

A rapid review of sexual wellbeing definitions and measures: should we now include sexual wellbeing freedom?

Abstract

An increasing number of studies refer to sexual wellbeing and/or seek to measure it, and the term appears across various policy documents, including sexual health frameworks in the UK. We conducted a rapid review to determine how sexual wellbeing has been defined, qualitatively explored and quantitatively measured. Eligible studies selected for inclusion from OVID Medline, PsychInfo, PubMed, Embase, CINAHL were: in English language, published after 2007, were peer-reviewed full articles, focused on sexual wellbeing (or proxies for, e.g. satisfaction, function), and quantitatively or qualitatively assessed sexual wellbeing. We included studies with participants aged 16-65. Given study heterogeneity, our synthesis and findings are reported using a narrative approach. We identified 162 papers, of which 10 offered a definition of sexual wellbeing. Drawing upon a socio-ecological model, we categorised the 59 dimensions we identified from studies under three main domains: cognitive-affect (31 dimensions); inter-personal (22 dimensions); and socio-cultural (6 dimensions). Only 11 papers were categorised under the socio-cultural domain, commonly focusing on gender inequalities or stigma. We discuss the importance of conceptualising sexual wellbeing as individually experienced but socially and structurally influenced, including assessing *sexual wellbeing freedom*: a person's freedom to achieve sexual wellbeing, or their real opportunities and liberties.

Whilst sexual health is generally accepted as a concept that goes beyond the absence of disease, sexual wellbeing offers a broader conceptualization. Sexual health policies across, for example, countries in the United Kingdom (UK) have embedded a holistic approach to sexual health, thus embracing the idea of sexual wellbeing (Department of Health, 2013; The Scottish Government, 2015). During a World Health Organization/United Nations Population Fund (WHO/UNPF) working group meeting in September 2007 to discuss sexual health indicators, the group explored the term “sexual wellbeing”. Notably, there was little agreement among participants about what sexual wellbeing was, or how to measure it. Participants of that meeting concluded that more research was needed to explore the various dimensions of ‘sexual well-being’ in order to draw up an appropriate set of indicators” (World Health Organization, 2010). It is now over ten years since that meeting, and there has been a growing number of studies seeking to assess sexual wellbeing, or aspects of this concept.

The wider wellbeing literature informs us of the multidimensionality to the concept of wellbeing (Linton, Dieppe, & Medina-Lara, 2016), and the variation in theoretical underpinnings (Gasper, 2010). Approaches range from a focus on subjective wellbeing, and capturing positive and negative affect as well as life satisfaction, to objective assessments based on measuring wellbeing as the ability of a person to live a life they have reason to value (Sen, 1985). Amartya Sen’s capability approach emphasises both achievements (functionings) and the freedom to achieve (one’s capability); whilst health status is an end, the capability for health is the means. Capability assessments of wellbeing often seek objective measures to determine such functionings and capabilities, often drawing from large-scale population datasets (e.g., British Household Panel Survey) and lean towards population assessments (Anand, Hunter, Carter, Dowding, Guala & Van Hees, 2009). However, some have explored wellbeing qualitatively, inviting people to make an assessment of their capabilities, thus embracing subjective assessments (Lorgelly, Lorimer, Fenwick, Briggs, & Anand, 2015). A key limitation of inviting people to assess how satisfied they are is captured from the concept of *adaptive preferences*: can wellbeing be captured by mental states,

given people who experience oppression and suffering could adapt to their circumstances and, nevertheless, report good wellbeing (Nussbaum, 2000)? Such adaptive preferences pose problems for accounts of sexual wellbeing that rely on assessments of satisfaction. For example, a woman who has adapted her preferences within the constraints of a gendered culture might report high sexual satisfaction. Such an issue might only be problematic if the measure of sexual wellbeing is solely based on satisfaction assessment rather than accompanying it with objective measures, or paying attention to what might be influencing subjective assessments. As a measure of sexual wellbeing is more likely to be a self-assessment by individuals, then selecting relevant dimensions is vital to ensure the measure is appropriately capturing all aspects of sexual wellbeing. For any such measure that is rooted in a capability approach, dimensions should reflect people's ability to lead a life they have reason to value.

To date, there is no multidimensional measure of sexual wellbeing, although one was developed for sexual health (Smylie et al., 2013). Whilst some assessments of sexual wellbeing have enquired about satisfactions with one's sexual life, other constructs have included sexual self-concept, sexual anxiety and relationship communication (Birnbaum et al., 2014; Mastro & Zimmer-Gembeck 2015). Some may only wish to know about sexual function and make use of a sexual function scale; however, for those of us who want to capture ends (health status) and means (capability for health), a narrow focus on functioning or satisfaction provides a partial picture. So here we depart from the WHO/UNFPA report authors who suggested sexual wellbeing "could probably be measured only as 'self-perceived sexual health'" (World Health Organization, 2010, p. 4). What if in addition to asking about (sexual) health status we also asked about the opportunities and liberties they have in order to achieve good health (i.e., their capabilities)? As Nussbaum wrote: "We ask not only about the person's satisfaction with what she does, but also about what she does, and what she is in a position to do (what her opportunities and liberties are). And we ask not just about the resources that are sitting around, but about how those do or do not go to work, enabling [the person] to function in a fully human way" (Nussbaum, 2000, p. 71). Asking whether a young

person is free from attack and abuse of any kind can furnish us with information about their capability for sexual wellbeing; asking them how satisfied they are with their sexual life does not provide us with such information. We are, therefore, motivated towards a more expanded informational space, as a measure of sexual wellbeing created from a focus on both functionings and capabilities could be useful for the evaluation of interventions which seek to improve sexual health and wellbeing. A complex community-based intervention that seeks to improve sexual health and wellbeing might seek to change the conditions in which people live in order to positively impact on health, such as providing microfinance loans to women in relation to HIV prevention. Capturing the health achievement (HIV negative), *and* capability (the means with which to achieve health outcomes, such as women's empowerment) gives us a far greater understanding of what the intervention has done than just capturing the health achievement. Extending this capability lens to sexual wellbeing means we not only seek to know what people have and do, but what they are able to do and be. Such a multidimensional assessment could identify the constraints upon people's freedom, which coupled with understanding conversion factors (one's ability to achieve), would allow for a better understanding of the limits to capability and additionally could explain an intervention's "failure" or success.

If we are to develop such a multidimensional measure, a useful starting point is to conduct a review of the evidence-base to take stock of how sexual wellbeing has been defined and assessed, so that such a measure is built in relation to existing work, whether this would involve making use of an existing scale or to realise that new data are required to fill a gap. The key aims of our review were to assess how sexual wellbeing has been defined and how it has been measured across studies. As we sought to assess how sexual wellbeing is defined, it was essential that we did not develop our own tight definition of the concept for our rapid review. We kept a very broad working definition to encompass as wide a range of studies as possible. We accepted the concept of sexual wellbeing as individual subjective assessments of affect and satisfaction, but we also sought to remain alert to potential key influences or determinant on sexual wellbeing from social and environmental contexts

(DiClemente, Salazar, Crosby, & Rosenthal, 2005). For example, a social norm can impact an individual's freedom to achieve. We paid particular attention to the main domains and dimensions of sexual wellbeing that have been used in the existing literature. To be able to capture the breadth of domains and attributes we drew upon the socio-ecological perspective, to allow us to identify and categorise not only individual cognitive-affect type attributes (thoughts, emotions, subjective evaluations), but also inter-personal and socio-cultural dimensions (Golden & Earp, 2012; Rimer & Glanz, 2005). Given this work was planned and funded as a rapid review, we chose to focus our narrative synthesis on what is useful for the evaluation community as well as for agenda setting for future research. As such, the paper collates and synthesises existing work, offering a high-level descriptive overview of definitions and measures.

Method

Use of rapid review approach

This rapid review drew upon systematic review methodology and adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis statement (Moher, Liberati, Tetzlaff, & Altman, 2009). Rapid review methodology differs from systematic reviews commonly in terms of scope, rigor and timescale (Khangura, Konnyu, Cushman, Grimshaw, & Moher, 2012). For our rapid review, we 1) limited our search to five key databases, 2) included English language papers only, 3) included papers published from 2007 (the date of the WHO working group meeting, at which they stated no indicators of sexual wellbeing had yet been produced, and there was no accepted definition of sexual wellbeing) (World Health Organization, 2010). We also did not make an assessment of study quality or opt to include/exclude studies on the basis of quality. The effect of these decisions is that the scope and comprehensiveness is reduced, compared to a systematic review.

Search strategy

Our initial scoping search revealed a relatively sparse evidence-base in relation to sexual wellbeing, which allowed for a broad search strategy rather than a highly sensitive one. Google Scholar, for example, located 5,770 results for “sexual well-being”, with a 2007 date limiter. We identified studies for review using five databases: OVID Medline, PsychInfo, PubMed, Embase, CINAHL. The keywords we employed focused our searches on study population (adults), and the term “sexual wellbeing” or “sexual well-being” (see an example search strategy in supplementary file 1). To be clear, we did not use search terms such as sexual function or sexual satisfaction to locate studies.

Study selection and data extraction

We sought to include all types of study, including both quantitative and qualitative. Our exclusion criteria were: published prior to 2007; not published in English language; study population younger than age 16 years; study population older than 65 years; letters, conference proceedings, discussions, editorials, theses, books; or where sexual wellbeing or its dimensions were not a major focus or overarching aim of the study. Our restriction to populations younger than 65 years was to ensure the review was not dominated by sexual functioning research (e.g., erectile dysfunction), allowing a variety of other factors associated with sexual wellbeing, as well as defined outcomes of sexual wellbeing, to be emphasised. However, we acknowledge the limitation this places on our ability to aggregate evidence on sexual wellbeing across a more extended range of the lifecourse. We restricted eligible studies to be those that explored experiences, or measurement, of sexual wellbeing (or proxies for, e.g. satisfaction, function). All studies identified had referred to “sexual wellbeing” or “sexual well-being”; as such, even those which used a sexual satisfaction scale (for e.g., Global Measure of Sexual Satisfaction (GMSEX)) referred to assessing sexual wellbeing. At study selection stage, we focused only on studies that self-reported exploring or assessing sexual wellbeing.

We used Covidence (a Cochrane technology platform <https://www.covidence.org>) to manage our citations and our process of selecting studies. The inclusion and exclusion criteria were applied successively to titles and abstracts by one reviewer (BB), after the first 500 references were double screened by two reviewers (BB & AA) to agree criteria for consistency of screening. Full reports were obtained for studies that appeared to meet the criteria or where there was insufficient information from the title and abstract. All full reports for which full text was available were assessed by two reviewers independently (BB & AA). Disagreements were resolved through discussion and recourse to a third reviewer (CC).

We extracted data from all full text studies that fulfilled the inclusion criteria, using a standardised framework we created, which captured the study design, the country where the study was carried out, the health focus of the study (e.g., breast cancer, sexual violence), the study population, whether any definition of sexual wellbeing was offered, the measures of sexual wellbeing used (noting any particular scales, such as GMSEX), and the dimensions included in any such measures. For quantitative studies utilising a questionnaire, we focused on the methods to aid extraction of the measures used (e.g., sexual self-esteem, sexual anxiety), and/or from the particular scale used (e.g., GMSEX includes a *relational* measure of sexual satisfaction). For qualitative studies, we paid attention to the research questions, a topic guide, if available, and results to determine the specific sexual wellbeing focus of the study; as such, in comparison with the quantitative studies, for the qualitative studies the review team allocated labels for the dimensions of sexual wellbeing being explored. Extraction was undertaken by one researcher (BB), with one third checked by a second reviewer (AA); all (n = 19) qualitative studies were extracted by two reviewers; all uncertainties were checked by a third reviewer (CC). As previously mentioned, we grouped the dimensions into three domains by drawing upon a social-ecological model: individual cognitive-affect; inter-personal, and; socio-cultural. Papers were included in the individual cognitive affect domain if they addressed sexual wellbeing at the individual rather than relational or wider socio-cultural levels. This included research taking an individual's experience of adverse events such as sexual coercion into account

(for example, see McGuire & Barbour, 2010). Papers grouped at the inter-personal level were those that specifically addressed relational issues in terms of sexual wellbeing, such as sexual satisfaction contextualised within relationships (for example, see Ahlborg, Rudeblad, Linnér & Linton, 2008).

Results

The PRISMA diagram, in Figure 1, details the 1,662 references located and screened, from which we included 162 in our review (see supplementary file 2 for a list of all 162 papers). Of these 162 papers, 18 reported an experimental or quasi-experimental design, 2 used case control, 5 used a longitudinal design, 7 prospective observational, 90 cross-sectional survey design, 19 were qualitative, 11 mixed methods, 5 papers reported the development and/or validation of a scale utilizing quantitative methods. Four studies used diaries and one a case series design. Just over half of all studies involved only women ($n = 86$), compared to 14 studies that recruited only men. Only ten of all included studies made explicit reference to the sample being lesbian, gay, bisexual, transsexual (LGBT). The majority of studies were conducted in the USA ($n = 45$), Canada ($n = 24$) or across multiple countries ($n = 24$); 8 studies were conducted in the UK; 5 studies in each of Germany, Italy, Netherlands, China, Iran; 4 studies in Australia; 3 studies in France and Israel; 2 studies in each of Turkey, Finland, South Africa, Croatia, Sweden; 1 in each of Brazil, South Korea, Chile, New Zealand, Cyprus, India, Belgium, Korea, Austria, Egypt, Czech Republic, Portugal, Vietnam, Iceland, Ireland, Thailand, Hong Kong. Of the 19 studies that utilised a qualitative design, 11 involved only women compared to 2 that recruited only men, which reveals a dearth of in-depth exploration of men's (regardless of sexual orientation or gender identity) sexual wellbeing.

How has sexual wellbeing been defined?

Only 10 papers, from our included 162, offered a definition of sexual wellbeing (Contreras, Lillo, & Vera-Villarroel, 2016; Crump & Byers, 2017; Foster & Byers, 2013, 2016; Frost, McClelland, & Dettmann, 2017; Kaestle & Evans, 2017; Mastro & Zimmer-Gembeck, 2015; Muise, Preyde,

Maitland, & Milhausen, 2010; Pearlman-Avnion, Cohen, & Eldan, 2017; Stephenson & Meston, 2015), although some of these were not explicitly stated, in that the authors did not necessarily use specific language such as “our definition” or “we operationalised sexual wellbeing as..”. Five of these definitions referred to the individual cognitive-affect domain only (sexual satisfaction, sexual anxiety, sexual self-esteem) (Crump & Byers, 2017; Foster & Byers, 2013, 2016; Kaestle & Evans, 2017; Muise et al., 2010). For example, one definition was given as “subjective sexual well-being was defined as the cognitive and affective evaluation of oneself as a sexual being” (Muise et al., 2010, p. 917). In contrast, three referred to multiple domains (Frost et al., 2017; Mastro & Zimmer-Gembeck, 2015; Pearlman-Avnion et al., 2017), such as “The term ‘sexual well-being’ refers to an individual’s subjective assessment of a wide range of physical, cognitive, emotional and social aspects of relations with oneself and with others” (Pearlman-Avnion et al., 2017, p. 280). One was unclear, but seemed to suggest sexual wellbeing was more than function and satisfaction: “The term subjective well-being provides a wider and more global assessment of the sexual experience, seeing beyond sexual function and differing from the concept of sexual satisfaction” (Contreras et al., 2016, p. 339).

We reviewed the ten papers that assessed sexual wellbeing in terms of socio-cultural influences, to identify whether they offered a broader definition, but only one offered a definition of sexual wellbeing: “Sexual well-being refers to an individual’s subjective appraisals of their sexuality, the presence of pleasurable and satisfying experiences, and the absence of sexual problems” (Foster & Byers, 2013, p. 149). Despite examining influences beyond the individual, this definition emphasises the individual. Overall, we noted a lack of use of terms seen in the WHO definition of sexual health, such as discrimination, and freedom from violence and coercion (World Health Organization, 2006), which some of the studies included in this review found impacted on sexual wellbeing (de Visser, Rissel, Richters, & Smith, 2007; Gupta et al., 2008; Hellemans, Loeys, Buysse, & De Smet, 2015; Luo, Parish, & Laumann, 2008). Indeed, the lack of agreement within the WHO/UNFPA working group was also evident in the studies reviewed. It is, therefore, rather striking that of 162 studies that sought to assess sexual wellbeing, or an aspect of it, so few offered a

definition of terms. Studies that focused on assessing sexual function might not be expected to offer a definition of sexual wellbeing, but to clarify, many of these studies were included in this review as the authors wrote about assessing sexual wellbeing. For example, a study of adult men with congenital adrenal hyperplasia assessed sexual function but the title of the paper was “Sexual wellbeing in adult male patients with congenital adrenal hyperplasia”, sexual wellbeing was referred to throughout the abstract and the conclusion was the condition partially impairs sexual wellbeing (Dudzinska, Leubner, Venz, & Quinkler, 2014).

What dimensions of sexual wellbeing have been assessed?

We identified a total of 59 dimensions of sexual wellbeing, which we aggregated under three domains (see Table 1): individual cognitive-affect ($n = 31$), inter-personal ($n = 22$) and socio-cultural ($n = 6$). As we stated in our introduction, our grouping of dimensions under these three domains draws upon a social ecological perspective: individual cognitive-affect domain (thoughts, emotions, subjective evaluations), the inter-personal domain and the socio-cultural domain. Table 1 shows the dominance across these papers of the individual cognitive-affect domain in terms of the dimensions used to assess sexual wellbeing; some exceptions include sexual satisfaction, which was assessed relationally in 32 papers (i.e., their sexual satisfaction in the context of a relationship), relationship satisfaction (assessed in 13 papers) and partner communication (assessed in 6 papers). Only 11 papers captured data that fell within a socio-cultural domain (Bay-Cheng, 2017; Domic & Philaretou, 2007; Fitz & Zucker, 2014; Foster & Byers, 2016; Henderson, Lehavot, & Simoni, 2009; Lees et al., 2014; Menger, Kaufman, Harman, Tsang, & Shrestha, 2015; Merghati-Khoei et al., 2014; Pérez, Mubanga, Aznar, & Bagnol, 2015; Schick, Zucker, & Bay-Cheng, 2008; Zarei, Khoei, Taket, Rahmani, & Smith, 2013), commonly focusing on gender norms and inequalities (Domic & Philaretou, 2007; Fitz & Zucker, 2014; Henderson et al., 2009; Lees et al., 2014; Menger et al., 2015; Merghati-Khoei et al., 2014; Pérez et al., 2015; Schick et al., 2008; Zarei et al., 2013). In summary, the evidence-base is

weighted towards these identified factors, which needs to be considered in terms of interpreting the evidence.

Commonly-used dimensions across the domains

Table 1 shows the dimensions in order of popularity. The most commonly used dimensions under the *individual cognitive-affect domain* were: sexual function (n = 88 papers), sexual satisfaction (assessed from an individualistic point-of-view) (n = 28 papers), sexual self-esteem (n = 17 studies) and sexual anxiety (n = 9 papers). Within the *inter-personal domain*, sexual satisfaction (assessed relationally) (n = 32 papers), relationship satisfaction (n = 13 papers) and partner communication (n = 6 papers) were most commonly assessed. A variety of dimensions were utilised across 11 papers assigned to the *socio-cultural domain*, so no one dimension dominated; however, 9 of these papers explored sexual wellbeing in relation to gender norms, stereotypes or other aspects of inequality related to gender (Domic & Philaretou, 2007; Fitz & Zucker, 2014; Henderson et al., 2009; Lees et al., 2014; Menger et al., 2015; Merghati-Khoei et al., 2014; Pérez et al., 2015; Schick et al., 2008; Zarei et al., 2013).

Why are wider socio-cultural influences important for sexual wellbeing?

We now focus on the 11 papers that we categorised as embracing socio-cultural influences upon sexual wellbeing, to tease out possible constraints upon one's freedom to achieve sexual wellbeing. Although these can be read as *influences on* sexual wellbeing rather than *attributes of* sexual wellbeing, we opt to highlight them as within a capability analysis are considered *conversion factors*: examples of conversion factors include personal characteristics of individuals, the environment, the social climate (Robeyns 2017). Conversion factors blur the line between wellbeing and the influences upon wellbeing, so they require careful consideration for inclusion in any measure of sexual wellbeing that is developed from a capability perspective. Nine papers considered some aspect of gender inequality, including two that sought to determine whether holding feminist

beliefs positively impacts on sexual wellbeing (Fitz & Zucker, 2014; Schick et al., 2008), one that explored whether gender socialization or sexual orientation has a greater impact on sexual satisfaction (Henderson et al., 2009), exploration of the role of cultural norms around divorce and sexual wellbeing (Merghati-Khoei et al., 2014; Zarei et al., 2013), as well as labial elongation (Pérez et al., 2015), social and cultural norms re intravaginal practices (Lees et al., 2014) and safer-sex practices for women in contexts of dominant gender norms (Menger et al., 2015). In an ethnographic exploration with 20 men of Greek-Cypriot background married to Eastern-European women, stereotypical views towards Greek-Cypriot women and Eastern-European women strongly shaped the men's approach to sexual relationships, and in turn their sexual satisfaction (Domic & Philaretou, 2007). Foster and Byres (2016) explored sexual wellbeing in relation to public stigma and self-stigma among individuals diagnosed with a sexually transmitted infection (STI). One might think the stereotypes and stigma associated with STIs would result in women reporting poorer sexual wellbeing outcomes, but the authors found this not to be the case; instead they found a group of women who, despite reporting low self-stigma, reported lower sexual satisfaction and sexual self-schemas as well as greater sexual anxiety. As such, Foster and Byers (2016) highlighted the importance of "other factors related to the female gender role that is associated with poorer sexual well-being" (Foster & Byers, 2016, p. 411). Whilst one study found "feminism, with its emphasis on gender equality and women's sexual rights, has a role to play in the progress toward safer and better sexual experiences for women" (Schick et al., 2008, p. 231), another saw the authors commenting that "women's attitudes and social environment work together to shape sexual well-being" (Fitz & Zucker, 2014, p. 7). Finally, Bay-Cheng (2017) invited us to consider the extent to which material security might foster "more affirming self-reflection when it comes to sensitive matters such as sexuality or that it mitigates any possible consequent stress" (Bay-Cheng, 2017, p. 292).

Gender-based violence as an under-emphasised influence on sexual wellbeing

Perhaps a striking example of a key factor often omitted from considerations of sexual wellbeing, is gender-based violence, which disproportionately affects women; globally the rates of domestic abuse and sexual violence are alarmingly high (Abrahams et al., 2014; Macdowall et al., 2013). Such a cause and consequence of gender inequality should be recognised as a major impact upon sexual wellbeing, if we follow the WHO definition of sexual health. Although the WHO offered a definition of sexual health, it takes us into wellbeing territory with its inclusion of living a life free from discrimination and violence, and with opportunities for pleasure (World Health Organization, 2006), and subjective wellbeing territory when asking people to evaluate their own lives. Of all 162 included papers, 16 assessed violence, such as domestic abuse or childhood sexual abuse, revealing the impact such experience(s) have upon adult sexual wellbeing (Barnum & Perrone-McGovern, 2017; Brüne, O, Schojai, Decker, & Edel, 2017; Crump & Byers, 2017; de Visser et al., 2007; Glenn & Byers, 2009; Gupta et al., 2008; Hellemans et al., 2015; Lacelle, Hebert, Lavoie, Vitaro, & Tremblay, 2012; Lemieux & Byers, 2008; Lorenz, Harte, & Meston, 2015; Luo et al., 2008; Menger et al., 2015; Parish, Luo, Laumann, Kew, & Yu, 2007; Sigurdardottir, Halldorsdottir, & Bender, 2014; Smylie et al., 2013; Wyatt et al., 2017). Of these, half ($n = 8$) explicitly sampled women, or included a mixed sample consisting of both men and women, with experience(s) of sexual abuse or partner violence (Barnum & Perrone-McGovern, 2017; Brüne et al., 2017; Crump & Byers, 2017; de Visser et al., 2007; Glenn & Byers, 2009; Lorenz et al., 2015; Sigurdardottir et al., 2014; Wyatt et al., 2017). Thus, in the past ten years, few studies have been conducted that sought to assess the impact such abuse has upon one's sexual wellbeing, and fewer based this assessment on people's own experiences. Few have recruited men, which is an important omission from the evidence-base despite women constituting the majority of survivors (Abrahams et al., 2014; Macdowall et al., 2013). These studies reveal the lasting influence of trauma, impacting on a variety of health outcomes including those which influence sexual wellbeing, such as poor relationship quality (Parish et al., 2007), and sexual difficulties (Lacelle et al., 2012; Lemieux & Byers, 2008; Luo et al., 2008). Thus, measures of sexual function and satisfaction that omit any questions about experience of violence may not be gathering

a full picture. Here, at least, the multidimensional measure developed by Smylie et al. (2013), which includes violence and coercion as one of the five dimensions, is a significant advance in this field (Smylie et al., 2013). It was developed with 16-24 year olds, so testing this with an older population would add value to this area.

Discussion

This rapid review sought to examine how sexual wellbeing was defined, as well as how it has been qualitatively explored or quantitatively measured. Of the 162 included studies, few offered an explicit definition of sexual wellbeing, despite this being a dominant concept under scrutiny across these studies. This field would benefit from more conceptual definitions being stated, and explicit reference to operational definitions of sexual wellbeing, which will help to move this field forward. Perhaps the Pearlman-Avnion et al., (2017) definition of sexual wellbeing comes closest to a holistic definition, so long as the ‘social’ aspect is interrogated beyond intimate relationships: “The term ‘sexual well-being’ refers to an *individual’s subjective assessment of a wide range of physical, cognitive, emotional and social aspects of relations with oneself and with others*” (Pearlman-Avnion et al., 2017, p. 280). However, some might suggest such a definition describes wellbeing rather than specifically sexual wellbeing.

We found 31 dimensions that we categorised under the individual cognitive-affect domain, which were used in 141 of our 162 included papers. More relational dimensions, such as relationship satisfaction and partner communication, were used in 52 papers. Collectively, the findings and comments across the 11 papers we categorised in the socio-cultural domain reveal the importance of conceptualising sexual wellbeing as individually experienced but socially and structurally influenced (World Health Organization, 2010). Individual cognitive-affect factors such as sexual self-esteem and sexual satisfaction are not formed in a vacuum; as those 11 papers showed, they can be powerfully and profoundly shaped by, for example, gender norms and discrimination. Across many of the 162 included papers, significant differences were reported between men and women, yet few

followed such findings through to a conclusion that wider socio-cultural factors need to be addressed in order to see improvements in people's sexual wellbeing. A social-ecological model reveals the profound shaping of one's gender performance at individual, close relationships, community and societal levels.

We also found a number of other gaps in evidence that can help shape future research: firstly, a number of dimensions under each domain appear absent. For example, might sexual health literacy be important, such as understanding the effects of pre-exposure prophylaxis (PrEP) for HIV prevention and its use impacting positively on intimacy? What role might peer influences/norms have on individual sexual wellbeing? Poverty, causing people to stress about basic needs, is an important structural influence, from a sociological point of view. Dimensions focusing on violence also appeared to emphasize intimate partner violence, with other forms of gender-based violence such as female genital mutilation not mentioned; only one study focused on a similar topic of labial elongation (Pérez et al., 2015). Secondly, few studies assessed dimensions *across* these domains, instead they often favoured a variety of dimensions from one domain (e.g., individual cognitive-affect). Thirdly, few papers employed qualitative method(s), which limits an in-depth understanding of the lived reality of influences upon people's sexual wellbeing. In particular, we found a dearth of in-depth exploration of men's (irrespective of sexual orientation) sexual wellbeing. Fourthly, the omission of gender-based violence, which can be experienced throughout the life course in numerous ways, and which we know to have a detrimental impact on physical, emotional and sexual wellbeing, renders many of the measures used at best limited and means they fail to capture the lived reality of many people's, particularly women's, sexual lives and experiences. Trauma in childhood, including witnessing domestic abuse, can increase emotional vulnerability and contribute to violence in adulthood (Mathews, Jewkes, & Abrahams, 2011) and raise risks for various psychological and behavioural problems, particularly among boys (Evans, Davies, & DiLillo, 2008; Wood & Sommers, 2011). Other work should also remind us that a major risk factor for sexual victimisation is previous sexual victimisation (Tharp et al., 2013). So, we need to pay attention to the

lasting effects such formative experiences can have, as their impact on one's sexual wellbeing and sexual relationships can be profound. In particular, how might such experiences impact on one's adaptation to circumstances, and the implications of this on subjective assessments of satisfaction?

Fifthly, taking a snapshot of a person's sexual wellbeing is a momentary glimpse into an aspect of their health; however, a healthy person might not have security of their health state. For example, one might gain health only to later see it diminished, such as from the withdrawal of public funding for free prescriptions. Different groups may be vulnerable to lacking security of their health status, such as those with low incomes (Wolff, 2009). As such, good sexual wellbeing today might not mean good sexual wellbeing next year if. In repeated large-scale social surveys of populations, we could capture such shifts over time. For example, the National Survey of Sexual Attitudes and Lifestyles (Natsal) conducted in Great Britain (England, Scotland, Wales) around every ten years since 1990, could track such changes with a capability-based measure of sexual wellbeing.

Finally, should a definition of sexual wellbeing include the concept of sexual wellbeing freedom? Returning to our initial interest in a capability-based measure of sexual wellbeing, we can see from the 11 papers that explored social and structural influences offer some insights into constraints upon (or conversion factors) sexual wellbeing freedom, including the influence of gender inequalities. During the development of a capability-based measure of sexual wellbeing, one would need to carefully consider how to account for such conversion factors. Capturing the substantive freedoms people have in relation to achieving sexual wellbeing are far harder to measure than what people report they have and do. However, as Robeyns (2017) makes clear, a capability analysis is only a partial one if it does not seek to grapple with these decisions. Our rapid review offers some insight into the importance of a social relations dimension, which appears across different capability lists, such as those by Nussbaum and Robeyns (Nussbaum, 2000; Robeyns, 2003), which could prove useful for a multidimensional measure of sexual wellbeing if it goes beyond a subjective assessment of satisfaction.

Our review was a rapid one, which inevitably raises limitations. As we restricted our search to five databases, we may not have captured all relevant literature. We engaged in a partial double screening of titles and abstracts and partial double data extraction. We did not extract statistical findings and, thus, we did not conduct a more extensive quantitative synthesis. Neither did we exclude studies on the basis of quality. Our work should be read in light of all of these.

Conclusions

Ten years on from a WHO/UNFPA report that indicated little agreement about what sexual wellbeing was nor how to assess it, our rapid review found few studies published since then offering an explicit definition of sexual wellbeing, despite this being a dominant concept under scrutiny across these studies (World Health Organization, 2010). We are not convinced that any of the existing definitions fully capture the complexity of the concept of sexual wellbeing, particularly when viewed via a capability lens. Further work is required to fully operationalise this concept and arrive at a holistic definition. The dominance of highly individualistic assessments of sexual wellbeing, focusing on individual cognitive-affect dimensions, requires further research that explores the impact of socio-cultural factors, but without losing the importance of cognitive-affective factors. As such, we recommend the development of a multi-dimensional measure of sexual wellbeing that includes dimensions across *all* domains (individual cognitive-affect, inter-personal and socio-cultural), and seek to capture sexual wellbeing *freedom*. Such a measure would be invaluable to intervention evaluators so that all relevant outcomes associated with an intervention to improve sexual health and wellbeing can be captured; in the absence of an effective measurement tool, the effectiveness of interventions may be inadequately captured, adversely affecting the decision-making around allocation of resources. Finally, a person may be satisfied because they have learned to adapt to their circumstances, for example, through socialisation into normative gender roles, so measures of satisfaction need to be treated with caution. Procedural methods can bring selection biases, so we recommend further qualitative research in this area to explore and better understand

the conversion factors to the achievement of good sexual wellbeing. We should also ask people what they actually value for their sexual wellbeing – *their* priorities to live a life they have reason to value.

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