

Are Older Adults Well Sexually? Sexual Well-Being among a Cross-National Sample of Older Adults

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Abstract

Objectives: To analyze sexual well-being (SWB) in older adults' perspective, to investigate the latent constructs that can work as major determinants in SWB and to examine the potential explanatory mechanisms of a SWB overall model, in an older cross-national sample. **Method:** Measures were completed, using a variety of appropriate methods, including demographics and interviews. Complete data were available for 163 older adults aged between 65-97 years ($M=74.2$; $SD = 4.743$). Data were subjected to content analysis. Representation of the associations and latent constructs were analyzed by a Multiple Correspondence Analysis (MCA). **Results:** The most prevalent response of the interviewed participants for SWB was "affection and care" (11.0%). A three-dimension model formed by "intimacy and well-being", "care, eroticism and desire", and "sexual activity and health" was presented as a best-fit solution for German older adults. SWB for Portuguese older adults were explained by a three-factor model: "intimacy, health and desire", "affection and well-being" and "sexual activity". **Conclusions:** The outcomes presented in this paper emphasized the need to explore the indicators of SWB among older adults and the under-developed potential of a SWB overall model for the older population.

Keywords: community-dwelling older adults, German, multiple correspondence analysis, Portuguese, sexual well-being

1. Introduction

The aging of the population is progressing rapidly in both developed and developing countries. The proportion of the world's population aged 60 and above increased from 8% in 1950 to 12% in 2013 and it is expected to reach 21% in 2050. Additionally, the older population is also aging. Globally, the share of old people aged 80 and above within the older population was 14% in 2013 and it is projected to reach 19% in 2050 (United Nations, 2013).

Sexuality is a broad term that includes social, emotional, and physical components (Southard & Keller, 2008). This concept was defined as a central aspect of life and encompasses sex, gender identities and roles, sexual orientation, eroticism, and social well-being (World Health Organization, 2006). Moreover, sexual acts are an important component of a close emotional relationship in late life (Gott & Hinchliff, 2003) and an important part of life (Lindau et al., 2007; Kontula & Haavio-Mannila, 2009).

It is generally agreed that older adults who engage in sexual activities benefit from an important source of reinforcement and pleasure, which may enhance psychological and physical well-being and may contribute to reduce a number of physical and mental health problems (Trudel, Turgeon, & Piché, 2010). Moreover, maintaining physical intimacy seems to be relevant for sexual well-being (SWB) when penetrative sex is no longer possible (Gott & Hinchliff, 2003).

SWB has been an ignored dimension that may contribute directly and indirectly to successful aging. Definitions of SWB vary greatly across research studies and often focus solely on sexual dysfunction (Mona et al., 2011). However, this concept comprises components, such as, sexual interest, functioning, satisfaction, healthy intimate relationships, sexual self-esteem and psychosexual variables (Mona et al., 2011; Rosen & Bachman, 2008).

Previous studies have shown that the prevalence of sexual activity declines with age, yet a substantial number of older adults engage in vaginal intercourse, oral sex, and masturbation even in the eighth and ninth decades of life

(Lindau et al., 2007). A number of reasons have been discussed for this decline in activity. According to Lindau et al. (2007), older individuals who identify as showing fair or poor health were more likely to report sexual problems and were less likely to be sexually active than individuals showing good health. Furthermore, physical problems that come with age may contribute to low self-esteem, poor self-image, and diminished sexual responsiveness and sexual desire (Bachmann & Lieblum, 2004). Additionally, there are differences between sexes. The most noticeable changes in women are related to declining functioning of the ovaries. Women may experience vaginal dryness and atrophy, due to the gradual decline in levels of oestrogen in the body (DeLamater, 2012). Men commonly experience a slow decline in testosterone production. The refractory period is especially affected, that is, they need a longer time to regroup after orgasm before they can achieve another orgasm. Additionally, the most prominent change in male sexual function with age is erectile dysfunction (Kenny, 2013).

The link between SWB and aging has been a neglected area of research, for a long time (Trudel et al., 2010). SWB from birth to the end of the fertile period is a well-researched subject in the social sciences. SWB and sexual development in old age, however, has received much less attention (DeLamater, 2012; Schwartz, Diefendorf & McGlynn-Wright, 2014); this is due to the widely held belief that older adults are asexual (Kenny, 2013). Moreover, late life sexuality has been often regarded as a medical and specialist research topic (Gott & Hinchliff, 2003). Indeed, treatment for common sexual medical conditions that occur in late life, prevention of sexually transmitted diseases, and risky sexual behaviour among older adults, are the most broached areas when considering older adults' SWB (Kenny, 2013; Lindau & Gavrilova, 2010).

Considering that SWB in old age is self-perceived and that people in different cultures show different meanings for their experiences, qualitative research allows access to the varying perspectives and experiences of older adults (e.g. Karraker, DeLamater, & Schwartz, 2011; Schwartz et al., 2014).

Knowledge about older adults' SWB is valuable for planning public health resources, expertise, and services related to maintaining or enhancing older adults' SWB. In this context, our study aims to analyze SWB in older adults' perspective, to investigate the latent constructs that can work as major determinants in SWB and to examine the potential explanatory mechanisms of a SWB overall model in an older cross-national sample.

2. Methods

2.1 Participants

The total sample included 163 eligible non-institutionalized individuals, aged 65 and over ($M=74.2$; $SD = 4.743$; range 65-97). 57.4% female, 50.0% German and 67.6% married or in a relationship. The sampling of participants was based on the availability of participants and they were recruited through senior universities message boards, local and art community centres list-serves, in Lisbon and the Algarve regions. Once informed consent had been received, participants went through a cognitive screening assessment. Participant eligibility included: (1) 75 years of age or older and (2) participants' score in the normal range on the Mini-Mental Status Exam (>26) (Folstein, Folstein, & McHugh, 1975). None of the participants had any history of psychiatric or neurological illness, or history of drug or alcohol abuse, which might compromise cognitive function. The American Psychological Association's standards on the ethical treatment of participants were followed.

Table 1. Characterization of participants according to socio-demographic and health-related variables

	German		Portuguese		Total	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
<i>N</i>	68		68		136	
Age (<i>M</i> ; <i>SD</i>)	73.1 (4.104)		75.2 (5.381)		74.2 (4.743)	
Gender						
Female	38	55.9	40	58.8	78	57.4
Male	30	44.1	28	41.2	58	42.6
Education						
< High school	41	60.3	42	61.8	83	61.0
≥ High school	27	39.7	26	38.2	53	39.0

Marital Status							
Married or in a relationship	47	66.2	47	69.1	92	67.6	
Not married nor in a relationship	23	33.8	21	30.9	44	32.4	
Professional Status							
Inactive	47	69.1	46	67.6	93	68.4	
Active	21	30.9	22	32.4	43	31.6	
Family Annual Income							
≤10,000 €	30	44.1	36	52.9	66	48.5	
≥10,001	38	55.9	32	47.1	70	51.5	
Perceived Health							
Good	39	57.4	45	66.2	84	61.8	
Poor	29	42.6	23	33.8	52	38.2	

Note. Total sample: $n = 163$; SD = standard deviation.

2.2 Materials and Procedure

2.2.1 Data Collection

Semi-structured interviews based on an interview guide were conducted in the participants' own homes. Each interview was performed individually and began with a set of straightforward background questions, to find out about the participant's living arrangements, health, nationality, age, family, education and work, followed by one open-ended question that was created in order to allow any kind of narrative about each theme, as well as to facilitate the fluency of the participants' narratives about their perspectives: "I would like to understand what, in your point of view, contributes to your sexual well-being in this phase of your life". This question was elaborated to address one core area: SWB. All interviews were conducted and audio-recorded by the same researcher (SvH) who had no previous relationship with the participants. The interviews lasted an average of 30 minutes; the shortest was 20 min and the longest was 45 minutes. Upon completion of the interview, participants were asked to evaluate the schedule and the interview process. Participants were also asked to identify any questions that they found difficult to answer.

2.2.2 Data Analysis

Data was analyzed, employing content analysis and using the following procedure: a) development of major emergent categories, mutually exclusive, that reflected the 163 interviews, for the pre-existing category: SWB; b) creation a list of coding cues; c) analysis of verbatim quotes and best fit characterizations for a given emergent category d) definition of sub-categories, within and across the narratives, while preserving the principle of homogeneity of the category and e) derivation of major emergent categories until the point of theoretical saturation was reached (Bardin, 2007). Our structure of sub-categories and categories was then subjected to an external review and critical feedback was obtained from reviewers with experience with older adults. An independent analysis of the 163 interviews was performed by a jury of two psychologists (both faculty) and a final group co-resolution, regarding the categories was made. Reliability between researchers was measured through the Cohen's Kappa. All SWB categories presented a value above .80 ($.849 \leq k \leq .934$), thus indicating a high agreement rate.

Representations of the associations between the emergent categories obtained from the narrative analysis, and latent constructs that can work as major determinants in older adults' verbalized SWB, were assessed by a Multiple Correspondence Analysis (MCA). Statistic criteria included the following: (a) minimum of 5.0% of the total variance explained by each factor and (b) minimum eigenvalue of 1 for each factor. Data were analyzed using SPSS for Windows (version 19.0; SPSS Inc., Chicago, IL). The William James Research Center coordination from ISPA - Instituto Universitário approved this study.

3. Results

3.1 Content Analysis of the Emergent Categories

Findings designated a total of 12 categories for SWB: (a) “affection and care”; (b) “intimacy with a partner”; (c) “sexual touching”; (d) “sexual openness and communication”; (e) “eroticism and sensuality”; (f) “sexual health”; (g) “physical health”; (h) “feeling physically attractive”; (i) “sexual intercourse”; (j) “sexual desire for others”; (k) “emotional well-being”; and (l) “mental health”. “Affection and care” was the most reported indicator of SWB for the participants (11.0%), whereas “sexual intercourse and sexual desire for others were the least referred indicators of SWB” (both 4.9%), as shown in Table 2.

“Sexual openness and communication” and “physical health were the most verbalized indicators of SWB for German participants” (both 12.7%) whilst “emotional well-being” was the least mentioned indicator of SWB by German participants (3.3%). Additionally, “affection and care”, “eroticism and sensuality” and “sexual health” were the most mentioned indicators of SWB by Portuguese participants (10.3%), whereas “sexual intercourse” and “sexual desire for others” were the least mentioned indicators of SWB by German participants (6.1%) (see Table 2).

3.1.1 Affection and Care

Participants reported that demonstrations of affection and care, such as cuddling, hugging and kissing were important for their SWB.

“We often kiss when we are alone.” (Participant 17)

“We hug each other every time we feel like it.” (Participant 78)

3.1.2 Intimacy with a Partner

Participants verbalized the relevance of sharing intimacy with a partner, as contributing to their SWB.

“My husband and I have a very pleasant intimate life. We have our own games and we want to keep it that way.” (Participant 41)

“Being able to share intimacy with someone who is important to me is one of the best things in life.” (Participant 16)

3.1.3 Sexual Touching

Sexual touching, such as caressing, massaging, rubbing, touching with the lips and fingertips were verbalized by these participants as contributing to their SWB.

“I need to feel that he enjoys touching me.” (Participant 123)

“I enjoy being caressed and massaged.” (Participant 111).

“We have our intimate ritual. We first caress each other for a long time and only after do we continue to other sexual acts.” (Participant 143).

3.1.4 Sexual Openness and Communication

Being able to openly communicate sexual concerns, fantasies and expectations was indicated as a relevant indicator of SWB. Furthermore, showing an accepting attitude concerning sexual interests was verbalized as important for their SWB.

“I feel I can talk openly with my wife about my sexual expectations.” (Participant 67)

“He accepts all my sexual fantasies.” (Participant 21)

3.1.5 Eroticism and Sensuality

“Eroticism and sensuality was verbalized as contributing to these participants” SWB. Moreover, older adults reported sexual arousal, dancing, sexual fantasies and anticipation for the sexual contact, as significant for their eroticism and sensuality.

“I feel in a state of sexual arousal when I anticipate that he will touch me.” (Participant 35)

“Stimulating my erogenous zones is very erotic to me.” (Participant 51)

3.1.6 Sexual Health

Sexual health was verbalized as a relevant indicator of SWB. Furthermore, problems concerning sexual function, such as, erectile dysfunction, pain with penetration and vaginal dryness were verbalized as negatively affecting their SWB.

“Everything is functioning properly. I continue to feel a man.” (Participant 27)

“I no longer feel pain during sex. This really improved my sex life.” (Participant 102)

3.1.7 Physical Health

Physical function was reported by these participants as contributing to SWB. Moreover, some physical conditions, such as hypertension and diabetes, and medication intake were indicated as negatively affecting SWB.

“I take care of my health. A simple headache may harm my sex interest.” (Participant 131)

“I need to feel physically well, to engage in sex with my partner.” (Participant 154).

3.1.8 Feeling Physically Attractive

Feeling physically attractive to others, namely to their partner, was indicated by these participants as contributing to SWB.

“I need to feel pretty and attractive to my husband.” (Participant 112)

“My wife still finds me good looking and that is important for my sexual drive.” (Participant 157).

3.1.9 Sexual Intercourse

Sexual intercourse, namely vaginal penetration and oral sex, was reported as relevant for older adults' SWB.

“For me, sex is mainly penetration.” (Participant 56)

“We take our time while we enjoy having sex.” (Participant 118)

3.1.10 Sexual Desire for Others

Feeling desire for others was stated as important for older adults' SWB.

“I need to feel desire for him, in order to have sex.” (Participant 42)

“Sex is not worth it without feeling sexual desire.” (Participant 51)

3.1.11 Emotional Well-Being

Emotional and psychological well-being was indicated by these older participants as contributing to their sexual expression and SWB.

“Being in a stable relationship gives me emotional well-being and allows me to fully express myself sexually.” (Participant 14)

“Emotional well-being is key for having a sex life.” (Participant 78)

3.1.12 Mental Health

Mental health was verbalized as a relevant indicator of SWB. Furthermore, problems concerning poor mental health, such as depression and anxiety, negatively affected the sexual behavior of these participants.

“Sometimes I feel depressed. On those periods, it is difficult for me to think about having a sex life.” (Participant 76)

“I need to be well mentally to be available for sex.” (Participant 98)

Table 2. Emergent categories resulting from content analysis of the pre-category “sexual well-being”

	German		Portuguese		Total	
	Category frequency	Category percentage	Category frequency	Category percentage	Category frequency	Category percentage
Affection and care	53	11.8	49	10.3	102	11.0
Intimacy with a partner	48	10.7	45	9.5	93	10.1
Sexual touching	30	6.7	31	6.5	61	6.6
Sexual openness and	57	12.7	38	8.0	95	10.3

communication						
Eroticism and sensuality	48	10.7	49	10.3	97	10.5
Sexual health	51	11.4	49	10.3	100	10.8
Physical health	57	12.7	41	8.6	98	10.6
Feeling physically attractive	39	8.7	41	8.6	80	8.7
Sexual intercourse	16	3.6	29	6.1	45	4.9
Sexual desire for others	16	3.6	29	6.1	45	4.9
Emotional well-being	15	3.3	37	7.8	52	5.6
Mental health	19	4.2	37	7.8	56	6.1
Score of pre-category "sexual well-being"	449	100.0	475	100.0	924	100.0

3.2 Multiple Correspondence Analysis of the Emergent Categories

Multiple correspondence analysis assesses the correlational structure of the category in our study: SWB. Hence, outcomes indicate a model for SWB for each nationality group, with diverse factors and factor loadings.

Findings showed a three-dimension model (accounting for 73.1% of total variance) composed by: "intimacy and well-being", "care, eroticism and desire", and "sexual activity and health", as a best-fit solution for German participants (see Table 3) and a three-dimension model (accounting for 90.5% of total variance) composed by: "intimacy, health and desire", "affection and well-being" and "sexual activity", as a best-fit solution for Portuguese participants (see Table 4).

Table 3. Three-dimensional representation for "sexual well-being" for German older adults: factor loadings for each dimension, mean loadings and % inertia (variance) explained

Categories	Dimensions			Mean
	Intimacy and well-being	Care, eroticism and desire	Sexual activity and health	
Affection and care	.141	.508	.176	.275
Intimacy with a partner	.909	.003	.002	.305
Sexual touching	.134	.091	.667	.297
Sexual openness and communication	.391	.473	.011	.292
Eroticism and sensuality	.068	.492	.177	.246
Sexual health	.517	.331	.001	.283
Physical health	.061	.142	.588	.264
Feeling physically attractive	.017	.009	.216	.081
Sexual intercourse	.017	.009	.213	.080
Sexual desire for others	.318	.428	.003	.250
Emotional well-being	.751	.082	.005	.279

Mental health	.314	.484	.016	.271
Eigenvalue	3.638	3.052	2.075	2.923
Inertia	.303	.255	.173	.244
% of Variance	30.275	25.450	17.342	24.356

Table 4. Three-dimensional representation for “sexual well-being” for Portuguese older adults: factor loadings for each dimension, mean loadings and % inertia (variance) explained

Categories	Dimensions			Mean
	Intimacy, health and desire	Affection and well-being	Sexual activity	
Affection and care	.641	.156	.003	.267
Intimacy with a partner	.819	.081	.002	.301
Sexual touching	.001	.419	.445	.288
Sexual openness and communication	.144	.671	.169	.328
Eroticism and sensuality	.257	.411	.221	.296
Sexual health	.756	.060	.012	.276
Physical health	.803	.092	.061	.319
Feeling physically attractive	.000	.434	.428	.287
Sexual intercourse	.007	.332	.628	.322
Sexual desire for others	.805	.092	.062	.320
Emotional well-being	.144	.671	.171	.329
Mental health	.167	.654	.042	.288
Eigenvalue	4.544	4.073	2.244	3.621
Inertia	.378	.340	.187	.302
% of Variance	37.817	33.967	18.654	30.217

4. Discussion

This study aims to explore SWB reported by older adults, to investigate the latent constructs that can work as major determinants in SWB and to examine the potential explanatory mechanisms of a SWB overall model in an older cross-national sample. In doing so, this study contributes to the literature in two ways. Firstly, our results show the relevance of affection and care, sexual health, and physical health as the major indicators of SWB in older adults' perspective and, secondly, our results show two distinct correlational models for SWB for German and Portuguese older adults.

For German participants, the largest factor “intimacy and well-being” accounted for 30.1% of total variance, whereas for Portuguese participants, “intimacy, health and desire” represented 37.8% of total variance. “Sexual activity” was the least representative factor for Portuguese older adults (18.7% of total variance) and “sexual activity and health” for the German participants (17.3% of total variance).

The MCA considering the correlational structure of SWB suggests that this is largely explained by a three-factor model, for each nationality. Hence, for German participants, “intimacy with a partner”, “sexual health”, and “emotional well-being” composed the first factor (“intimacy and well-being”). Previous literature suggested that intimacy, a sense of closeness and familiarity with another, has been closely tied to the experience of sexuality in old age (Robinson & Molzahn, 2007). Rosen and Bachmann (2008) found that sexual activity and satisfaction are positively associated with emotional well-being, though causal order cannot be established. Moreover, older adults' happiness was positively associated with good sexual function (Laumann, Paik, & Rosen, 1999). Additionally, sexual health may be affected by physical function and medication (e.g., hypertension, diabetes), which are also linked to impaired sexual function (DeLamater & Sill, 2005).

The second factor (“care, eroticism and desire”) assembled “affection and care”, “sexual openness and

communication”, “eroticism and sensuality”, “sexual desire for others” and “mental health”. These results corroborate a previous study with older adults, in which, 86% of respondents were engaged in sexual activities, such as, kissing, hugging, cuddling, sexual touching, caressing, expressing affection, sexual intercourse, self-stimulation, and oral sex (American Association of Retired Persons, 2005). Relationships provide the proximity between individuals, interpersonal commitment, and shared interests that define companionship, care, sensuality and intimacy (Stroebe, Abakoumkin, & Schut, 1996). However, research has directed less attention to the influence of significant others on SWB, even though social relationships have considerable impact on health status among older adults. Indeed, there is still a disconnection between research on SWB and that on social relationships (Hirayama & Walker, 2010). Additionally, poor mental health as reflected, for example, in depression, may negatively affect sexual behavior and well-being in old age (Carpenter, Nathanson, & Kim, 2009).

The third factor (“sexual activity and health”) encompassed “sexual touching”, “physical health”, “feeling physically attractive” and “sexual intercourse”; thus these older adults valorized sexual activities and physical health. Yet, “feeling physically attractive” (.216) and “sexual intercourse” (.213) had a low loading in this factor, which indicated that these categories are not very significant in this factor. Sexual functioning, activity, interest and satisfaction have been associated with physical benefits such as cardiovascular health, physical benefits of exercise, increased relaxation, and decreased pain sensitivity (Brody, 2010; Chen, Zhan, & Tan, 2009; Jannini, Fischer, Bitzer, & McMahan, 2009). Moreover, health problems of older adults may interfere with their desire for or ability to engage in sexual activities, such as sexual touching and intercourse (Karraker et al., 2011). The link between physical health and sexual activity may explain the observed association between increased age and decreased engagement in partnered sexual activity (Call, Sprecher, & Schwartz, 1995; Galinsky & Waite, 2014). Furthermore, a given health condition may have a different effect on sexual function for older men and women. For example, hypertension, may compromise the mechanics of vaginal intercourse for older men through erectile dysfunction, but the same condition in an older woman may not interfere with her capacity for vaginal intercourse (Dennerstein, Alexander, & Kotz, 2003).

For Portuguese participants, the first factor (“intimacy, health and desire”) gathered “affection and care”, “intimacy with a partner”, “sexual health”, “physical health”, and “sexual desire for others”. Research to date seems to have underestimated the potential of older adults to deal with their concerns about sexual functioning through their social relationships (Hirayama & Walker, 2010). However, sexual desire in later life has been suggested to be more closely related to social or relational demonstrations of affection and care, than to physiological variables (DeLamater & Sill, 2005). Additionally, the intimate relationship with the partner could make poor sexual functioning less problematic and thus, protect older adults’ psychological well-being from sexual concerns (Hirayama & Walker, 2010). Moreover, physical health conditions can be relevant regarding sexual relations and sexual health (Lindau et al., 2007). Physical health affects the capacity of individuals and their partners to engage in sexual activity and mortality influences the availability of sexual partners (Karraker et al., 2011). Additionally, specific conditions, namely, diabetes and hypertension are associated with declines in sexual function (Lindau et al., 2007).

“Sexual openness and communication”, “eroticism and sensuality”, “feeling physically attractive”, “emotional well-being” and “mental health” composed the second factor (“affection and well-being”). However, “eroticism and sensuality” and “feeling physically attractive” (.411) and “sexual intercourse” (.434) had a low loading in this factor, which indicated that these categories are not very significant in this factor. Hurd (2000) highlighted the shift that occurs in priorities as people reach old age, that is, the emphasis on attractive appearance in the eyes of other people is replaced by one on health. For older adults, feeling sensual and physically attractive affects their self-esteem (Hurd, 2000). Moreover, openly communicating with significant others helps older adults to clarify their sexual expectations, concerning affection, sexual expression, eroticism and sensuality (Hirayama & Walker, 2010). Both partners’ emotional and psychological well-being may influence partnered sexual expression and activity (Laumann, Das, & Waite, 2008). Furthermore, how older adults perceive their sexual functioning predicts their mental and emotional well-being (Hirayama & Walker, 2010). Conversely, declines in mental health and cognitive function associated with aging (Cole & Dendukuri, 2003) can affect sexual expression. For instance, depression is associated with decreases in sexual function and well-being comparable to those experienced by individuals with chronic health conditions (Wells & Burman, 1991). Additionally, antidepressant medication use is related to declines in sexual desire (DeLamater & Sill, 2005).

The third factor (“sexual activity”) comprised “sexual touching” and “sexual intercourse”. These results are consistent with the literature, suggesting that older adults continue to enjoy, value, and engage in sexual activity (Lindau et al., 2007). As individuals age, the means of sexual expression may change, with less focus on orgasm

or vaginal intercourse and more frequent sexual touching (Galinsky, 2012). Moreover, increasing age predicted decreased sexual activity and was related to declining health and lack of partner (American Association of Retired Persons, 2005).

Despite valuable findings, there are a number of limitations that should be noted. Although the sample of participants was diverse, because of the non-probabilistic nature of this study and its proneness to sampling bias, the sample is not representative of the entire population, cannot lead to generalizations to the entire older adult population and only reveals the perceptions of our participants. Our sampling was performed purposefully with the objective of facilitating the understanding of the under-developed potential of SWB. Contrary to research using closed-end questionnaires, this approach provides insightful benefits into the overall nature of this concept. Considering that research shows limited definitions of SWB outcomes, qualitative research therefore, was necessary to maximize validity and to highlight the need for researchers to be attentive to the diverse perspectives of older adults' SWB. In addition, even though the interviews were conducted with a view to being bias free, one core area was predefined to be addressed. Hence, interviews tended to be steered to this area which could have biased the results. Further research is needed into the conceptual framework of SWB in old age. Additionally, a consideration of a comprehensive set of bio-psycho-social risk factors is recommended

Notwithstanding these limitations, the present study represents an important empirical step in understanding the potential of SWB in old age. We identified several indicators that may positively contribute to the enhancement of SWB in old age. Thus, policy programs and community interventions, which include specific indicators of SWB such as affection and care, sexual health and physical health, are recommended. To date, our knowledge of the WB in the oldest cohorts is still limited. Future interventions with the older population may increase their efficacy by including the above variables. In fact, there is a continued need for professionals to be open to discuss sexuality and assess the SWB concerns of older adults.

In sum, this study illustrated the cross-cultural context and multidimensional nature of SWB in old age. Additionally, a SWB model yielded information on the ways older adults from different cultures delineate their SWB. Hence, we consider that SWB is a key aspect for old people, and that researchers and health care professionals may use these user-driven results in future health care planning and cross-cultural community interventions with older adults.

References

- American Association for Retired Persons (AARP). (2005). *Sexuality at Midlife and Beyond: 2004 Update of Attitudes and Behaviors*. Washington, DC.
- Bachmann, G. A., & Lieblum, S. R. (2004). The impact of hormones on menopausal sexuality: A literature review. *Menopause: The Journal of The North American Menopause Society*, 11(1), 120-130. <http://dx.doi.org/10.1097/01.GME.0000075502.60230.28>
- Bardin, L. (2007). *Análise de conteúdo* [Content analysis]. Lisboa: Edições.
- Brody, S. (2010). The relative health benefits of different sexual activities. *Journal of Sexual Medicine*, 7, 1336-1361. <http://dx.doi.org/10.1111/j.1743-6109.2009.01677.x>
- Call, V., Sprecher, S., & Schwartz, P. (1995). The incidence and frequency of marital sex in a national sample. *Journal of Marriage and the Family*, 57, 639-652. <http://dx.doi.org/10.2307/353919>
- Carpenter, L. M., Nathanson, C. A., & Kim, Y. J. (2009). Physical women, emotional men: Gender and sexual satisfaction in midlife. *Archives of Sexual Behavior*, 38, 87-107. <http://dx.doi.org/10.1007/s10508-007-9215-y>
- Chen, X., Zhang, Q., & Tan, X. (2009). Cardiovascular effects of sexual activity. *Indian Journal of Medical Research*, 130, 681-688.
- Cole, M. G., & Dendukuri, N. (2003). Risk factors for depression among elderly community subjects: A systematic review and meta-analysis. *American Journal of Psychiatry*, 160(6), 1147-1156. <http://dx.doi.org/10.1176/appi.ajp.160.6.1147>
- DeLamater, J. (2012). Sexual expression in later life: A review and synthesis. *Journal of Sex Research*, 49(2-3), 125-141. <http://dx.doi.org/10.1080/00224499.2011.603168>
- DeLamater, J., & Sill, M. (2005). Sexual desire in later life. *Journal of Sex Research*, 42, 138-149. <http://dx.doi.org/10.1080/00224490509552267>
- Dennerstein, L., Alexander, J. L., & Kotz, K. (2003). The menopause and sexual functioning: A review of the

- population-based studies. *Annual Review of Sex Research*, 14, 64-82.
- Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). Mini-mental state. A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, 12, 189-198.
- Galinsky, A. M. (2012). Sexual touching and difficulties with sexual arousal and orgasm among U. S. older adults. *Archives of Sexual Behavior*, 41, 875-890. <http://dx.doi.org/10.1007/s10508-011-9873-7>
- Galinsky, A. M., & Waite, L. J. (2014). Sexual activity and psychological health as mediators of the relationship between physical health and marital quality. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 69(3), 482-493. <http://dx.doi.org/10.1093/geronb/gbt165>
- Gott, M., & Hinchliff, S. (2003). How important is sex in later life? The views of older people. *Social Science & Medicine*, 56, 1617-1628. [http://dx.doi.org/10.1016/S0277-9536\(02\)00180-6](http://dx.doi.org/10.1016/S0277-9536(02)00180-6)
- Hirayama, R., & Walker, A. J. (2011). Who helps older adults with sexual problems? Confidants versus physicians. *Journal of Gerontology: Social Sciences*, 66B(1), 109-118. <http://dx.doi.org/10.1093/geronb/gbq021>
- Hurd, L. C. (2000). Older women's body image and embodied experience: An exploration. *Journal of Women and Aging*, 12, 77-97.
- Jannini, E. A., Fischer, W. A., Bitzer, J., & McMahon, C. G. (2009). Is sex just fun? How sexual activity improves health. *Journal of Sexual Medicine*, 6, 2640-2648. <http://dx.doi.org/10.1111/j.1743-6109.2009.01477.x>
- Karraker, A., DeLamater, J., & Schwartz, C. R. (2011). Sexual frequency decline from midlife to later life. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 66, 502-512. <http://dx.doi.org/10.1093/geronb/gbr058>
- Kenny, R. T. (2013). A review of the literature on sexual development of older adults in relation to the asexual stereotype of older adults. *Canadian Journal of Family and Youth*, 5(1), 91-106.
- Kontula, O., & Haavio-Mannila, E. (2009). The impact of aging on human sexual activity and sexual desire. *Journal of Sex Research*, 46(1), 46-56. <http://dx.doi.org/10.1080/00224490802624414>
- Laumann, E. O., Das, A., & Waite, L. J. (2008). Sexual dysfunction among older adults: Prevalence and risk factors from a nationally-representative U. S. probability sample of men and women 57-85 years of age. *Journal of Sexual Medicine*, 5, 2300-2311. <http://dx.doi.org/10.1111/j.1743-6109.2008.00974.x>
- Laumann, E. O., Paik, A., & Rosen, R. C. (1999). Sexual dysfunction in the United States. *Journal of the American Medical Association*, 281, 537-544. <http://dx.doi.org/10.1001/jama.281.6.537>
- Lindau, S., Schumm, P., Laumann, E. O., Levinson, W., O'Muircheartaigh, C. A., & Waite, L. J. (2007). A national study of sexual and health among older adults in the United States. *New England Journal of Medicine*, 357, 762-774. <http://dx.doi.org/10.1056/NEJMoa067423>
- Lindau, S. T., & Gavriloiva, N. (2010). Sex, health, and years of sexually active life gained due to good health: Evidence from two US population based cross sectional surveys of ageing. *BMJ*, 340(810), 1-11. <http://dx.doi.org/10.1136/bmj.c810>
- Mona, L. R., Syme, M. L., Goldwaser, G., Cameron, R. P., Chen, Clemency, C. ... Lemos, L. (2011). Sexual health in older adults: Conceptualization and treatment. In K. Sorocco, & S. Lauderdale (Eds.), *Cognitive behavior therapy with older adults :Innovations across care settings* (pp. 261-285). New York: Springer.
- United Nations, Department of Economic and Social Affairs, Population Division. (2013). *World Population Ageing 2013*. New York: United Nations.
- Robinson, J. G., & Molzahn, A. E. (2007). Sexuality and quality of life. *Journal of Gerontological Nursing*, 33(3), 19-27.
- Rosen, R. C., & Bachmann, J. A. (2008). Sexual well-being, happiness and satisfaction, in women: The case for a new conceptual paradigm. *Journal of Sex and Marital Therapy*, 34, 291-297. <http://dx.doi.org/10.1080/00926230802096234>
- Schwartz, P., Diefendorf, S., & McGlynn-Wright, A. (2014). Sexuality in Aging. In D. L. Tolman, & L. M. Diamond (Eds.), *APA Handbook of Sexuality and Psychology: Vol. 1. Person-Based Approaches* (pp. 523-551). Washington: American Psychological Association. <http://dx.doi.org/10.1037/14193-017>
- Southard, N., & Keller, J. (2008). The importance of assessing sexuality: A patient perspective. *Clinical Journal*

- of Oncology Nursing*, 13(2), 213-217. <http://dx.doi.org/10.1188/09.CJON.213-217>
- Stroebe, W., Stroebe, M., Abakoumkin, G., & Schut, H. (1996). The role of loneliness and social support in adjustment to loss: A test of attachment versus stress theory. *Journal of Personality and Social Psychology*, 70, 1241-1249. <http://dx.doi.org/10.1093/geronb/gbr058>
- Trudel, G., Trugeon, L., & Piché, L. (2010). Marital and sexual aspects of old age. *Sexual and Relationship Therapy*, 25(3), 316-341. <http://dx.doi.org/10.1080/14681991003750467>
- Wells, K. B., & Burman, M. A. (1991). Caring for depression in America: Lessons learned from early findings of the medical outcomes study. *Psychiatric Medicine*, 9, 503-519. [http://dx.doi.org/10.1016/0163-8343\(91\)90056-3](http://dx.doi.org/10.1016/0163-8343(91)90056-3)
- WHO. (2006). *Defining sexual health—Report of a technical consultation on sexual health 28-31 January 2002, Geneva*. Sexual Health Document Series. Geneva, World Health Organisation.

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