



April 2020

Development of the Occupational Performance Inventory of Sexuality and Intimacy (OPISI): Phase One

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Recommended Citation

Walker, B., Otte, K., LeMond, K., Hess, P., Kaizer, K., Faulkner, T., & Christy, D. (2020). Development of the Occupational Performance Inventory of Sexuality and Intimacy (OPISI): Phase One. *The Open Journal of Occupational Therapy, 8*(2), 1-18. <https://doi.org/10.15453/2168-6408.1694>

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Abstract

Background: The occupational therapy profession needs a framework to guide understanding of the occupational nature of sexuality and intimacy, assessment, intervention design, and measurement of outcomes. This study aimed to define the occupational nature of sexuality and intimacy and develop a theoretical and occupation-based screen, in-depth self-assessment, and performance measure.

Method: The Occupational Performance Inventory of Sexuality and Intimacy (OPISI) was developed following DeVellis's (2017) guidelines for scale development that involved mapping the construct, generating an item pool, determining the format for measurement, and reviewing the initial item pool.

Results: The Occupational Therapy Sexual Assessment Framework (OTSAF) was developed to define the occupational nature of sexuality and intimacy, depict how the theoretical constructs intertwine with the domain of occupational therapy, and guide scale development. The OPISI includes a self-screen, in-depth self-assessment, and an individualized measure to establish baseline performance and detect self-perceived change in ability, satisfaction, understanding, and confidence in skills and ability to improve occupational performance associated with sexuality and intimacy over time.

Conclusion: The OTSAF defines the occupational nature of sexuality and intimacy and informs the occupational therapy scope of practice. The OPISI includes theoretical and occupation-based tools to adequately screen, assess, and measure performance related to the complex occupational nature of sexuality and intimacy. Formal validation is needed prior to releasing the OPISI for clinical use.

Comments

The authors report that they have no conflicts of interest to disclose.

Keywords

OPISI, sexuality, intimacy, assessment, framework, occupational therapy

Cover Page Footnote

The authors would like to acknowledge Christopher Bentlage and Jeremy Warriner, who shared their experiences, highlighted the significance of sexuality and intimacy to individuals with disabilities, and invoked shame in our profession for our silence in addressing the topic in practice. We would also like to acknowledge Dr. George Szasz, a pioneer in sexual medicine, who readily shared his experiences, insight, and expertise throughout this process and supported our efforts to break the silence in addressing sexuality and intimacy in occupational therapy.

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DOI: 10.15453/2168-6408.1694

Sexuality and intimacy are fundamental aspects of the human experience. According to the World Health Organization (WHO, 2006), sexuality encompasses sex, gender identities and roles, sexual orientation, intimacy, and reproduction; is influenced by the interplay between psychological, biological, social, economic, political, cultural, legal, historical, religious, and spiritual factors; and is expressed in attitudes, values, beliefs, behaviors, practices, roles, and relationships. Given that sexuality contributes to a person's overall health and wellness (Fritz et al., 2015; Helmes & Chapman, 2012; Stanger, 2009), one can infer that when an illness, injury, condition, or life stage compromises health and wellness that it will impact sexuality and intimacy as well (Isler et al., 2009; Lohman et al., 2017; McGrath & Lynch, 2014; Stanger, 2009).

Adverse psychological, physiological, and relational consequences have been associated with illness, injury, and disability and often result in decreased sexual satisfaction, participation, and frequency (Eglseder et al., 2018; Richards et al., 2016; Sellwood et al., 2017). Societal stigmas that overshadow people with disabilities may hinder positive sexual experiences (Nilsson et al., 2016; Sakellarios & Sawada, 2006; van Hees et al., 2017). When an individual internalizes negative stigmas and attitudes surrounding their disability and sexuality it may result in decreased self-image, lower self-esteem, role loss, decreased sexual satisfaction, and depression (Eglseder et al., 2018; Richards et al., 2016; Sellwood et al., 2017). Physical limitations or impaired physiological responses involving muscle and movement functions limit engagement in sexual activities and may contribute to a decline in sexual satisfaction, performance, libido, and orgasm, and may cause an increase in erectile dysfunction (Eglseder et al., 2018; McBride & Rines, 2000; McLaughlin & Cregan, 2005; Sakellarios & Sawada, 2006). Relational consequences associated with various conditions and disabilities noted throughout relevant literature include difficulty with initiating and engaging in, as well as maintaining, relationships (Sellwood et al., 2017). In addition, role loss and social isolation may result from the impact of conditions and disabilities on sexuality and intimacy (Esmail et al., 2007; Richards et al., 2016). Overall, these consequences cause limitations in sexual satisfaction, performance, and frequency.

Occupational therapy (OT) helps people of all ages enhance their ability to participate independently in everyday activities and to reach their maximum level of function through engagement in purposeful interventions (American Occupational Therapy Association [AOTA], 2014; Jones et al., 2005). Activities of daily living are defined as "all the things people want, need, or have to do, whether of physical, mental, social, sexual, political, or spiritual nature" (AOTA, 2014, p. S6). In the context of human participation and function, sexuality is seen as an expression of occupational performance, which is an integral part of an individual's identity, health status, and self-image (Penna & Sheehy, 2000; Stanger, 2009). Sexuality and intimacy are considered elements of a person's occupational identity (Krantz et al., 2016), regardless of the presence of a disability (Isler et al., 2009), and have long been considered factors that occupational therapists need to address (Novak & Mitchell, 1988). Although many clients identify sexual concerns as major barriers to their occupational performance (Rose & Hughes, 2018; Sakellarios & Sawada, 2006), the lack of education, experience, and comfort in addressing sexual concerns have been associated with brief discussions or a complete disregard of the issue altogether in practice (Areskoug-Josefsson et al., 2016).

The PLISSIT model includes four levels: permission (P), limited information (LI), specific suggestions (SS), and intensive therapy (IT). The model provides a systematic approach for determining the different levels of addressing sexuality and intimacy with clients (Annon, 1976). The model serves as a guide for how to request clients' permission to address sexual concerns, provide clients with general

information about their concerns, give specific suggestions regarding their questions, and refer clients to a specialized therapist (Krantz et al., 2016; McAlonan, 1996; McGrath & Lynch, 2014; Weerakoon et al., 2008). Although the PLISSIT model has been heavily referenced throughout the literature as a technique to resolve conversational discomfort and enhance the client's sexual well-being (McGrath & Lynch, 2014), it has limitations. The focus of the model is to assist therapists with the discussion, not to solve problems associated with sexuality and intimacy (Rutte et al., 2015). Once permission is granted to discuss aspects of sexuality and intimacy, the client is expected to initiate the conversation, readily identify known deficits in occupational performance, and provide general information about the concerns they feel comfortable addressing (Taylor & Davis, 2007). The profession of OT is in need of a framework to help guide occupational therapists' understanding of the complex occupational nature of sexuality and intimacy, assessment, intervention design, and measurement of performance to determine outcomes (Walker, 2019).

Multiple health professions refer to the Sexual Assessment Framework (SAF) for exploring the dynamic sexual needs of clients with a variety of injuries and disabilities (Kokesh, 2016; McBride & Rines, 2000). Dr. George Szasz developed the SAF to guide the assessment of sexual health for individuals with disabilities. The SAF is based on seven common themes found across hundreds of concerns noted in extensive interviews in the 1970s with individuals and couples regarding the impact of disability on sexual health (G. Szasz, personal communication, November 28, 2018). The seven primary constructs of the SAF include: sexual knowledge, sexual behavior, sexual self-view, sexual interest, sexual response, fertility and contraception, and sexual activity (McBride & Rines, 2000). Walker (2019) found the SAF to be an effective guide to evaluate and understand the complex occupational nature of sexuality and intimacy. A theoretical and occupation-based assessment of the complex occupational nature of sexuality and intimacy does not exist. Thus, the purpose of this study was to create a theoretical and occupation-based screen, in-depth self-assessment, and performance measure to address the complex occupational nature of sexuality and intimacy.

Method

The design of this study was informed by DeVellis' (2017) guidelines of scale development and included the following steps: determining what to measure and thoroughly defining the construct, generating an item pool, determining the format for measurement, and having the initial item pool reviewed by experts (see Figure 1). A clear conceptualization of the construct being measured is vital to scale development and involves delineating, defining, and determining the conceptual breadth of the target construct (Boateng et al., 2018; Tay & Jebb, 2017). According to Yuen and Austin (2014), studies related to assessment development in OT should include a blueprint clearly linked to the theoretical underpinnings of the phenomenon of interest. Although the steps are presented here sequentially, the Occupational Therapy Sexual Assessment Framework (OTSAF) evolved throughout the study and the final model was achieved using a grounded theory approach.

The next step is to generate a large pool of items that reflect the scale's purpose as possible candidates for inclusion (DeVellis, 2017). Boateng et al. (2018) outlined best practices for developing and validating scales for health, social, and behavioral research and recommended deductive and inductive approaches be used for item generation. A deductive approach involves generating items based on an exhaustive search of the literature and preexisting scales (Hinkin, 1995). According to Keating et al. (2009), assembly of an item pool should involve collecting and categorizing individual items for each

construct from a variety of multiple resources. An inductive approach to item construction involves generating items based on the qualitative data regarding the construct obtained from the target population (Morgado et al., 2017). Care should also be taken to ensure that items target only one attribute, describe a measurable behavior, are clear and unambiguous, are of relevance to the target population (Keating et al., 2009), and are not offensive or potentially biased.

In order to determine the scale of measurement, it is important to delineate between screen and assessment, as well as between performance-based outcome measures and self-reported performance measures. According to the *Standards of Practice for Occupational Therapy* (2015), screening involves “obtaining and reviewing data relevant to a potential client to determine the need for further evaluation and intervention” (p. 2). An assessment refers to a specific tool used as part of an evaluation to understand a client’s occupational profile, client factors, performance skills, performance patterns, and contextual factors, as well as activity demands that influence performance of relevant occupations (Hinojosa et al., 2014). For the screening tool and in-depth inventory, a check-all-that-apply format would allow for a wide range of concerns to be covered using a present or absent response approach (Crist, 2014) and would not require a high cognitive level of engagement, thus allowing respondents the ability to cover a large number of concerns in less time (Ares et al., 2014). A performance-based measure conveys actual clinical findings about performance, whereas a self-reported measure conveys what a client believes they are capable of accomplishing (Rallon & Chen, 2008). Because occupational performance related to sexuality and intimacy cannot be feasibly or ethically measured in a clinical setting, a self-reported measure of performance is the most appropriate format of measurement. Michener and Leggin (2001) suggested that information obtained by self-report can be reliable if a tool is well designed and validated. A calibration process using a Likert scale is a useful way to measure beliefs, opinions, attitudes, and overall quality of life (Crist, 2014; DeVellis, 2017; Krzych et al., 2018). DeVellis (2017) indicated that the Likert scale can span a wide range of constructs allowing for an opportunity for gradations of responses, which adds value to the subjective questionnaire and aids in gaining essential information occupational therapists use for future intervention planning.

The fourth step outlined by DeVellis (2017) is to have the initial item pool reviewed by a panel of experts. A pilot study on the initial item pool allows researchers to gain perspective from a small sample of individuals regarding the feasibility and application to a larger scale audience and gather feedback on modifications needed for future validation (Leon et al., 2011).

Results

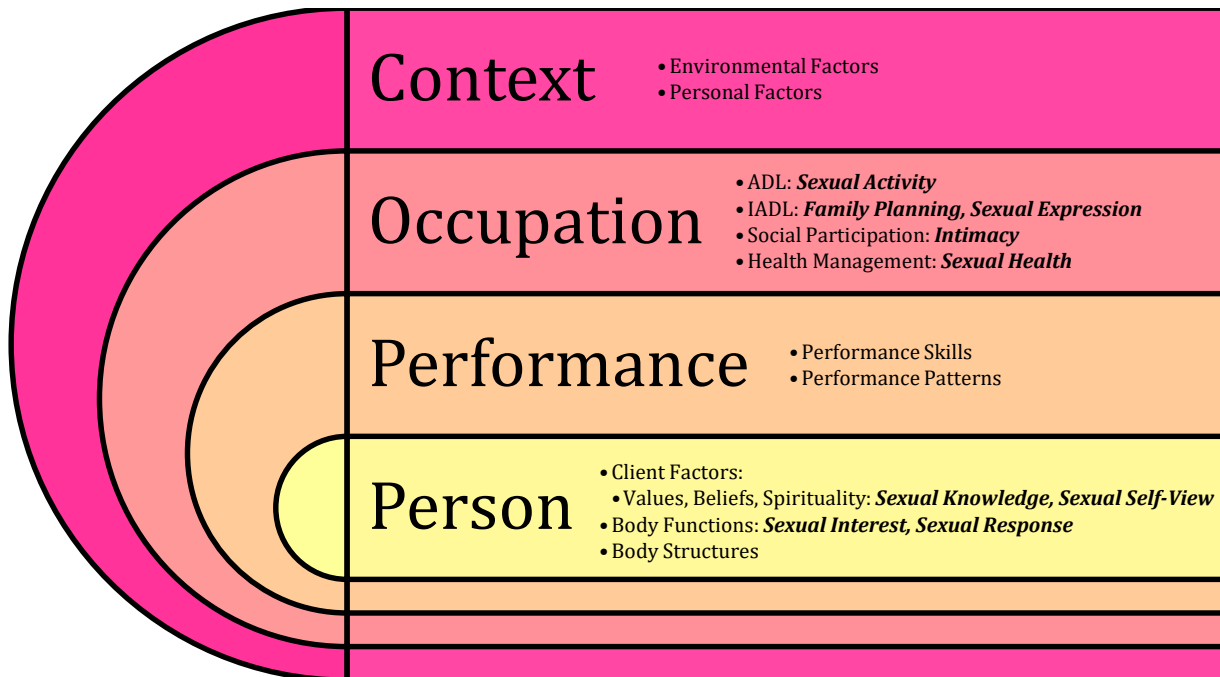
Step 1: Map the Construct: The Occupational Therapy Sexual Assessment Framework

The first step in this process was to map the construct by defining the occupational nature of sexuality and intimacy. Just as *The Occupational Therapy Practice Framework* (OTPF) serves to describe the core tenets that serve as the foundation for understanding the practice of OT, we have developed the OTSAF to describe the core constructs of the SAF as they intertwine with aspects of the domain of OT (see Table 1). As a result, three SAF constructs were modified to better reflect the tenets of OT. Specifically, the construct sexual behavior was renamed intimacy, and the construct fertility and contraception was renamed sexual health and family planning. The construct of sexual self-view was split into sexual self-view and sexual expression. The resultant model follows a pathway from intrinsic to extrinsic. In sum, client factors serve to influence performance of relevant occupations that occur within an individual’s context (see Figure 1).

Table 1*Occupational Therapy Sexual Assessment Framework Constructs and Definitions*

Construct	Definition
Sexual knowledge	What a person knows, understands, believes, and values regarding sexuality and intimacy.
Sexual activity	A person's ability to safely engage in sexual and/or intimate activities (alone or with another person). Sexual activities may include hugging, kissing, foreplay, masturbation, oral sex, anal sex, vaginal sex, and use of sexual toys or devices.
Sexual interest	A person's psychological and physiological drive, motivation, desire, or libido related to participation in sexual activities alone or with another person.
Sexual response	The body's physical sexual response associated with sexual activity, including physiological arousal, response to erogenous zones, nipple erection, clitoral excitation, erection, vaginal lubrication, prostate release, ejaculation, and/or orgasm.
Sexual expression	A person's ability to express themselves as a sexual being. A person may express their sexuality and/or gender identity through behaviors, mannerisms, preferences, appearance, pronouns, political engagement, acquired tendencies, daily routines, symbolic actions, or preferred roles.
Sexual self-view	How a person views themselves as a sexual being and includes aspects of sexual identity, gender identity (female, male, other), sexual self-esteem (a person's comfort and confidence with how they view themselves as a sexual being), and body image (mental representation of how a person pictures themselves).
Intimacy	A person's ability to initiate and maintain close intimate relationships which includes the ability to give and receive affection needed to successfully interact in the role as intimate partner.
Sexual health*	A person's ability to develop, manage, and maintain routines for sexual health, including practicing safe sex and identifying, understanding, selecting, and using protection.
Family planning*	A person's ability to develop, manage, and maintain routines associated with fertility, pregnancy, and/or parenthood.

Note. *Sexual health and family planning are combined into one section of the Occupational Performance Inventory of Sexuality and Intimacy (OPISI) but are separated in the OTSAF to delineate how each aspect fits in the scope of practice for OT.

Figure 1*Model for Understanding the Occupational Nature of Sexuality and Intimacy*

Note: The Occupational Therapy Sexual Assessment Framework (OTSAF) follows a pathway from intrinsic to extrinsic. In sum, a person's client factors, body structures, and body functions influence performance of relevant occupations that occur within an individual's context. ADL = activities of daily living; IADL = instrumental activities of daily living.

The person is at the center of the model, as it is essential to first gain an understanding of the client factors that reside in a person that influence their perceptions, experiences, and performances related to sexuality and intimacy. Client factors include a person's values, beliefs, spirituality, body functions, and body structures. Sexual knowledge and sexual self-view stem from one's values, beliefs, and spirituality. Sexual knowledge involves a person's understanding of how their condition, disability, illness, or injury may influence their participation in intimate activities, the expression of sexuality, and their overall health and well-being. Sexual self-view involves how a person views themselves as a sexual being and includes aspects of sexual identity, gender identity, sexual self-esteem, and body image. Just as occupational therapists consider the influence of body functions on performance of occupation, sexual interest and sexual response are considered essential body functions that influence sexual performance. Body structures also play an important role as they support body function and occupational engagement related to sexuality and intimacy.

Once client factors influencing participation as a sexual being are understood, it is important to consider the occupational domains of performance skills and performance patterns. Performance skills include motor, process, and social interaction skills. Motor skills are needed to interact, move, manipulate, and position the body during sexual activities. Process skills are needed to identify, select, and follow step-by-step actions aimed toward successful performance of tasks associated with sexuality and intimacy. Social interaction skills serve as the foundation to intimacy and include skills needed during social exchange with a partner(s) or potential partner(s).

Performance patterns include roles, habits, rituals, and routines that may support or hinder sexual performance and participation. Therapists need to understand the inherent roles and patterns of behaviors reinforced by values and beliefs associated with how a person perceives themselves as a sexual being. Roles, habits, routines, and rituals are inextricably linked to sexual self-view, sexual identity, and gender identity. Together with the client, determinations can be made on whether these performance patterns support or hinder sexual participation and performance. Disruption to performance patterns in an individual's life will affect their ability to participate in intimate and/or sexual activities. Performance patterns are highly individualized, which makes sexual participation and intimacy unique to the person.

Given a person's capacities, values, beliefs, skills, habits, roles, and routines, the occupational therapist must consider how these factors collectively influence participation in occupations relevant to sexuality and intimacy. Sexual activity is an activity of daily living (ADL) that involves a person's ability to safely engage in sexual and/or intimate activities (alone or with another person). Sexual activities may include hugging, kissing, foreplay, masturbation, oral sex, anal sex, vaginal sex, and use of sexual toys or devices. Occupational therapists are skilled in analyzing the occupational demands of participating in daily occupations (AOTA, 2014) to uncover the specific client factors, performance skills, and performance patterns required to participate in intimate activities such as dressing, undressing, transferring, positioning, hugging, kissing, petting, masturbating, using adult novelty products, or engaging in intercourse. Using, cleaning, and maintaining personal care items such as sexual devices is considered personal device care and categorized as an ADL (AOTA, 2014).

Sexual health and family planning fall under the umbrella of the occupation health management. These occupations play a crucial role as individuals often contemplate their capacity to start a family (Walker, 2019). Occupational therapists are able to discuss and help individuals gain an understanding of how their capabilities and limitations may influence performance associated with the IADL of child rearing. Similar to the IADL category of religious and spiritual activities and expression, sexual expression is the way a person communicates or presents themselves as a sexual being.

Intimacy is a clear component of the occupation of social participation and includes the ability to give and receive affection needed to successfully initiate, maintain, and interact in the role as an intimate partner (McBride & Rines, 2000). Occupational therapists attend to an individual's involvement in activities that involve intimate interactions with others through texting, phone calls, video conferencing, social media platforms, and dating services, as well as engagement in a wide variety of interactions, displays of affection, and intimacies, which may or may not involve sexual activity (AOTA, 2014). If leisure includes exploring and participating in activities that are intrinsically motivating and done in one's free time (AOTA, 2014), meeting potential partners or going on dates (MacRae, 2013) may also be considered leisure occupations (Penna & Sheehy, 2000).

Lastly, occupational therapists should fully understand the context in which their client's sexuality and intimacy occurs to gain insights about their overarching, underlying, and embedded influences on engagement (AOTA, 2014). Physical, technological, social, attitudinal, and available services play an essential role in expressions of sexuality or engagement in activities relevant to sexuality and intimacy. Physical environments incorporate natural and built surroundings, as well as the objects that are in them. Elements in a person's physical environment that may influence optimal performance in related activities need to be considered. Finally, occupational therapists should pay

attention to the social environment of their clients and consider the availability and expectations of those who are significant to the person, such as spouses, friends, and caregivers (AOTA, 2014).

The personal factors of context, such as one's age, socioeconomic status, gender, and educational status, are all part of the way one internally and externally views their sexual identity and how they express themselves. The values and beliefs within one's cultural context dictates accepted sexual practices and norms that influence personal sexual expression, identity, and activity. These factors also influence the availability of one's sexual partners and the avenues in which one has the opportunity to gain sexual knowledge, experience, and activity. The experience of sexuality and intimacy are also shaped by one's temporal context given that perceptions, expectations, participation, and performance change over time and across the lifespan. In today's society, how one interacts, expresses themselves as a sexual being, and participates in activities pertaining to sexuality and intimacy are also heavily influenced by their virtual context, whether through smartphones, computers, or social media.

Step 2: Assemble an Item Pool: Review of Existing Tools

The next task involved in this step included generating an item pool of existing items that address sexuality and intimacy (see Figure 2). An exhaustive search of the literature revealed 35 relevant scales (see Table 2).

Figure 2

Step 2: Process for Item Development

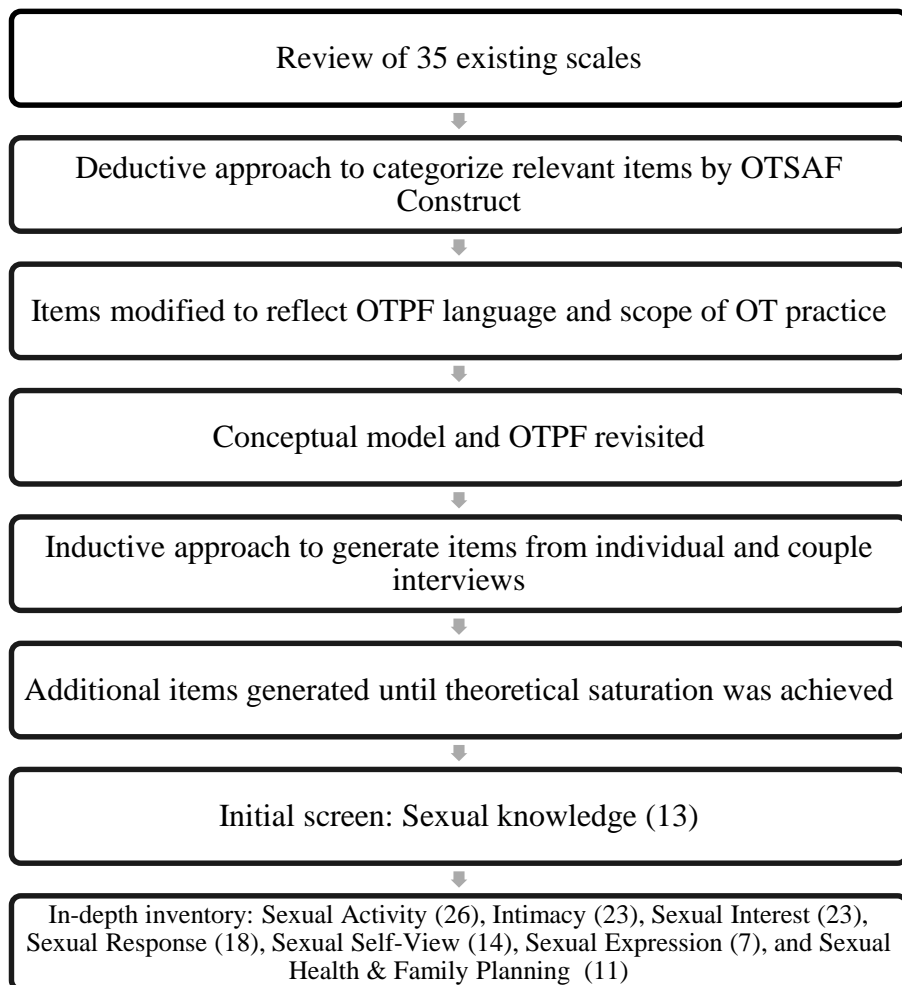


Table 2*Assessment Tools Reviewed***Assessment tool (Reference)**

Assessment tool (Reference)
Body Esteem Scale – Revised (BES-R) (Frost et al., 2018)
DASH Questionnaire (Kennedy et al., 2011)
Female Genital Self-Image Scale (FGSIS) (DeMaria et al., 2012)
Female Sexual Function Index (FSFI) (Rosen et al., 2000)
Functional Analytic Psychotherapy Intimacy Scale (Leonard et al., 2014)
Functional Status Questionnaire (FSQ) (Jette et al., 1986)
Golombok Rust Inventory of Sexual Satisfaction (GRISS) (Rust & Golombok, 1986)
Life-Satisfaction-Questionnaire-9 (LISAT-9) (Fugl-Meyer et al., 2002)
Male Genital Self-Image Scale (MGSIS) (Herbenick et al., 2013)
McCoy Female Sexuality Questionnaire (MFSQ) (Rellini et al., 2005)
Multidimensional Sexuality Questionnaire (MSQ) (Snell et al., 1993)
New Sexual Satisfaction Scale (NSSS) (Štulhofer et al., 2010)
Oswestry Low Back Pain Disability Questionnaire (Alcántara-Bumbiedro et al., 2006)
Quality of Sexual Function (QSF) (Heinemann et al., 2005)
The Modified Brief Sexual Symptom Checklist for Men (BSSC-M) (Rutte et al., 2015)
The Modified Brief Sexual Symptom Checklist for Women (BSSC-W) (Rutte et al., 2015)
The Multiple Sclerosis Intimacy and Sexuality Questionnaire (Foley et al., 2013)
The Satisfaction with Sex Life Scale (SWSLS) (Neto, 2012).
Sex Effect Scale (Sex FX) (Kennedy et al., 2010)
Sexual Behavior Questionnaire (SBQ) (Macdonald et al., 2003)
Sexual Desire Inventory-2 (SDI-2) (Spector et al., 1996)
Sexual Dysfunction Questionnaire (SDQ) (Infrasca, 2011)
Sexual Function Questionnaire (SFQ-V1) (Quirk et al., 2002)
Sexual Functioning Questionnaire (SFQ) (Smith et al., 2002)
Sexual Interest and Desire Inventory-Female (SIDI-F) (Sills et al., 2005)
Sexual Interest and Satisfaction Scale (Siosteen et al., 1990)
Sexuality Questionnaire (Hattjar, 2012)
Participation Survey/Mobility (PARTS/M) (Gray et al., 2006)
Personal Assessment of Intimacy in Relationship (PAIR-M Questionnaire) (Thériault, 1998)
Personal Experience Questionnaire (PEQ) (Dennerstein et al., 2001)
Pelvic Organ Prolapse/Incontinence Sexual Questionnaire-International Urogynecology Association Revised (PISQ-IR) (Rogers & Pons, 2013)
Psychotropic-Related Sexual Dysfunction Questionnaire (PRSexDQ) (Montejo & Rico-Villademoros, 2008)
Udvalg for Kliniske Undersogelser Side Effect Rating Scale (UKU) (Lingjaerde et al., 1987)
The World Health Organization Quality of Life Questionnaire (WHOQOL-100) (WHOQOL Group, 1998)
Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form (Q-LES-Q-SF) (Endicott et al., 1993)

Items from each scale were analyzed for applicability to the scale's purpose and scope of OT practice. Items found to be relevant were then categorized depending on which construct of the OTSAF the item best reflected. Items were then reviewed and modified using terminology consistent with the OTPF and specifically reflect the occupational nature of sexuality and intimacy through the lens of the specific construct (see Appendix). Reduction of items occurred when multiple items reflected the same concept, resulting in one well-constructed item. The initial item pool consisted of 132 items.

Given the lack of scales relevant to the occupational nature of sexuality and intimacy, the next step involved a thorough conceptual analysis of the OTPF and the OTSAF to brainstorm possible occupation-based elements necessary for inclusion to adequately assess each construct. See the Appendix for sample items created in this process. Conceptual analysis involved examining the OTPF and deciding what occupations, client factors, performance skills, performance patterns, contexts, and environments play a role in and possibly affect one's sexuality and intimacy. Items were then generated for each construct until theoretical saturation was achieved. An inductive approach was also applied to generate items based on qualitative information regarding each SAF construct (Kapuscinski & Masters, 2010) obtained from in-depth interviews with individuals and couples from the target population affected by various conditions, such as stroke, spinal cord injuries, and bilateral above-the-knee amputations (Walker, 2019). Following discussions regarding the global nature of the items in the category for sexual knowledge, we determined that these items would serve better as the basis for the screening tool rather than as part of the in-depth self-assessment.

Step 3: Determine the Format for Measurement

The first draft of the Occupational Performance Inventory of Sexuality and Intimacy (OPISI) includes a self-screen (13 items), in-depth self-assessment (122 items), and an individualized measure used by occupational therapists to detect self-perceived changes in occupational performance associated with sexuality and intimacy over time (28 possible items). This design was informed by the PLISSIT model. The purpose of the initial screen is to assure the client that sex is an appropriate and acceptable topic to be addressed during therapy (permission) and to gather and review information about the client to determine the need for continued evaluation and intervention (AOTA, 2015). The in-depth self-assessment was designed to provide a greater understanding of client factors that influence performance of occupations associated with sexuality and intimacy within the client's context. The occupational therapist may elect to issue the complete in-depth assessment to the client or tailor the assessment to include only the categories of sexuality and intimacy identified by the client on the screen.

Following a thorough review and discussion of the inventory, a 4-item performance measure was designed for each category to quantify the client's perception of occupational performance regarding ability, satisfaction with ability, understanding of how their condition impacts performance, and confidence in their skills and ability to make necessary modifications to improve performance (self-efficacy). The occupational therapist asks the client to rate each of the relevant categories of the OTSAF based on their current condition or life circumstance on a scale from 1 (*no ability, satisfaction, understanding, or confidence*) to 10 (*highest ability, satisfaction, understanding, or confidence*). For the categories of sexuality and intimacy in which the client had concerns (sexual activity, sexual interest, sexual response, sexual expression, sexual self-view, intimacy, and/or sexual health and family planning), occupational therapists can work with the client to develop goals, plan interventions (limited information or specific suggestions), and/or make necessary referrals. At follow-up, the performance

measure for each relevant category is readministered to determine if the intervention was effective or if the intervention plan needs to be modified (Silverman, 2014).

Step 4: Initial Pool Review

Thirteen occupational therapists, a physical therapist, and George Szasz, renowned physician and pioneer in sexual medicine who developed the SAF in the 1970s, reviewed the initial item pool. We selected these individuals for their ability to review the overall applicability of the items to the profession of OT, establish face validity to ensure that items appear to measure the constructs they intend to measure, and ensure that items were gender neutral and nondiscriminatory. Feedback led to changing the initial screen and in-depth assessment from Likert-type to check-all-that-apply, reordering the presentation of the OTSAF constructs, and removal of certain items that did not align well with the OT scope of practice. Items were also modified based on feedback regarding item clarity, gender neutrality, inclusivity, and reading level. Overall, items for the construct self-view were noted to be negatively worded and edits were made to better reflect client's sexual self-view concerns in a more positive light.

Discussion

Aspects of sexuality and intimacy are incorporated in every human being's daily life (Lohman et al., 2017) regardless of the presence of a disability (Isler et al., 2009). It is unfortunate that many health care practitioners are hesitant to initiate the subject of sexuality because of personal embarrassment and the belief that they would embarrass the client and that the clients do not raise the topic because of fear of embarrassing the professional (Nilsson et al., 2017). The profession of OT is in need of a theoretical framework, screen, thorough assessment, and performance measure addressing the complex occupational nature of sexuality and intimacy. Such tools would answer the call for occupational therapists to be more deliberate in using theory to introduce, assess, plan, and implement interventions (Boniface et al., 2008; Leclair et al., 2013; Melton et al., 2010) that address sexuality and intimacy. The OTSAF depicts how related theoretical constructs intertwine with the domain of OT and serve as an effective foundation to build the comprehensive OPISI. The OTSAF should be used to inform curricular infusion, continuing education, practice guidelines, day-to-day-practice, and the development of client-centered resources and interventions.

The OPISI was created to comprehensively screen, assess, and measure performance related to the complex occupational nature of sexuality and intimacy following DeVellis's (2017) guidelines for scale development. The following steps taken thus far include mapping the construct, generating an item pool, determining the format for measurement, and having the initial item pool reviewed by a small panel of experts. The screening tool (13 items) provides an introduction to the topic of sexuality and intimacy, the role of OT, and items relevant to sexual knowledge. There is a separate in-depth self-assessment (122 items) associated with the following constructs of the OTSAF: sexual activity (26), intimacy (23), sexual interest (23), sexual response (18), sexual self-view (14), sexual expression (7), and sexual health and family planning (11). Once concerns are identified, there is a performance measure available to establish a baseline and detect self-perceived changes in occupational performance associated with sexuality and intimacy over time.

Limitations

Limitations in the development of the OPISI exist. The research team consisted of seven females who inherently produced a level of unavoidable gender bias, regardless of attempts to gain diverse opinions and perspectives from male peers and colleagues. The focus of this phase of item development

was to create as many relevant items as possible to avoid construct underrepresentation or narrowed focus (Boateng et al., 2018; MacKenzie et al., 2011) and relied heavily on the expertise of the pilot panel and their understanding of the constructs and scope of OT practice. Nonetheless, at the time of this publication, the final pool of items had not been vetted by a client sample.

Conclusion

There is a need for formal validation of the OPISI in order to get this much needed screen, in-depth self-assessment, and performance measure into the hands of occupational therapists. Now that the occupational nature of sexuality and intimacy has been clearly defined through the development of the OTSAF, a modified Delphi technique would be an appropriate approach to collect expert opinions through consensus to validate the theoretical constructs (Linstone & Turoff, 1975). A modified Delphi technique would also be useful to obtain content validity for the OPISI (Falzarano & Pinto, 2013; Keeney et al., 2011). Once the OPISI has been vetted by a larger panel of content experts, reliability studies involving a variety of client populations can ensue.

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Appendix

OPISI Item Development: Sample Items

Construct	Original Item	Modified/New Original Item
Screen <i>Sexual Knowledge</i>	How important is it for you to participate in intimacy? (Gray et al., 2006)	Sexuality and intimacy are important aspects of my life.
	How important is sexuality to you now compared to before/after injury? (Siosteen et al., 1990)	
	Rather than talking about sexual activity, I'd rather receive handouts or brochures about the topic. (Hattjar, 2012)	I would like to receive handouts or brochures from the occupational therapists about this topic.
		I have concerns about the overall impact my condition or life stage has on my ability to safely engage in sexual and/or intimate activities (alone or with another person). Sexual activities may include hugging, kissing, foreplay, masturbation, oral sex, anal sex, vaginal sex, and the use of sexual toys or devices.
		I have concerns about the overall impact my condition or life stage has on my ability to give and receive affection needed to successfully interact in my role as intimate partner.
In-Depth Inventory <i>Sexual Activity</i>	Does your condition prevent you from enjoying sexual activities? (Dennerstein et al., 2001; Siosteen et al., 1990)	My symptoms prevent me from enjoying or participating in sexual activities.
	Do you experience discomfort or pain with penetration during intercourse? (Rosen et al., 2000)	I avoid participation in sexual activities that include penetration due to pain.
		I experience difficulty dressing/undressing myself or my partner in preparation for sexual activities.
		I worry about my ability to control my bladder and/or bowel or urinary and/or bowel symptoms during sexual activity.
<i>Sexual Interest</i>	Are you dissatisfied with your desire to engage in sexual behavior with a partner? (Spector et al., 1996)	I am dissatisfied with my desire to engage in sexual activities.
	Have you been distressed (worried, concerned, guilty) about your level of sexual desire? (Sills et al., 2005)	I worry that my condition interferes with my overall level of sexual interest, drive, or desire.
		Lack of time to participate in sexual activities interferes with my sex drive.

		Lack of sleep interferes with my interest in participating in sexual activities.
Sexual Response	Do you experience difficulty with arousal during sexual activity due to illness/injury? (Rosen et al., 2000)	My body's physical response associated with sexual activity has changed as a result of my condition and this is a problem.
	Problems with erection. (Rutte et al., 2015)	I struggle obtaining an erection or maintaining it once I have initiated sexual activity.
		I would like to find other means of experiencing sexual satisfaction to compensate for lack of orgasm.
Sexual Expression		I experience delay or difficulty achieving orgasm with masturbation.
		I am no longer comfortable expressing my sexual identity.
		I worry that I no longer appear as masculine/feminine/other as I would like.
Sexual Self-View	How sexually attractive do you feel you are to your primary sexual partner? (Rellini et al., 2005)	I do not feel that I am able to fulfill the roles that I associate with my gender identity.
	Over the last 6 months feeling that my body is less attractive have interfered with my sexual activity. (Foley et al., 2013)	I worry that I am not sexually attractive or appealing to my partner(s) or potential partner(s).
	Over the last 6 months feeling less masculine or feminine due MS have interfered with my sexual activity. (Foley et al., 2013)	My condition leaves me feeling less masculine/feminine/other.
		The extent of care and assistance I need leaves me feeling powerless which impacts my sexual self-esteem.
		I feel that my guilt or my partner's(s') guilt regarding my condition interferes with our ability to enjoy intimacy and sexual activity.
Intimacy	Are you comfortable discussing significant problems with your partner? (Leonard et al., 2014)	I am not comfortable discussing aspects of sexuality and intimacy or my sexual needs with my partner(s).
	Are you satisfied with your sexual relationships? (Jette et al., 1986)	I feel my condition prevents me from being satisfied with my intimate relationship(s).
		I have difficulty prioritizing or engaging in pleasant, loving, affectionate shared time with my partner(s).

<i>Sexual Health & Family Planning</i>	I (have) (have not) consented to having sex with someone and regretted it afterward. (Hattjar, 2012)	<p>I find it difficult to express my sexual interest and desires in a way that my partner(s) understands.</p> <p>My ability to understand, access, and use social media platforms to develop intimate relationships is limited.</p> <p>I am concerned about my ability to protect myself from unwanted sexual advances, sexual assault, or rape</p>
<i>Performance Measure Sexual Interest</i>		<p>I do not know how to use, forget to use, or have physical limitations that prevent me from using contraception (including ability to open packaging) as intended to prevent pregnancy or sexually transmitted infections.</p> <p>I feel my ability to provide care and supervision to support the developmental needs of a child may be limited.</p> <p>My partner is hesitant to create a family with me because they will take on most of the responsibility.</p> <p>How would you rate your sexual interest, drive, or desire? (Ability)</p> <p>How satisfied are you with your current sexual interest, drive, or desire? (Satisfaction)</p> <p>How would you rate your understanding of how your condition or life stage influences your sexual interest, drive, or desire? (Knowledge)</p> <p>How confident are you in your skills and ability to make necessary changes to improve your sexual interest, drive, or desires? (Self-Efficacy)</p>