00 (.03)	.00	.20 (.05)	.20**	.07 (.04)	.06	−.09 (.04)	−.11*	.07 (.03)	.11*
Entitlement-part	.08 (.05)	.07	.10 (.04)	.11*	−.03 (.05)	−.03	.01 (.06)	.01	−.06 (.05)	−.06	.05 (.04)	.06

Age, living status, student status, cultural status, and sexual attraction (same/other sex) were included as covariates in each model. These covariates had no significant association with any dependent variable, so the results are not reported here

est esteem, *part* partner

* $p < .05$. ** $p < .01$

1. $R^2 = .50$, $F(11, 410) = 36.57$, $p < .01$
2. $R^2 = .29$, $F(11, 410) = 15.20$, $p < .01$
3. $R^2 = .29$, $F(11, 410) = 15.20$, $p < .01$
4. $R^2 = .41$, $F(11, 410) = 25.38$, $p < .01$
5. $R^2 = .43$, $F(11, 410) = 28.28$, $p < .01$
6. $R^2 = .16$, $F(11, 410) = 7.17$, $p < .01$

Lamb & Peterson, 2012; Peterson, 2010; Tolman, 2012). They also may feel, perceive, or report themselves to be more entitled than they appear to observers given their experiences or behavior. Hence, it is possible that the challenges of sexual interactions and the difficulties inherent in communicating to new partners about sexual needs is important to women and they feel entitled to do it, but it may not be a skill they have mastered or that their experiences support, and it may be they face more challenges than men in facilitating their own experience of pleasure with partners. Future research could examine whether reports of greater entitlement are significantly associated with young women's capacity to communicate their desire, become familiar with what they find pleasurable, and to engage in more enjoyable sexual relations now and in the future (see e.g., Zimmer-Gembeck, 2013). Future research could also investigate differences in how feelings of entitlement are significantly associated or impact on relationships and sexual behavior in women compared to men. What is suggested by these findings, however, is that a focus on efficacy and entitlement, and their relations to behavior, is a future direction for research on sexual health in young people.

Regarding the other two sexual subjectivity elements, there were no significant gender differences. Young men and women did not differ in sexual body-esteem. Despite the evidence that men and women are about as similar as they are different when sexual attitudes are examined (Petersen & Hyde, 2010), this lack of difference in sexual body-esteem was still somewhat surprising given the often reported lower levels of general body satisfaction and greater appearance concerns among women compared to men (Furnham, Badmin, & Sneade, 2002; McCabe & Ricciardelli, 2001; Webb & Zimmer-Gembeck, 2013). Our finding of no significant gender difference in the tendency to reflect about sexual behavior is also consistent with the evidence that there is often gender similarity in sexual perceptions and attitudes (Peterson & Shibley-Hyde, 2010).

Sexual Subjectivity and General and Sexual Well-Being

In general, we also found that young men and women who reported greater sexual subjectivity were also better off in most domains of general and sexual well-being. In Study 1, when simple associations were examined, men who reported more positive sexual body-esteem and greater self-efficacy in achieving sexual pleasure were higher in general well-being (self-esteem, life satisfaction, and identity achievement). In Study 2, when general and sexual well-being were examined among young men and women, these associations were even more numerous, with most elements of sexual subjectivity significantly associated with both general and sexual (sexual esteem, sexual depression, and condom use self-efficacy) well-being among both young men and women. Moreover, in multivariate analyses, gender did not moderate any of the associations of sexual subjectivity with well-being and sexual body-esteem and sexual self-efficacy stood out as the two elements most consistently and strongly correlated with greater well-being across multiple measures for both young men and women. Therefore, sexual self-esteem and sexual self-efficacy seem to have the most widespread effects on well-being during the late teens and early 20 s, suggesting that they may be important to address in universal sexual health promotion programs for adolescents.

The associations between the five elements of sexual subjectivity and general well-being have only been tested in a few studies of young women (e.g., Horne & Zimmer-Gembeck, 2005; Zimmer-Gembeck et al., 2011a). The current findings confirm what has been found in this past research, and extended these findings to show, for the first time, that young people with greater sexual subjectivity, especially sexual body-esteem and self-efficacy to achieve pleasure, were also feeling more efficacious regarding buying, carrying, and using condoms. The patterns of associations between sexual subjectivity and the different measures of sexual well-being were also revealing, with sexual body-esteem most prominently associated with lowered sexual depression, efficacy in achieving sexual pleasure, and condom use self-efficacy having a particularly strong association with condom use self-efficacy, and both sexual body-esteem and self-efficacy in achieving pleasure prominently associated with better sexual esteem. This highlights the importance of enhancing both sexual body-esteem and sexual self-efficacy as one avenue to promote more positive and fewer negative emotional responses to sex, but also identifies how efficacy in two domains related to sexual behavior (efficacy in achieving pleasure and for condom use) may be important to address to enhance health protective behaviors. Research has found condom use self-efficacy to be one set of beliefs and attitudes that can set in motion a series of thoughts and behaviors that, if combined with support to take real action to buy and carry condoms, could result in increased health protective behavior both in steady relationships and with casual partners (van Empelen & Kok, 2008). These findings suggest that discussion about sexual interactions and practice or role plays to enhance feelings of efficacy regarding having pleasurable and avoiding unpleasurable sexual activity might also be a focus in health promotion programs, with the possibility that building these competencies could generalize to condom use self-efficacy, condom use, and other health protective behaviors.

After considering sexual self-esteem and sexual self-efficacy, heightened levels of each of the other three sexual subjectivity elements also had unique associations with at least one measure of well-being. In particular, although the associations were small and correlational, sexual self-reflection seemed to be an added benefit to well-being in some areas. Considering the past and thinking about future sexual relationships and behaviors may allow young people to learn from past mistakes and successes and take these new views and developing competencies into their future interactions, potentially yielding more satisfaction, fewer negative emotions related to sexual interactions, and greater efficacy.

Summary, Limitations, and Future Research

In summary, these studies provide a new measure that will be useful for assessing young men's sexual subjectivity and the findings support the conceptualization of sexual subjectivity as a set of five elements that are significantly associated with general and sexual well-being for men and women. In addition, these results were based on fairly large samples of both men and women, which used both online and in-person recruitment methods to increase sample diversity. Future research should test the new measure with other groups of young men and women inside and outside of Australia to expand the generalizability of the findings.

A limitation was that the assessment of sexual subjectivity elements was based on slightly different items for men compared to women in Study 2. The MSSI for men and the FSSI for women included a common set of 11 items plus another three items with only slight differences, but seven items differed on the MSSI compared to the FSSI. We recommend future research test the new measure (the MSSI) described here with both men and women. This recommendation is based on the similar factor structure of the MSSI compared to the FSSI, the higher reliability of the MSSI when compared to that of the FSSI (see also Horne & Zimmer-Gembeck, 2006; Zimmer-Gembeck et al., 2011a), the balance of items across subscales on the MSSI (four per subscale), and the relevance of all MSSI items to both men and women. Also, there was no evidence of gender moderation in the present study, suggesting that the FSSI and the MSSI do not have different associations with any measure of well-being.

In summary, sexual subjectivity covaries with enhanced general and sexual well-being for both young men and women, providing support for feelings of sexual body-esteem, efficacy and entitlement, as well as reflecting as sexual behavior, as part of a comprehensive and multidimensional conceptualization of sexual health. These results support the continued development of sexual health models that include cognitions, emotions and attitudes, as well as behavior and relationships, when studying adolescent and young adult sexual health and development (Bay-Cheng, 2012; Yager & O'Keefe, 2012; Tolman & McClelland, 2011; Zimmer-Gembeck, 2013).

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