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AN INVESTIGATION OF THE SUBJECTIVE ORGASM EXPERIENCE IN SEXUALLY ACTIVE WOMEN

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BY

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ABSTRACT

The subjective experience of orgasm is an important, yet understudied aspect of the sexual experience (Arcos-Romero, Expósito-Guerra, & Sierra, 2020). The Orgasm Rating Scale (ORS) is a measure for which respondents rate adjective descriptors of their last orgasm experience along Cognitive-Affective and Sensory dimensions (Mah & Binik, 2002). The purpose of this study was threefold: 1) test the psychometric soundness of the ORS in a sample of 359 sexually active women, 2) determine whether ORS responses would result in meaningful clusters, and 3) validate the clusters by investigating any significant score differences among them on measures of sexual functioning, interoceptive awareness, and attention to genital cues. Results showed: 1) a psychometrically sound ORS structure of three components and 23 items, 2) the ORS responses were best categorized into five clusters, and 3) validity of the clusters was established by significantly different means on sexual functioning and interoceptive awareness measures, as well as response differences in whether one's last orgasm was with or without a partner. Overall, the results suggest that there is a relationship between subjective experience of orgasm and endorsement of various facets of sexual functioning and bodily mindfulness.

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CHAPTER 1

INTRODUCTION

Subjective experience of orgasm is an important aspect of women's sexual experience. The Orgasm Rating Scale (ORS) is a measure developed by Mah and Binik (2002) that characterizes one's description of orgasm using adjectives. There has been minimal literature on the personal experience of orgasm utilizing specific descriptive characteristics (Arcos-Romero, Expósito-Guerra, & Sierra, 2020). The purpose of this study is to investigate one's perceived experience with orgasm using the ORS and the relationships among ORS responses and measures of sexual functioning, interoceptive awareness (i.e., bodily mindfulness), and attention to genital cues.

The results of this research may have future clinical utility in several areas, such as couple's therapy or for individuals receiving treatment for sexual difficulties (e.g., secondary to medical procedures) (Mah & Binik, 2002). Scores with the ORS could be utilized pre- and post-intervention along with other measures to determine whether there was any effect on sexual functioning and the subjective experience. Of particular interest would be its use in medical populations who may be contending with sexual challenges due to surgery and/or physiological sequelae of treatments (e.g., gynecologic cancer patients post-radiation; Varela et al., 2013). The ORS would be able to demonstrate to what extent patients characterize their orgasms on certain dimensions (e.g., sensory and cognitive-affective), which could help inform the focus of sexual dysfunction treatments (i.e., whether they should be tailored more to physical or psychological factors).

CHAPTER 2

REVIEW OF LITERATURE

Orgasms are generally considered an important part of the sexual experience (Opperman et al., 2014). Women's orgasm has been defined as "… a variable, transient peak sensation of intense pleasure, creating an altered state of consciousness, usually with an initiation accompanied by involuntary, rhythmic contractions of the pelvic striated circumvaginal musculature, often with concomitant uterine and anal contractions, and myotonia that resolves the sexually induced vasocongestion (sometimes only partially) and myotonia, generally with an induction of well-being and contentment" (Meston et al., 2014, p. 174). Multiple theoretical foundations have been utilized in the literature when investigating women's orgasms, including evolutionary, psychological, typological, and physiological (King et al., 2011; Levin, 1992). One aspect of orgasm that has received minimal attention in the research is the study of the subjective experience of orgasm (Arcos-Romero, Expósito-Guerra, Sierra, 2020). The subjective experience has been conceptualized as encompassing perceived bodily feelings, evaluations of the orgasm occurrence, emotional sentiments, closeness and affection, and gratifying experiences (Arcos-Romero, Granados, & Sierra, 2019; Arcos-Romero, Moyano, & Sierra, 2018; Mah & Binik, 2001). It is therefore useful to understand the relationship between one's subjective perception of orgasm and how it intersects with other facets of the sexual experience, such as sexual functioning, interoceptive awareness (bodily mindfulness), and attention to genital cues.

The Orgasm Rating Scale (ORS) – A Measure of the Subjective Orgasm Experience

A notable measure that was developed within the past two decades to investigate the subjective experience of orgasm is the ORS (Mah & Binik, 2002). The ORS utilizes a biopsychosocial framework to conceptualize orgasm into two dimensions that were empirically derived: sensory (i.e., related to the feelings of bodily reactions) and cognitive-affective (i.e., emotional and appraised experiences) domains. These two dimensions together are comprised of 10 components (building sensations, flooding sensations, flushing sensations, shooting sensations, throbbing sensations, general spasms, emotional intimacy, ecstasy, pleasurable satisfaction, and relaxation), and each component is made up of two to five adjectives that participants rate on a six-point Likert scale (Mah & Binik, 2002; Mah & Binik, 2019). The authors suggested that this questionnaire could be useful clinically (Mah & Binik, 2002); however, additional studies on its psychometric properties and cutoff scores are needed before it can be recognized as a clinical measure in the literature (Giraldi et al., 2011; Mah & Binik, 2019).

The original paper on the ORS presented data from a model development phase and a cross-validation phase (Mah & Binik, 2002). Both phases found good to excellent internal consistency of the adjectives and had statistically significant gender differences on a number of components, with women generally endorsing higher scores. In the cross-validation phase, women had higher scores on every component of the sensory domain except for shooting sensations, which was higher in men. Despite a number of score differentials, effect sizes were all rather small ($\eta 2 \leq .04$) except for shooting sensations, which demonstrated a large effect. The authors surmised that this large gender difference

was due to the male ejaculatory process and that women's and men's orgasms are more alike than disparate.

The authors also found that scores were influenced by how orgasm was achieved (i.e., individual masturbation or partnered sexual activity; Mah & Binik, 2002). More specifically, in the cross-validation study, partnered sexual activity resulted in statistically significant higher scores compared to individual masturbation for pleasurable satisfaction, emotional intimacy, ecstasy, shooting sensations, and general spasms. The scores for relaxation were significantly higher for individual masturbation compared to partnered sexual activity. Emotional intimacy was the only component found to have a large effect size, and the authors concluded that this difference between partnered and individual orgasm activity demonstrates the impact of interpersonal, psychological, and sexual facets during orgasm.

Mah and Binik (2005) further explored the ORS components in a study that focused on subjective pleasure and satisfaction with orgasm as represented by the pleasurable satisfaction component. Cognitive-affective components were more frequently and more strongly found to be predictors of pleasure and satisfaction experienced with orgasm than were sensory components. More specifically, greater ecstasy and relaxation (both cognitive-affective components) were found to be associated with higher scores on pleasurable satisfaction for orgasm achieved through individual masturbation. Furthermore, greater ecstasy, relaxation, emotional intimacy (another cognitive-affective component), throbbing sensations, and flushing sensations were associated with higher pleasurable satisfaction scores for orgasm achieved through partnered sexual activity. The authors stated that the significant association with

emotional intimacy with pleasure and satisfaction with orgasm with a partner complimented their observation of emotional intimacy's importance with partnered sex in their previous paper (Mah & Binik, 2002) and also further underscored the significance of relational and sentimental characteristics on orgasm (Mah & Binik, 2005).

Mah and Binik (2005) analyzed the effect of location of orgasm ("genitals," "the pelvic area," or "beyond the pelvic area") on orgasmic pleasure and satisfaction (p. 193). A hierarchical multiple regression found that the effect of psychological intensity superseded that of bodily location when it came to orgasmic pleasure and satisfaction and influenced it in a positive direction. However, when examining perceived physical intensity of orgasm, both greater physical intensity and psychological intensity were associated with orgasmic pleasure and satisfaction in the hierarchical multiple regression. Additionally, greater relationship satisfaction was related to higher orgasm pleasure and satisfaction during partnered sexual activity.

The ORS was used to explore whether different typologies of orgasm exist in women (King et al., 2011). A secondary data analysis was performed on participants who identified as women (n = 503) from Mah and Binik's (2002) original published paper on the ORS. A latent class analysis was conducted on the 10 components for women who endorsed having their last orgasm with a partner, which resulted in four clusters: Type I – "High Pleasure and Sensations;" Type II – "High Pleasure, Medium Sensations" (the largest cluster); Type III – "Medium Pleasure and Sensations;" and Type IV – "Low Pleasure and Sensation" (the smallest cluster) (p. 4). Comparisons between the average scores of independent masturbation orgasms and partnered orgasms revealed that the ratings of independent masturbation orgasms were higher on relaxation but lower on

flushing sensation, general spasming, pleasurable satisfaction, emotional intimacy, and ecstasy. Furthermore, significant differences were found between each partnered orgasm type and the masturbation orgasm. Of note, Type IV orgasms were not rated higher on emotional intimacy compared to masturbation orgasms; furthermore, Type IV orgasms were also characterized by lower scores on relaxation, ecstasy, and spasming (also for Type III) compared to individual masturbation orgasms. Additionally, pleasurable satisfaction scores for masturbation orgasms were somewhat close to those seen on the Type I and Type II orgasm clusters.

A Spanish version of the ORS was published in 2018 that produced a four-factor, 25-item model compared to 40 items and two dimensions in the original ORS (Arcos-Romero, Moyano, & Sierra, 2018; Mah & Binik, 2002). The authors posited that the new dimensions – affective, sensory, intimacy, and rewards – resemble the original ORS in that the four dimensions are conceptually represented in the two dimensions of cognitive-affective (rewards, intimacy, and affection) and sensory (which shares the same name) (Arcos-Romero, Moyano, & Sierra, 2018; Mah & Binik, 2002). One validity measure in the study found that were significant differences in three of the four dimensional scores between groups of individuals with and without challenges reaching orgasm (Arcos-Romero, Moyano, & Sierra, 2018). More specifically, those who did not endorse having orgasmic issues were more likely to have higher scores on the affective, sensory, and intimacy dimensions compared to those with problems with orgasms (there was also a trend towards a significant difference between the two groups with the rewards dimension as well). This suggests that the former group found adjectives that comprised particular dimensions to better characterize their last orgasm experience.

The four-dimensional model that was developed was labeled as the Model of Subjective Orgasm Experience (MSOE) (Arcos-Romero, Granados, & Sierra, 2019; Arcos-Romero, Moyano, & Sierra, 2018). This model underwent further validation in a sexual psychophysiological study (an investigation that utilizes subjective and genital measures from participants to measure their sexual response) in a sample of undergraduate students without medical or psychological concerns or sexual dysfunction (Arcos-Romero, Granados, & Sierra, 2019). A gender difference was noted in that women had higher scores on the sensory domain compared to men (Arcos-Romero, Granados, & Sierra, 2019), which was similarly seen in Mah & Binik's (2002) study where women scored significantly higher on a number of sensory components in relation to men. In men, their general proclivity to become sexually excited was found to be a predictor of the affect, rewards, and sensory dimensions. Additionally, changes on the penile plethysmograph (a device that is used in studies of sexual arousal to measures changes in the circumference of the penis due to blood accumulation; Holub, 2017) served as a predictor of the intimacy dimension in men. In women, self-reported ratings of sexual arousal predicted the sensory dimension.

Another paper from this group looked further at the Spanish version ORS' psychometric properties and standard scores (Arcos-Romero & Sierra, 2019). Statistically significant score differences by age and gender were found at the domain level. In the 18-34 age group, men endorsed higher scores on the dimension of rewards, while women reported higher scores on the sensory dimensions. For the 35-49 age group, women had higher affective and sensory dimension score. However, for individuals 50+, there were no gender differences. Of note, any differences between women and men were

considered to be small based on their effect sizes. Furthermore, endorsed scores were lower on all dimensions as age increased, which were suggested to correspond with sexual changes related to age. Additionally, it was observed that intimacy and rewards dimension scores did not change as markedly with increasing age as did the affective and sensory dimension scores.

More recent papers from this lab have found further associations with the Spanish-version ORS and subjective orgasm experience (Arcos-Romero, Expósito-Guerra, & Sierra, 2020; Arcos-Romero & Sierra, 2020). One study of participants in mixed-sex relationships utilized multiple linear regression models with results that indicated that greater scores on the ORS were predicted by age, "sexual sensations seeking," contentment with one's sexual life in a relationship, and sexual desire for one's partner in men; women had the same predictors as men with the addition of erotophilia (i.e., "the disposition to affectively respond to sexual stimuli;" Arcos-Romero & Sierra, 2020, pp. 315, 323). In another empirical investigation, the association between the Spanish-version ORS and sexual desire was studied (Arcos-Romero, Expósito-Guerra, & Sierra, 2020). Sexual desire for one's partner was found to significantly relate to one's perceived experience of orgasm in a linear regression analysis such that higher levels of desire predicted greater scores on the ORS.

The current study intended to pick up where the literature had left off by focusing on new variables that have not been studied extensively or at all in relation to the ORS. These variables were sexual functioning, interoceptive awareness, and attention to genital cues. Relationships between the ORS and sexual functioning and genital cue changes have been somewhat studied in terms of sexual arousal and orgasmic problems but have

not considered other female sexual functioning issues or more specific information about one's typical experience with noticing genital sensations (Arcos-Romero, Granados, & Sierra, 2019; Arcos-Romero, Moyano, & Sierra, 2018). Furthermore, there has been no investigation of the ORS in relation to bodily mindfulness, known as interoceptive awareness, which has been explored in other studies of human sexuality (e.g., Handy & Meston, 2016). This current study also drew from King et al.'s (2011) work by utilizing orgasm typologies in sexually active women.

Sexual Functioning

Sexual functioning is considered an important aspect of quality of life. One of the most popular measures of sexual function in women is the Female Sexual Functioning Index (FSFI; Meston et al., 2020; Rosen et al., 2000). The FSFI measures numerous facets of sexuality, including desire, arousal, lubrication, orgasm, satisfaction, and pain (Rosen et al., 2000).

There appears to be little quality research that has been done using the ORS to investigate sexual problems (Mah & Binik, 2019). Previously mentioned was the finding that the Spanish-version ORS could differentiate between individuals with and without orgasmic challenges, with the latter group having significantly lower scores on the affective, sensory, and intimacy dimensions (Arcos-Romero, Moyano, & Sierra, 2018). Considering the significance of sexual function to quality of life and the importance of further understanding the subjective orgasm experience, research investigating the potential relationships between these two concepts would be of scientific interest and could have possible clinical implications, particularly in populations with difficulties with orgasms (Mah & Binik, 2002; Mah & Binik, 2019). For example, the ORS could possibly

be utilized in understanding the differences in how people with and without sexual concerns experience orgasms. Those with sexual challenges may characterize their orgasms distinctly compared to those without sexual challenges. Furthermore, there may be orgasm experience variability among individuals with specific sexual difficulties (e.g., challenges with orgasm, low desire, etc.). Understanding any differences could help inform treatments that target sexual function.

Interoceptive Awareness

Interoceptive awareness has been defined as "the self-perceived tendency to detect internal bodily signals such as heartbeat, hunger, thirst, pain and breathing, and further encompasses how emotions, beliefs and attitudes are related to the internal state" (Jones et al., 2020, p. 662). It has also been connected to the concept of mindfulness (Mehling et al., 2012). Interoceptive awareness has been studied in sexual psychophysiological investigations focused on the concordance between genital vasocongestive response and subjective awareness of sexual arousal (e.g., Handy & Meston, 2016).

There is growing literature on how mindfulness from a more global perspective influences sexual functioning in women, especially with the use of mindfulness-based therapy (Stephenson & Kerth, 2017). A meta-analysis found that mindfulness-based therapies tend to enhance sexual function in women, with sexual arousal and desire outcomes demonstrating moderate to large effects and other sexual functioning components, including orgasm, producing small to moderate effect sizes (Stephenson & Kerth, 2017).

A cross-sectional study comparing women who were or were not meditators was conducted and investigated variables related to mindfulness (trait and bodily consciousness) and sexual functioning (Dascalu & Brotto, 2018). Meditators had significantly higher scores on sexual functioning scales or sub-scales, including orgasm, compared to nonmeditators. Meditators also demonstrated greater bodily awareness on a number of domains, which included Noticing, Attention Regulation, Emotional Awareness, Self-Regulation, Body Listening, and Trusting.

Another cross-sectional study of Portuguese women and men investigated correlations among alexithymia (i.e., "a subclinical condition globally described as a deficit in the awareness and cognitive regulation of emotions"), sexual functioning, and bodily awareness variables (Berenguer et al., 2019, p. 730). Women's scores on interoceptive awareness correlated with all measures of sexual functioning and distress. However, in men, interoceptive awareness scores only correlated with holding off on ejaculation during mixed-sex intercourse.

It appears that ORS scores have not been studied in relation to bodily awareness. It would be of empirical interest to study the relationship between the ORS and levels of interoceptive awareness, considering the intersection of physiological and emotional sensations that are captured within the subjective orgasm experience (Mah & Binik, 2002).

Attention to Genital Arousal Cues

A concept that has been associated with sexual psychophysiological investigations on genital and subjective arousal in women is attention to genital cues (Handy & Meston, 2016; Handy & Meston, 2018). It has been utilized as a descriptive

measure exploring one's characteristics of paying attention to their genitals (Handy & Meston, 2016; Handy & Meston, 2018). Most women endorse paying attention to genital cues during sexual experiences (Handy & Meston, 2016; Handy & Meston, 2018). It is worthy to note that attention to genital sensations is conceptually related to interoceptive awareness, although a correlation between these scales has yet to be established. It has also not been studied in relation to orgasm. It would be interesting to explore any potential associations between genital sensations and ORS sensory components more in depth, as any relationship may indicate the need for clinical interventions that target paying more attention to bodily sensations.

The current study examined psychometric properties of the ORS and the relationships among the subjective orgasm experience and sexual functioning, interoceptive awareness, and attention to genital cues. It was hypothesized that: 1) A principal components analysis (PCA) of the data would reveal that the ORS was a psychometrically sound instrument and that it would have at least two components; 2) After latent profile analysis (LPA), more than one cluster of ORS component scores would be identified; however, how many clusters would emerge and how the clusters would differ was not hypothesized; and 3) Validity of the clusters would be established by ANOVAs that would potentially reveal differential scores among the clusters on measures of sexual functioning, interoceptive awareness, and attention to genital cues.

CHAPTER 3

METHODOLOGY

Participants

This investigation was a secondary data analysis of data collected in 2018 from Queen's University in Kingston, Ontario, Canada. The goal of the primary study was to develop a measure of genital arousal sensations and perceptions. Institutional Review Board (IRB) approval (there known as ethics approval) was granted from the institution, and informed consent was obtained. Participants, comprised of students and online community members of all genders, were informed that to be eligible for the study they needed to be: 1) 18 years or older, 2) fluent in the reading and writing of English, and 3) not have any sexual functioning difficulties (e.g., pain with sex, low desire).They were recruited via the Queen's University Psychology Subject Pool and various social media and online platforms (e.g., Redditt, Facebook, Bunz, and Kijiji). The final sample consisted of 1,016 participants who completed an anonymous online survey with measures on a variety of topics, including sexual functioning, orgasm ratings, interoceptive awareness, and genital sensations.

A data transfer agreement was signed between Queen's University and the University of Rhode Island (URI). The data received from Queen's University was deidentified, and no answers could be traced back to any specific individuals. URI IRB approved two separate submissions regarding this research: 1) permission to look at the

data set to in order to determine possible research ideas for a Master's thesis, and 2) the Master's thesis proposal itself.

The current study investigated a sub-set of the Queen's University study sample – sexually active women. Additional eligibility criteria for participant inclusion were required for this study: 1) Self-identification as a woman on one of the items asking about gender identity[1]; 2) Report of having "female-typical genitalia (vulva, vagina)" on an item used to determine appropriate survey questions for individuals; and 3) Endorsement of any partnered sexual activity in the past four weeks on an item assessing whether sexual activity was had during that time frame and with whom (i.e., by oneself and/or with a partner; $n = 433$). Participants were excluded if they: 1) Took less than 10 minutes to finish the survey (in order to increase the chances of having more thoughtful and complete responses from participants)[2], and 2) Had missing responses on any of the ORS items used in the PCA and LPA. The final sample consisted of 359 women.

Measures

Demographic Questions

Participants were asked the following demographic questions: year of birth; sexual orientation; gender identity (two separate items); sex assigned at birth; whether participant had male-typical (penis, scrotum) or female-typical (vulva, vagina) genitalia; whether participant's partner(s)/desired partner(s) had male-typical or female-typical genitalia; country, world region, or continent of current residence; ethnic or cultural

[1] Participants were asked two questions about gender identity, which provided them the opportunity to indicate more than one gender identity identifier. If they selected "woman" as one of the identifiers, they were considered eligible for this criterion, regardless of their selection of another identifier (e.g., cis, trans, non-binary, etc.).

[2] The median time to survey completion was approximately 34 minutes for the 433 eligible participants.

group; religious community; highest level of formal education; occupational status; and approximate total annual income of household before taxes (see Table 3 for all response options that were selected by the sample). An “estimate age” variable was created and utilized in analyses instead of year of birth. This was calculated by subtracting the year of birth from 2018, which was the year participants completed the survey.

Relationship and Sexual History Questions

Participants were asked the following relationship and sexual history questions: current relationship status; number of previous sexual partners; number of long-term committed relationships, defined as a relationship that lasted more than three months and may or may not have include people one had cohabitated with; and age of first penetrative sexual activity. A variable to estimate sexually active years was created by subtracting age of first penetrative sexual activity from estimated age.

Orgasm Rating Scale (ORS)

The ORS is a measure that assesses one’s last orgasm experience from a subjective perspective. Individuals rate 40 adjectives on a Likert scale from 0 (“does not describe it at all”) to 5 (“describes it perfectly”), with higher scores indicating greater alignment with a particular sensation or feeling (Mah & Binik, 2002, p. 105; Mah & Binik, 2019). Participants also indicate whether or not the orgasm occurred during partnered sexual activity or solo masturbation (Mah & Binik, 2002). Of the 40 adjectives, the scores of 28 of them are summed together into 10 respective components: building sensations, flooding sensations, flushing sensations, shooting sensations, throbbing sensations, general spasms, emotional intimacy, ecstasy, pleasurable satisfaction, and relaxation (Mah & Binik, 2019). (The remaining 12 adjectives are not scored; they

represent other facets of orgasm but have not been empirically investigated; Mah & Binik, 2019.) The total scores of the components are added together to create the two-dimension scores, sensory and cognitive-affective. The sensory domain is comprised of the following components: building sensations, flooding sensations, flushing sensations, shooting sensations, throbbing sensations, and general spasms. The cognitive-affective domain is made up of the following components: emotional intimacy, ecstasy, pleasurable satisfaction, and relaxation. (Please see Mah & Binik [2002, 2019] for more information on the ORS model and scoring.) Reliability was found to range from good to excellent for the adjective items in the original validation study for the measure (Cronbach's $\alpha = 0.88 – 0.92$; Mah & Binik, 2002), and it was excellent within this sample (Cronbach's $\alpha = 0.94$).[3] Construct validity has been identified through differential scores between women and men and also between different sexual scenarios (i.e., partnered vs. solo sexual activity) (Mah & Binik, 2002).

Female Sexual Functioning Index (FSFI)

The FSFI is a measure that assesses self-reported sexual function over the preceding four weeks (Rosen et al., 2000). It consists of 19 items that comprise a full-scale score and the following domain scores: desire, arousal, lubrication, orgasm, satisfaction, and pain. Subscale scores are calculated by summing its respective items and multiplying the total by its particular factor (ranges from 0.3 – 0.6). These scores are added together to produce the full scale score. Higher scores on the full scale and subscale scores suggest better functioning. In the original developmental studies for the measure, reliability was found to range from good to excellent (Cronbach's $\alpha = 0.82 –$

[3] This alpha was calculated using the 28 scored items even though the scale used in the analyses consisted of 23. The reliabilities for the 23 item, three component ORS scale are reported later in the Results section.

0.93) on individual subscales, and acceptable discriminant and divergent validity were identified.

The current study used a modified language version of the FSFI based on wording changes made by Boehmer et al., (2012) in order to make the measure inclusive for women of all sexual orientations (Jackowich & Pukall, 2022). Reliability was deemed to be good in Jackowich & Pukall's (2022) sample (Cronbach's $\alpha = 0.80 – 0.89$), and it was good to excellent in the current study's sample (Cronbach's $\alpha = 0.81 – 0.92$). See Table 1 for more detailed information about the FSFI scales.

Multidimensional Assessment of Interoceptive Awareness (MAIA)

The MAIA is an assessment of one's interoceptive awareness (i.e., mindfulness of the body) (Mehling et al., 2012). It consists of 32 items that load onto eight sub-scales: noticing ("awareness of uncomfortable, comfortable, or neutral body sensations"), not distracting ("tendency *not* to ignore or distract oneself from sensations of pain or discomfort"), not worrying ("tendency *not* to experience emotional distress or worry with sensations of pain or discomfort"), attention regulation ("ability to sustain and control attention to body sensations"), emotional awareness ("awareness of the connection between body sensations and emotional states"), self-regulation ("ability to regulate distress by attention to body sensations"), body listening ("tendency to actively listen to the body for insight"), and trusting ("experience of one's body as safe and trustworthy") (Mehling et al., 2012, pp. 13, 15-16). The items are rated on a scale from 0 ("never") to 5 ("always") with greater mean scores indicating greater interoceptive awareness. Subscale scores are calculated using the mean of its respective items; there is no total score for this measure. Reliability was found to range from adequate to good (Cronbach's $\alpha = 0.66 –$

0.87) for individual subscales, and evidence for construct validity was identified by analyzing correlations with other measures, score differences between groups, and incremental validity. In the present sample, reliability was also deemed adequate to good (Cronbach's $\alpha = 0.65 – 0.89$). See Table 1 for more detailed information about the MAIA subscales.

Attention to Genital Cues (AGC) Scale

The AGC Scale measures facets of one's experience noting feelings from their genitals, specifically in terms of prevalence, effort, and significance of being cognizant of one's genital sensations (Handy & Meston, 2016, 2018). The first item functions as an initial skip pattern question, followed by four scored items rated on a Likert scale from 1-5 (Handy & Meston, n.d.). Reliability for the scored questions ($\alpha = .64$; Viscione et al., 2021) was found to be acceptable and may have been influenced by there being few items (Ponterotto & Ruckdeschel, 2007; Tavakol & Dennick, 2011). In this sample, reliability was deemed to also be acceptable for a four item scale (Cronbach's $\alpha = 0.60$). Initial validity for its use in quantitative investigations was suggested by positive correlations with interoceptive awareness and sexual arousal subscales (convergent validity) and non-significant correlations with the mood traits of tiredness and negative affect (discriminant validity) (Viscione et al., 2021).

CHAPTER 4

RESULTS

Data Cleaning

Data cleaning was conducted using the SPSS Version 27 statistical software program. Descriptives, frequencies, and box plots were run on variables of interest to check for deviations in normality and for outliers. Winsorizing was performed on select variables of interest (detailed below) prior to running the ANOVAs; no other transformations were needed. Missing data was handled by utilizing listwise deletion or complete cases during analyses.

Demographics

Participants' estimated ages ranged from 18 – 70 years old (M = 25.57, SD = 7.66; median = 23.00). In terms of sexual orientation, 70.5% identified as heterosexual, 22.6% identified as bisexual, 2.8% as "other," 1.9% as lesbian (same-sex attracted), 1.7% as queer, and 0.3% each for gay (same-sex attracted) and asexual, respectively. The entire sample was comprised of individuals who self-identified as women, with 97.8% endorsing being cisgender, 1.4% identifying as non-binary, and 0.8% identifying as trans. The majority of participants reported residing in Canada (57.4%), the United States (32.6%), or Western Europe (5.8%). The most endorsed ethnic origins or cultural groups were Canadian (46.5%), American (28.1%), Western European (except French) (8.6%), and Eastern European (8.1%).[4] The sample was comprised predominantly of individuals

[4] Participants were able to select multiple options.

with high levels of education, with 42.9% having some college/undergraduate degree, 22.6% having a college/undergraduate degree, 13.4% having a graduate school/professional degree, and 12.8% having graduated high school. Most individuals were either students (42.3%) or were employed full- (29.5%) or part-time (15.0%). See Tables 2 and 3 for more detailed demographic information.

Relationship and Sexual History

Participants endorsed the following current relationship statuses: dating one partner regularly (25.3%); living with partner (14.8%); married (13.1%); dating one partner regularly (long distance) (12.5%); single, not dating (11.1%); casual sex with one partner (7.8%); casual sex with multiple partners (7.8%); common-law (4.2%); and other (3.3%). The number of previous sexual partners ranged from 0 – 150 (M = 9.83, SD = 14.98; median = 5), and the number of long-term committed relationships that lasted more than 3 months ranged from 0 – 15 (M = 2.34, SD = 1.94; median = 2.00).[5] Age of first penetrative sexual activity ranged from 12 – 32 years old (M = 17.14, SD = 2.54; median = 17.00). Estimated sexually active years ranged from 1 – 50 years (M = 8.58, SD = 7.90; median = 6.00).[6] See Tables 2 and 3 for more detailed relationship and sexual history information.

Principal Components Analysis

Principal components analysis with a varimax rotation and listwise deletion were run on the 28 scored ORS items to determine what dimensions arose from the data. Both the Bartlett's test of sphericity ($\chi 2$ (378) = 5,817.86, $p < .001$) and the Kaiser-Meyer-

[5] One participant was removed from the descriptive analyses for the prior two variables due to extreme values compared to the rest of the sample.

[6] Another participant was removed from the descriptive analyses for the prior two variables due to an extreme age of first penetrative sexual activity compared to the rest of the sample.

Olkin measure of sampling adequacy (KMO; 0.92) indicated that the data were found to be suitable for a PCA (Bartlett, 1950; Kaiser, 1970; Field, 2009). Rotated component loadings of at least .40 were retained (Stevens, 2002). Items with cross loadings (also known as complex loadings) were removed unless the difference between the loadings was approximately |0.20| or greater. In these cases, the item would remain and be categorized under the component with the higher loading (L. Harlow, personal communication, March 17, 2022; Sandbrook et al., 2019). Four initial PCAs were run – one that allowed any components with an eigenvalue of 1.0 or greater to emerge, and three that were forced with two, three, and four components, respectively. The initial PCA produced six components with eigenvalues of 1.0 or greater that explained 66.86% of the variance with four items that loaded complexly ("elated," "flooding," "swelling," and "euphoric"). The forced two component PCA explained 46.39% of the variance and had seven items load complexly, of which one could be designated to a single component ("elated," "unifying," "euphoric" [put on component 2], "passionate," "tender," "close," and "ecstatic"). The forced three component PCA explained 53.47% of the variance and had six items load complexly, of which three could be designated to a single component ("pulsating" [put on component 2], "spurting," "flowing," "shooting," "rapturous" [put on component 1], and "peaceful" [put on component 3]). The forced four component PCA explained 59.06% of the variance and had six items load complexly, of which two could be designated to a single component ("pulsating," "spurting," "flowing," "quivering," "euphoric" [put on component 3], and "rapturous" [put on component 1]). The decision was made to proceed with the three component solution as it had the fewest complex loadings that would need to be removed out of all the PCAs.

Attention was turned to addressing the items with complex loadings within the three component solution. Items with a difference of less than approximately |0.20| between the loadings were removed from subsequent PCAs of three components until a 23 item solution was produced.[7] The items removed were “spurting,” “flowing,” “shooting,” “euphoric,” and “spreading.” The final three component, 23 item solution explained 56.16% of the variance. See Table 4 for the rotated component loadings of the final solution.

Once the ORS structure was established, the three components were named. Component 1 was designated as “Cognitive-Affective” (items: “elated,” “loving,” “unifying,” “passionate,” “rapturous,” “tender,” “close,” “ecstatic”). Component 2 was named “Sensory” (items: “flooding,” “pulsating,” quivering,” “swelling,” “building,” “flushing,” “shuddering,” “throbbing,” “trembling”). Component 3 was labeled “Rewards” (items: “satisfying,” “fulfilling,” “peaceful,” “relaxing,” “soothing,” “pleasurable”). The component names were taken from the original ORS scale (Mah & Bink, 2002) and its Spanish iteration (Arcos-Romero, Moyano, & Sierra, 2018). Reliability of the three components/dimensions ranged from good to excellent using Cronbach’s alpha (Cognitive-Affective – $\alpha = 0.91$; Sensory – $\alpha = 0.85$; Rewards – $\alpha = 0.85$).

Latent Profile Analysis

A latent profile analysis was conducted on the three component, 23 item PCA solution in the statistical program R. Only information from individuals with complete

[7] There was one item (“rapturous”) with cross loadings in this solution. However, since the difference between the two loadings was .22, the item was retained and categorized under the component with the higher loading.

cases was used, as listwise deletion had been utilized in the PCA data, and this data was entered into the LPA. One to six profiles were estimated, as this was the same number of clusters that were examined in King et al. (2011). All of the clusters were significantly different from one another except between the five and six cluster solutions ($p = 0.08$). The five cluster solution was selected from among the rest due to having the lowest Bayes information criterion (BIC) value and being more parsimonious than the six cluster option (Spurk et al., 2020). See Table 5 for latent profile analysis cluster estimate information and Figure 1 for a depiction of the final five cluster solution.

The five clusters generated from the LPA were analyzed and described. Cluster name format consists of the letter "C" and the cluster number that was generated by the R LPA analysis. This is then followed by three letters representing score levels – "L" for low, "M" for moderate, and "High" for high. The position of these three letters refers to the ORS PCA scores of a specific component. The first letter refers to the Cognitive-Affective score, the second letter refers to the Sensory score, and the third letter refers to the Rewards scores. Cluster 1 (C1 - MMM; $n = 96$) consisted of all moderate scores on the cognitive-affective, sensory, and rewards components. Cluster 2 (C2 – LLL; $n = 32$) consisted of all low scores on the cognitive-affective, sensory, and rewards components. Cluster 3 (C3 – HHH; $n = 106$) consisted of all high scores on the cognitive-affective, sensory, and rewards components. Cluster 4 (C4 – LMM; $n = 77$) consisted of scores that were low on the cognitive-affective component and moderate on the sensory and rewards components. Cluster 5 (C5 – LMH; $n = 48$) consisted of scores that were low on the cognitive-affective component, moderate on the sensory component, and high on the rewards component. See Figure 2 and Table 6 for descriptive information of all five

clusters in relation to the three components, and see Table 7 for cluster information on select demographic variables.

Cluster Differences: ANOVA and Chi-Square

The resulting LPA five cluster solution was subjected to analyses that examined mean differences between the clusters. Chi-squares and one-way ANOVAs were performed on the clusters and select demographic and relationship and sexual history variables. Continuous variables in this category were analyzed for extreme outliers, defined as values three times higher than the interquartile range utilizing box plots (Ghasemi & Zahediasl, 2012). Five such variables were winsorized: estimated age, number of previous sexual partners, number of long-term committed relationships, age first engaged in penetrative sexual activity, and estimated number of years sexually active since first penetrative sexual activity.[8] Of note, the values of two individuals with quite marked responses were removed from the following variables prior to winsorizing: number of previous sexual partners, number of long-term committed relationships, age first engaged in penetrative sexual activity, and estimated number of years sexually active since first penetrative sexual activity.

One-way ANOVAs were conducted on select continuous demographic and relationship and sexual history variables. Such tests revealed that there were no statistically significant difference in age, $F(4, 351) = 1.32$, $p = 0.263$, $\eta 2 = 0.015$, number of sex partners, $F(4, 342) = 1.24$, $p = 0.292$, $\eta 2 = 0.014$, number of long-term

[8] The process of winsorization used in this study involved recoding extreme outliers by identifying the value of the third quartile (Q3) plus three times the interquartile range (IQR) and adding one sequentially to this value. For example, if Q3+3*IQR = 50, then a value of 55 would be recoded as 51, 59 would become 52, 63 would be changed to 53, 70 would be recoded as 54, etc (A. Stamates, personal communication, April 6, 2022; Barnett & Lewis, 1984).

relationships, $F(4, 347) = 1.76$, $p = 0.136$, $\eta 2 = 0.020$, age first engaged in penetrative sexual activity, $F(4, 343) = 0.92$, $p = 0.453$, $\eta 2 = 0.011$, and number of estimated sexually active years, $F(4, 341) = 0.838$, $p = 0.502$, $\eta 2 = 0.010$, among the five clusters. See Table 8 for more information.

Chi-Square Tests of Independence were performed to assess whether there was a difference among the clusters on the variables of sexual orientation, current relationship status, and whether their last orgasm occurred while alone or with partner(s).[9] There was a significant relationship between whether one reported that their last orgasm was alone or with partner(s) and cluster designation, χ^2 (4, 346) = 44.78, $p = <0.001$. C1 – MMM and C3 – HHH had significantly different distributions of responses to this item compared to C4 – LMM and C5- LMH, with C1 – MMM and C3 – HHH having greater percentages of participants endorsing having their last orgasm with partner(s) (66.3% and 66.7%, respectively) compared to C4 – LMM and C5- LMH (31.2% and 23.4%, respectively). Of note, 51.6% of individuals in C2 – LLL reported having their last orgasm with partner(s). There was not a significant relationship demonstrated among the clusters with sexual orientation, $\chi^2(4, 359) = 4.55$, $p = 0.336$, and current relationship status, $\chi^2(32, 359) = 41.22$, $p = 0.127$. See Table 9 for more information.

One-way ANOVAs were conducted on continuous variables of sexual functioning, interoceptive awareness, and attention to genital cues. The decision was made to utilize complete cases for these variables, as many of the scales or sub-scales that comprise these variables do not contain many items, which would not make them a good candidate for mean replacement per the researcher and would possibly skew data

[9] The sexual orientation variable was dichotomized into heterosexual and non-heterosexual categories due to small *n*s in the latter classification.

interpretation. When looking at missing responses by item, there were always few to no items missing.

The sexual functioning (FSFI) scales that were subjected to the one-way ANOVA were Desire, Arousal, Lubrication, Orgasm, Satisfaction, Pain, and Full Scale. There was a statistically significant difference among the clusters on the variables of Desire, $F(4, 354) = 4.14$, $p = 0.003$, $\eta 2 = 0.045$, Arousal, $F(4, 351) = 9.98$, $p = <0.001$, $\eta 2 = 0.102$, Lubrication, $F(4, 350) = 3.72$, $p = 0.006$, $\eta 2 = 0.041$, Satisfaction, $F(4, 350) = 5.41$, $p = <0.001$, $\eta 2 = 0.058$, and Full Scale, $F(4, 341) = 5.73$, $p = <0.001$, $\eta 2 = 0.063$. Post-hoc analyses with the Bonferroni correction were conducted. A significant difference in Desire scores between C3 – HHH ($M = 4.46$, $SD = 1.00$) and C4 – LMM ($M = 3.85$, $SD = 1.19$) were found indicating that individuals in C3 – HHH had higher Desire scores than those in C4 – LMM. Arousal scores had significant differences between C2 – LLL ($M = 4.09$, $SD = 1.27$) and the rest of the clusters – C1 – MMM ($M = 5.12$, $SD = 0.79$), C3 – HHH ($M = 5.18$, $SD = 0.834$), C4 – LMM ($M = 4.86$, $SD = 0.97$), and C5 – LMH ($M = 5.10$, $SD = 0.96$), indicating that participants in C2 – LLL had lower Arousal scores than individuals in all other clusters. Lubrication scores had significant differences between C1 – MMM ($M = 5.56$, $SD = 0.63$) and C2 – LLL ($M = 4.85$, $SD = 1.38$), indicating that individuals in C1 – MMM had higher Lubrication scores than those in C2 – LLL. Satisfaction scores had significant differences between C3 – HHH ($M = 5.00$, $SD = 1.03$) and C2 – LLL ($M = 4.08$, $SD = 1.24$), C4 – LMM ($M = 4.44$, $SD = 1.15$), and C5 – LMH ($M = 4.43$, $SD = 1.33$), indicating that participants in C3 – HHH had higher Satisfaction scores than individuals in three other clusters. Full scale scores had significant differences between C2 – LLL ($M = 25.46$, $SD = 5.33$) and C1 – MMM ($M = 28.27$, $SD =$

4.14), C3 – HHH (*M* = 29.52, *SD* = 4.58), and C5 – LMH (*M* = 28.51, *SD* = 3.51), indicating that individuals in C2 – LLL had lower sexual functioning Full Scale scores than those in three other clusters. See Figure 3 and Table 10 for more information.

The interoceptive awareness (MAIA) scales that were subjected to the one-way ANOVA were Noticing, Not Distracting, Not Worrying, Attention Regulation, Emotional Awareness, Self-Regulation, Body Listening, and Trusting. There were statistically significant differences among the clusters on the variables of Attention Regulation, $F(4, 351) = 4.00$, $p = 0.003$, $\eta 2 = 0.044$, Emotional Awareness, $F(4, 352) = 3.36$, $p = 0.010$, $\eta 2 = 0.037$, Self-Regulation, $F(4, 352) = 8.45$, $p = <0.001$, $\eta 2 = 0.088$, Body Listening, $F(4, 354) = 2.69$, $p = 0.031$, $\eta 2 = 0.030$, and Trusting, $F(4, 350) = 5.86$, $p = <0.001$, $\eta 2 = 0.063$. Post-hoc analyses with the Bonferroni correction were conducted. Significant differences in Attention Regulation scores were found between C3 – HHH (*M* = 3.26, *SD* = 0.93) and C1 – MMM (*M* = 2.86, *SD* = 0.86) and C4 – LMM (*M* = 2.86, *SD* = 0.86), indicating that participants in C3 – HHH had higher Attention Regulation scores than those in C1 – MMM and C4 – LMM. Emotional Awareness scores had significant differences between C3 – HHH (*M* =3.86, *SD* = 0.79) and C4 – LMM (*M* = 3.44, *SD* = 0.88), indicating that individuals in C3 – HHH had higher Emotional Awareness scores than those in C4 – LMM. Self-Regulation scores had significant differences between C3 – HHH (*M* = 3.18, *SD* = 1.09) and C1 – MMM (*M* = 2.68, *SD* = 1.12), C2 – LLL (*M* = 1.99, *SD* = 1.30), C4 – LMM (*M* = 2.64, *SD* = 1.03), and C5 – LMH (*M* = 2.59, *SD* = 0.96); C2 – LLL (*M* = 1.99, *SD* = 1.30) had significant differences between C1 – MMM (*M* = 2.68, *SD* = 1.12), C3 – HHH (*M* = 3.18, *SD* = 1.09), and C4 – LMM (*M* = 2.64, *SD* = 1.03). This indicates that individuals in C3 – HHH had higher Self-Regulation scores

than those in all other clusters and that participants in C2 – LLL had lower Self-Regulation scores than those in three other clusters. Trusting scores were significantly different between C2 – LLL (M = 2.77, SD = 1.31) and C3 – HHH (M = 3.59, SD = 1.19) and C5 – LMH (M = 3.69, SD = 1.25); C3 – HHH (M = 3.59, SD = 1.19) was significantly different from C2 – LLL (M = 2.77, SD = 1.31) and C4 – LMM (M = 2.96, SD = 1.20); C4 – LMM (M = 2.96, SD = 1.20) was significantly different from C3 – HHH (M = 3.59, SD = 1.19) and C5 – LMH (M = 3.69, SD = 1.25); and C5 – LMH (M = 3.69, SD = 1.25) was significantly different from C2 – LLL (M = 2.77, SD = 1.31) and C4 – LMM (M = 2.96, SD = 1.20). This indicates that: participants in C2 – LLL had lower Trusting scores than those in in C3 – HHH and C5 – LMH; individuals in C3 – HHH had higher Trusting scores than those in C2 – LLL and C4 – LMM; participants in C4 – LMM had lower scores than those in C3 – HHH and C5 – LMH; and individuals in C5 – LMH had higher Trusting scores than those in C2 – LLL and C4 – LMM. See Figure 4 and Table 11 for more information.

The attention to genital cues (AGC) scale was subjected to a one-way ANOVA. There was a statistically significant difference among the clusters on this variable, $F(4, 305) = 2.439$, $p = 0.047$; however, post-hoc analyses with the Bonferroni correction did not identify any differences. See Figure 5 and Table 12 for more information.

CHAPTER 5

CONCLUSION

Discussion

The three hypotheses posited in this investigation were all supported. First, a psychologically sound instrument with three components – Cognitive-Affective, Sensory, and Rewards – was identified. Second, five meaningful clusters emerged from the three ORS components when subjected to latent profile analysis. These clusters consisted of individuals with different combinations of low, moderate, and high scores among the Cognitive-Affective, Sensory, and Rewards components. Third, validity of the clusters was established by significantly different means among them on the FSFI and MAIA measures, as well as response differences for the context of whether one's last orgasm by themselves or with a partner. The results showed higher self-report of sexual functioning and interoceptive awareness facets depending on differential scores among the clusters.

ORS Psychometric Structure

The three dimensional ORS psychometric structure that emerged from this research has support from the literature. Prior to the publication of Mah & Binik's 2002 article with a two dimensional ORS scale, these authors had worked on a three dimensional orgasm model (Mah, 2000; Mah & Binik, 2001). The three dimensional model had significant overlap with the subsequent 2002 ORS model in terms of its use of similar 28 adjective items and 10 components (Mah, 2000; Mah & Binik, 2002). Furthermore, its three dimensions – evaluative (comprised of adjectives describing

"pleasurable satisfaction" and "relaxation"), sensory (bodily sensations), and affective (comprised of adjectives describing "emotional intimacy" and "ecstasy") – were conceptually aligned with the 2002 ORS dimensions (i.e., Cognitive-Affective and Sensory; Mah, 2000, p. 175; Mah & Binik, 2002). In the 2002 paper, Mah & Binik wrote that when conducting PCA model testing, a three factor solution with cognitive, affective, and sensory dimensions presented as a potential model, but it was not different enough from the two-dimensional model to go with a less parsimonious fit. Additional researchers found support for a greater than two dimensional ORS model in a Spanish sample (Arcos-Romero, Moyano, & Sierra, 2018). Their analyses suggested that a four factor, 25 item model worked best, which consisted of affective, sensory, intimacy, and rewards dimensions. Therefore, the emergence of a three factor solution in this study has previous empirical support from the original ORS instrument authors as well as other independent researchers.

ORS Clusters

The five meaningful clusters that resulted from women's ratings of their last orgasm experience provide support for the existence of typologies of this phenomenon. The study that inspired this analysis, conducted by King et al., (2011), also investigated orgasm typology in women by subjecting the 10 ORS components produced from the original Mah & Binik (2002) study to a latent class analysis. King et al. (2011) identified both a four and five cluster solution as fitting the data, similar to the present study (although the four cluster solution was more parsimonious for their data). Additionally, both studies generated clusters of women's orgasm scores that varied in level (e.g., low, moderate, high) along orgasm descriptive categories, such as those that were

characterized by all or predominantly high scores, low scores, or different levels for various components. Interestingly, the cluster characterizing the smallest number of women in both studies had low scores on the respective orgasm characteristics. This suggests that women who do not describe their orgasm experience as particularly positive or varied may make up a smaller proportion of all orgasmic women.

One question that emerges from this investigation is whether the orgasm clusters/typologies identified in the current study would be stable over time and across different contexts at the individual level. Evidence from the current study suggests that they may change with context, as there was a significant difference in cluster scores depending on whether one's last orgasm was alone or with a partner. Differences in ORS component scores have also been noted between the two contexts in several studies (King et al., 2011; Mah & Binik, 2002; Mah & Binik, 2005). Furthermore, qualitative data from Fahs (2014) and Chadwick et al. (2019) provide numerous examples indicating that a variety of factors (e.g., specific partner, type of sexual activity, coercion/compliance/pressure, or identity characteristics) can influence one's experience of orgasm in both positive and negative ways. Therefore, further research is needed to determine to what extent individual orgasm typologies vary by context or over time.

Characteristics of ORS Clusters

The validity of the five ORS clusters was established by a number of significant differences on scales or subscales of the FSFI (Desire, Arousal, Lubrication, and Full Scale) and MAIA (Attention Regulation, Emotional Awareness, Self-Regulation, and Trusting), as well as the sexual history variable of one's last orgasm being with a partner or by oneself. These results provide support that there is an association between how one

experiences orgasm and their levels of sexual functioning and awareness of internal sensations, and some contextual factors involved in their sexual activity.

Sexual Functioning. Post-hoc analyses identified significant differences among the clusters on the following FSFI scales: Desire, Arousal, Lubrication, Satisfaction, and Full Scale. Desire produced one significant difference between C3 – HHH and C4 – LMM, which represented the highest and lowest scores on this sub-scale, respectively. A possible explanation for this could be due to differential scores on the Cognitive-Affective factor (for which C3 – HHH is high and C4 – LMM is low). This dimension is characterized by adjectives that would overlap theoretically with sexual desire, such as "passionate," "unifying," and "ecstatic." Individuals, such as those in C4 - LMM, who do not endorse these words adjectives as highly may therefore have less desire.

All differences found in Arousal were between C2- LLL (which had the lowest Arousal subscale score) and the rest of the clusters. Compared to the other clusters, C2 – LLL is the only cluster that is designated as having low scores in both the Sensory and Rewards dimensions. Sample adjectives include "pulsating," "swelling," and "throbbing" for Sensory and "pleasurable," "fulfilling," and "satisfying" for Rewards. These all overlap well with being "turned on," which is a descriptor used in some of the FSFI sexual arousal items (Rosen et al., 2000). However, it has been noted that the Arousal subscale better captures cognitive arousal instead of genital arousal, which is perhaps better measured with the FSFI Lubrication subscale (Meston et al., 2020). Therefore, low scores on all orgasm dimensions suggest the respondent may have a more difficult, less intense, or less pleasant experience with cognitive sexual arousal that may influence appraisals of the somatic sensations of orgasm.

Lubrication produced one significant difference between C1 – MMM and C2 – LLL, which represent the highest and lowest Lubrication subscale scores, respectively. These findings suggest that women's perception of orgasm is related to their frequency and difficulty of becoming or maintaining genital lubrication during sexual activity (Rosen et al., 2000). The C2 – LLL cluster having the lowest scores could be explained by likely having a poorer overall sexual experience that manifests physically.

Satisfaction produced significant differences between C3 – HHH and three other clusters: C2 – LLL, C4 – LMM, and C5 – LMH. C3 – HHH had the highest average scores, while C2 – LLL had the lowest. The clusters with the highest and lowest scores both make sense as they reflect groups who indicate alignment with orgasm descriptors the most and the least. Therefore, these findings suggest that greater endorsement of items that describe the cognitive-affective, sensory, and rewarding aspects of one's orgasm is associated with greater satisfaction with the "emotional closeness" and "sexual relationship" with their partner as well as with one's "overall sexual life" (Rosen et al., 2000, pp. 206-207).

Full Scale produced significant differences between C2 – LLL (which had the lowest average scores) and three other clusters: C1 – MMM, C3 – HHH, and C5 – LMH. Of note, the only cluster with a mean below the clinical cut off score of 26.55 is C2 – LLL, which suggest that members of this group might be more likely to have a clinically diagnosable sexual dysfunction (Wiegel et al., 2005).[10] These data indicate that scoring low on all three orgasm dimensions is consistent with potential sexual concerns.

[10] Of note, clinical sexual dysfunction cannot be assumed without a formal diagnosis and some measure of sexual distress (Meston et al., 2020).

The sub-scales scores of Orgasm and Pain were not significantly different among the clusters (although there was a trend towards significance for Orgasm). This is particularly interesting in regard to the Orgasm scale, as the clusters are measuring a facet of the orgasm experience. This investigation's result contrasts with Arcos-Romero, Moyano, & Sierra's (2018) study that found significant score differences in three of the four ORS factors between individuals with and without orgasmic difficulties, with individuals in the latter group scoring higher than those of the former. However, in Arcos-Romero, Moyano, & Sierra's (2018) work, orgasm difficulties were measured by another instrument and not the FSFI.

Potential reasons why Orgasm and Pain did not show any group differences could be due to sample selection and study criteria. In the original study done at Queen's University, prospective participants were informed that individuals with sexual difficulties, including sexual pain, would not be eligible, potentially leading to self-exclusion by some. In the data analysis, participants who reported sexual difficulties were retained. Further, those with sexual pain may have been more likely to be excluded because they would not have met the criteria of having engaged in partnered sexual activity in the past four weeks.

Another potential reason why Orgasm in particular did not show any group differences could be that the subjective experience of orgasm, as measured by the ORS, is not related to one's frequency, difficulty, or satisfaction with having an orgasm, as measured by the FSFI (Rosen et al., 2000). Although counterintuitive, this could suggest that just because one may have difficulties achieving orgasm does not necessarily mean the quality of the experience is markedly diminished. This may also indicate that other

variables associated with orgasm, such as intensity, could be greater contributors to orgasmic functioning than more specific subjective characteristics (i.e., cognitive-affective, sensory, and rewarding sensations and appraisals).

Some relevant limitations of the FSFI to this study should be noted. First, the measure is restricted to women who in the past four weeks have been sexually active (Meston et al., 2020). This requirement limits potential participants who may not be sexually active within the past month for a number of reasons, such as illness or marked sexual concerns. Second, the original wording of the measure could be changed for better inclusion of sexual minority women, which is what Boehmer et al. (2012) aimed to do in their study in a sample of such women. Third, further validation of this measure has been suggested for cultural and sexual minority populations (Meston et al., 2020). Finally, other relevant issues relate to subscale categories and whether they represent distinct and nonoverlapping components of sexual functioning, such as desire and arousal. This concern reflects that fact that the study of women's sexual functioning as well as clinical diagnosis are evolving to more accurately represent women's experience.

Interoceptive Awareness. Significant score differences were found among the clusters on the following interoceptive awareness scales: Attention Regulation, Emotional Awareness, Self-Regulation, and Trusting. Attention Regulation produced two significant differences between C3 – HHH and both C1 – MMM and C4 – LMM, with C3 – HHH having the highest score. Perhaps being categorized in C3 – HHH, characterized by a high score on Attention Regulation shows that this cluster of participants are more aware of sensations that are produced from a bodily experience, such as orgasm, without easily being distracted by other stimuli.

Emotional Awareness produced one significant difference between C3 – HHH and C4 – LMM. Like with Attention Regulation, C3 – HHH had the highest mean among the clusters on Emotional Awareness, and this cluster could be more in touch with the body-emotion connection, with the orgasm experience capturing that intersection.

Self-Regulation produced six significant score differences: C3 – HHH was significantly different from all other clusters, while C2 – LLL was significantly different from both C1 – MMM and C4 – LMM. C3 – HHH had the highest mean score on Self-Regulation, and C2 – LLL had the lowest mean score. Although the three items that comprise the Self-Regulation scale do not directly relate to sex (i.e., "When I feel overwhelmed I can find a calm place inside," "When I bring awareness to my body I feel a sense of calm," and "I can use my breath to reduce tension") this form of mindfulness likely spans beyond sexual encounters into their everyday lives.

Mean scores on Trusting produced four significant pairwise comparison differences, with C5 – LMH and C3 – HHH having significantly higher scores than both C2 – LLL and C4 – LMM, respectively. C5 – LMH and C3 – HHH had the highest scores on this sub-scale, while C2 – LLL had the lowest scores. Given that C5 – LMH and C3 – HHH are the two groups with high Rewards scores, perhaps there is a potential relationship between feeling secure in one's body (as indicated by a high Trusting score) and the experience of feelings during orgasm associated with Rewards, such as "peaceful," "soothing," and "pleasurable."

Attention to Genital Cues. Although the ANOVA for the Attention to Genital Cues scale was significant, there were no significant differences found in post-hoc analyses. Considering that the psychometric properties of this scale could be more ideal,

it is possible that a similar but more psychometrically sound measure could have been better at identifying any cluster differences that exist.

Sexual History. The only demographic, relationship, or sexual history variable that differed significantly among the clusters was whether one's last orgasm was by oneself or with partner(s). This is in line with previous research that has identified differential scores on ORS components (Mah & Binik, 2002) and ORS latent class analysis clusters (King et al., 2011) between the two scenarios. This result suggests that some contexts of a sexual encounter may influence one's experience with orgasm.

Overall Cluster Differences. The number of significant results lend support to the overall conclusion that awareness of one's body, whether during the sexual response or with general internal somatic cues, is related to how individuals characterize orgasm. This was evidenced best with the number of significant score differences between either C2 – LLL and C3 – HHH among the other clusters. Individuals in C3 – HHH highly endorsed ORS descriptor adjectives on all of three of the components. This cluster often had the highest scores on sexual functioning subscales (i.e., Desire, Arousal, Satisfaction, and Full Scale) and interoceptive awareness (i.e., Attention Regulation, Emotional Awareness, and Self-Regulation). Conversely, individuals who were in C2 – LLL gave lower endorsement to the ORS adjectives across the three components. This cluster often had the lowest scores on the sexual functioning and interoceptive awareness subscales of interest (i.e., Arousal, Lubrication, Satisfaction, FSFI Full Scale, Self-Regulation, and Trusting). Taken together, this suggests an association between a richer or varied orgasm experience and more positive outcomes with sexual functioning and mindfulness of one's body may exist. A potential implication of these findings is that clinical interventions that

enhance sexual functioning or bodily awareness may also lead to a more diverse and perhaps more fulfilling orgasm experience. For example, in a study of women with orgasmic difficulties, both the self-administered CBT (control condition) and mindfulness-based cognitive therapy (experimental condition) with a sex therapy focus resulted in improved FSFI scores, including the Orgasm subscale (Adam et al., 2020). It is possible that therapies such as these may also improve the subjective quality of one's orgasm. This is especially important considering that those in the C2 – LLL on average had FSFI Full Scale scores indicative of possible sexual concerns.

It should be noted that caution must be exercised in definitively conceptualizing orgasms as positive or negative based upon participants' cluster scores and their association with other variables, such as the FSFI scale and sub-scales. The design of the study did not allow us to determine how high and low endorsement of adjectives was associated with the subjective evaluation of the orgasm as "good" or "bad". In a mixed methods analysis, Chadwick et al. (2019) found that orgasms could be characterized as "bad" during consensual sexual encounters. This included some participants endorsing their orgasms as being less intense, less enjoyable (physically, mentally, or emotionally), and/or painful. In their qualitative responses, participants cited a number of factors that were associated with a less ideal orgasm experience, including: coercion; compliance; being tired, not interested, or bored; internal or external sexual performance pressure; and identity characteristics. Therefore, with limited understanding of the contextual factors influencing orgasm, lower endorsement of adjectives on orgasm components (or other variables) cannot be broadly assumed to connote a "bad" orgasm or sexual dysfunction.

Limitations

There are several limitations of this study. The first is that this is a secondary data analysis, so the certain variables that the investigator may have included in this analysis were not available (such as a full item sexual distress measure, which could have provided evidence that low sexual functioning scores may be clinically meaningful), as it was not necessary for the scope of the primary data collection question. Secondly, this was a predominantly young, student sample, although diversity in age and employment status were represented. Third, the sample consisted primarily of heterosexual, cisgender, North American women. Therefore, this limits generalization of results to gender, sexual, and ethnic and cultural minority samples. Finally, this was not a clinical sample, so any potential clinical implications would need to be replicated within a more appropriate population.

Future Directions

There are a number of future directions for this research, both from methodological and clinical perspectives. First, moderating and mediating factors could be investigated using multiple regression to further explain relationships between ORS dimensions and sexual function and interoceptive awareness variables. Potential mediators and moderators could be whether one's last orgasm was by oneself or with a partner, sexual distress, or common psychological concerns such as depression and anxiety. Second, this work could be replicated in a male sample to determine whether such individuals also exhibit a similar orgasm typology. Third, this line of research can be enhanced by using a longitudinal design and incorporating qualitative questions. The longitudinal design could assess whether orgasm typology changes over time, while

qualitative items would allow for the study of the effects of context on the orgasm experience using the participants' own words. These data would be able to provide a more comprehensive picture of the subjective experience of orgasm.

In terms of clinical future directions, this research could be done in those with sexual concerns of various etiologies (e.g., cancer treatment, abuse) to investigate whether treatment can be targeted to different orgasm profiles (e.g., those with lower Sensory domain scores may be a good candidate for biomedical interventions, while those with lower Cognitive-Affective or Rewards scores may benefit more from psychotherapy). Furthermore, development of mindfulness-based sex therapy techniques that target specific aspects of the subjective orgasm experience (i.e., Cognitive-Affective, Sensory, and Rewards) could be investigated to ascertain whether they could enhance pleasure or satisfaction with orgasm in women with and without orgasm concerns.

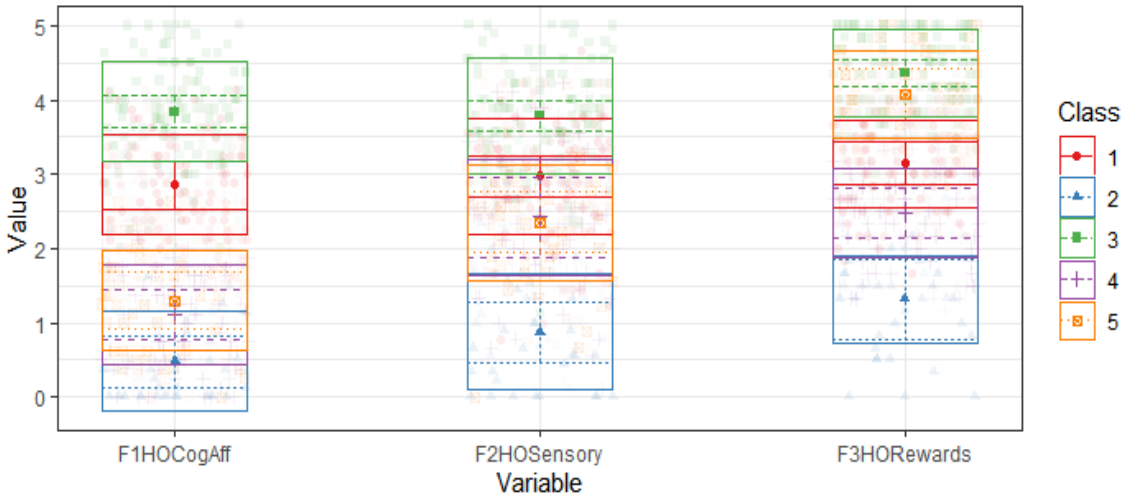
Conclusion

The ORS was found to be a psychometrically sound instrument in a sample of sexually active women, albeit with differences in the dimensional organization and number of items compared to the original (Mah & Binik, 2002). When subjected to LPA, five clusters of ORS component response patterns emerged, supporting the existence of orgasm typologies in women, like in King et al. (2011). Validity of the ORS clusters in the present study was established by significant score differences among the groups on measures of sexual functioning and interoceptive awareness, and whether one's last orgasm was with or without a partner. These results demonstrate a relationship between level of endorsement of orgasm characteristics and one's responses to bodily mindfulness and ratings of various facets of sexuality. Further research should be done to explore

these potential connections between the ORS components and other variables related to embodied experiences, sexual and otherwise, in particular within clinical populations.

Figure 1

Latent Profile Analysis Five Cluster Solution



Note. F1HOCogAff = Factor (Component) 1, higher order, Cognitive-Affective; F2HOSensory = Factor (Component) 2, higher order, Sensory; F3HORewards = Factor (Component) 3, higher order, Rewards.

Figure 2

Mean Scores of All Five Clusters in Relation to the Three ORS Components

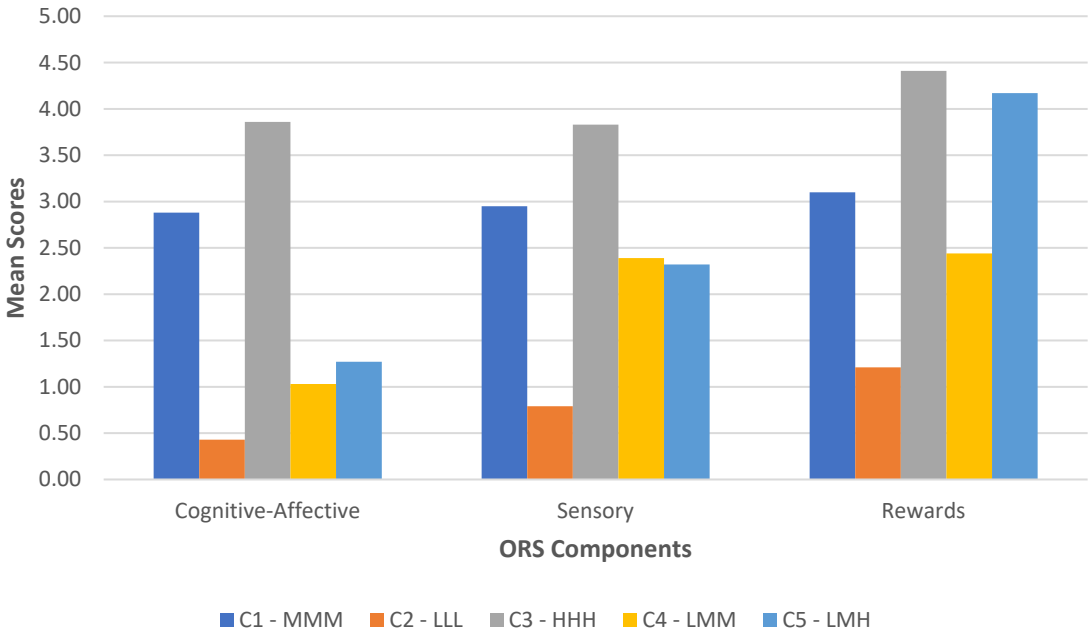
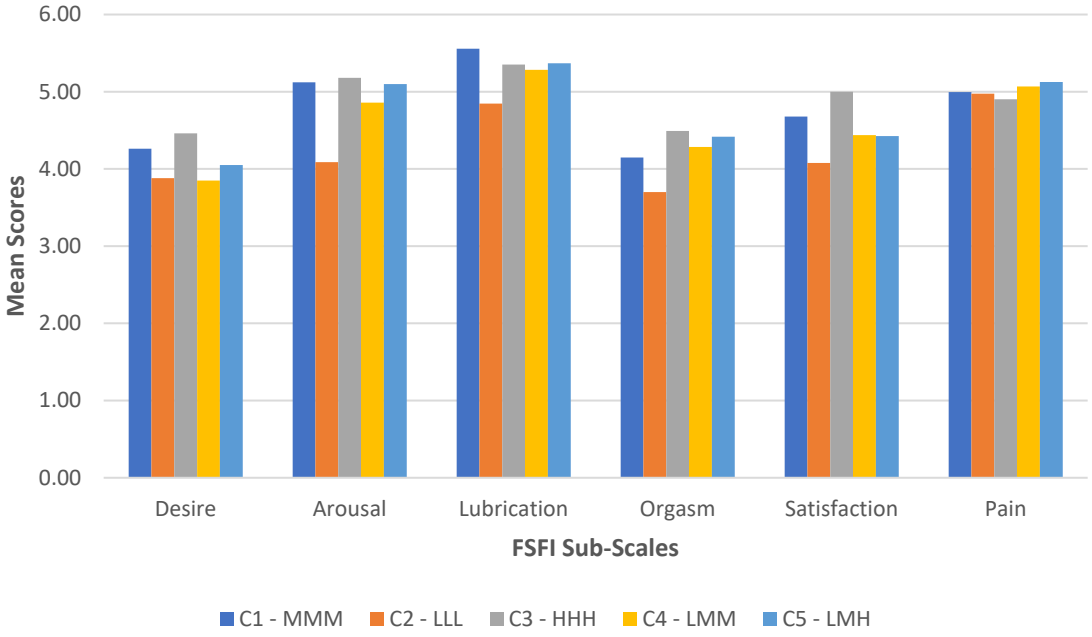


Figure 3

Cluster Mean Scores of FSFI Sub-Scales and Full Scale



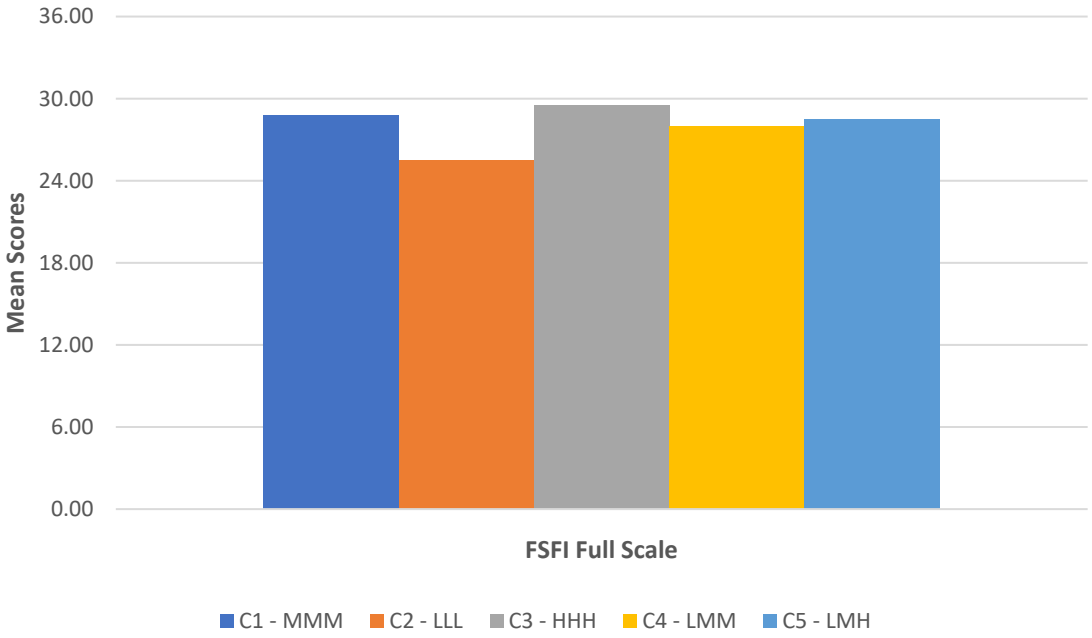


Figure 4

Cluster Mean Scores of MAIA Sub-Scales

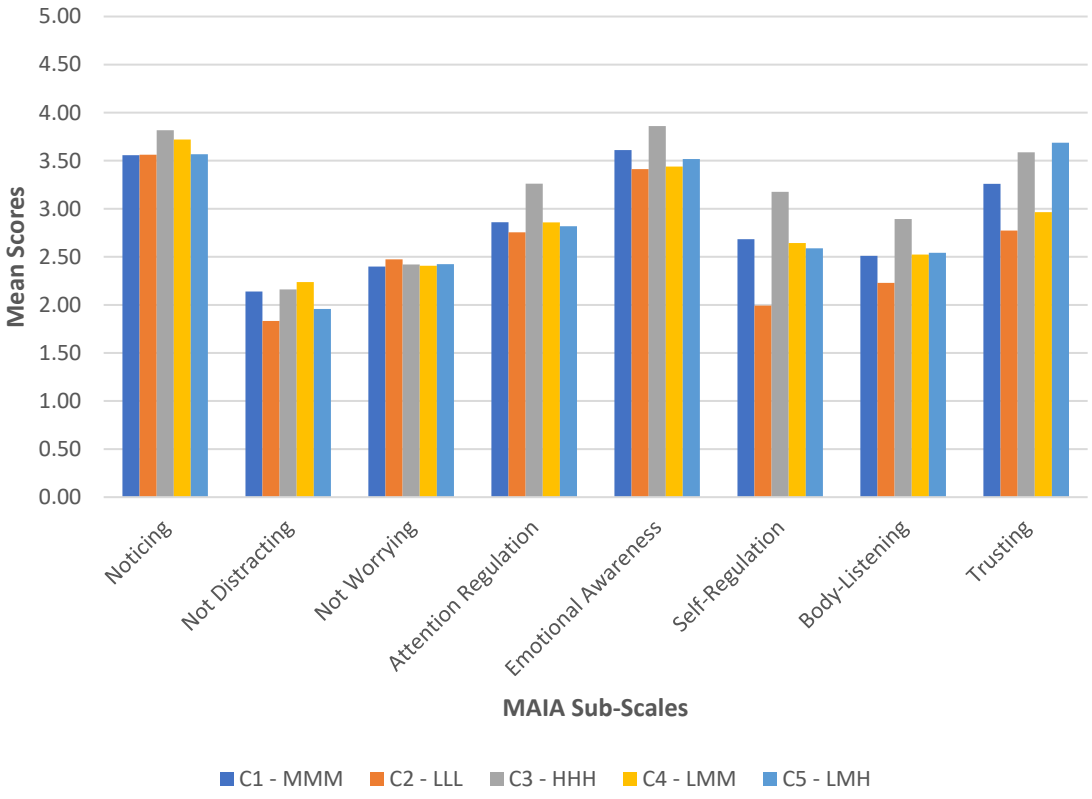


Figure 5

Cluster Mean Scores of the AGC Scale

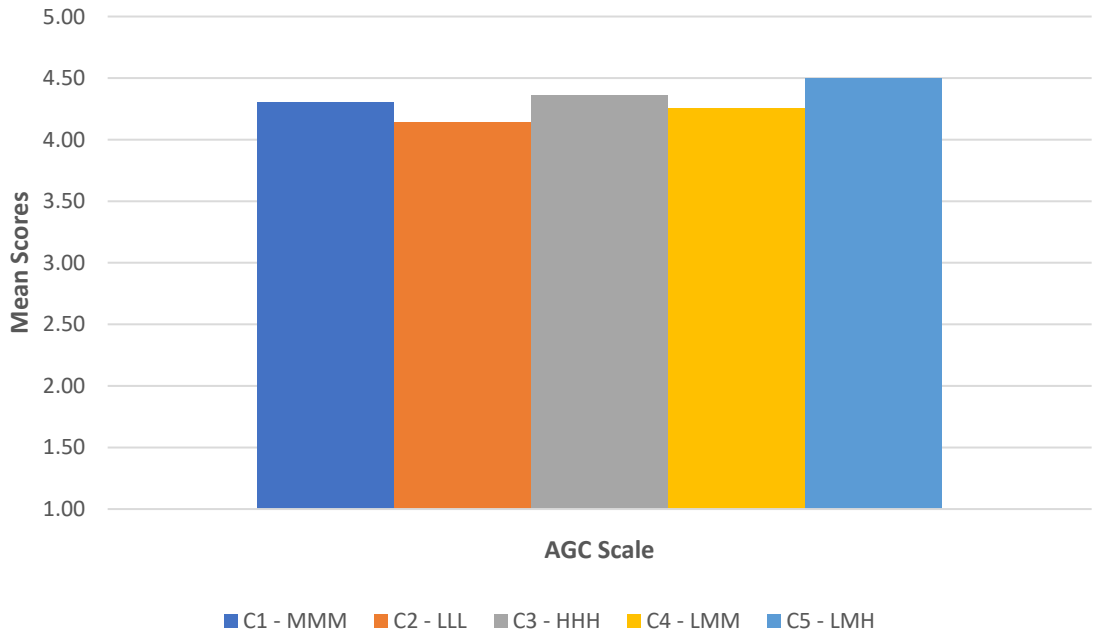


Table 1

Description of Scale or Sub-Scale Measures

Scale or Sub-Scale	# of scored items	Min Score	Max Score	Cronbach's α
Female Sexual Function Index (FSFI)	19			
Desire	2	1.2	6.0	.82
Arousal	4	0	6.0	.84
Lubrication	4	0	6.0	.88
Orgasm	3	0	6.0	.89
Satisfaction	3	0	6.0	.81
Pain	3	0	6.0	.92
Full Scale	19	2.0	36.0	.87
Multidimensional Assessment of Interoceptive Awareness (MAIA)	32			
Noticing	4	0	5.0	.68
Not-Distracting	3	0	5.0	.68
Not-Worrying	3	0	5.0	.65
Attention Regulation	7	0	5.0	.87
Emotional Awareness	5	0	5.0	.78
Self-Regulation	4	0	5.0	.85
Body-Listening	3	0	5.0	.81
Trusting	3	0	5.0	.89
Attention to Genital Cues (AGC)	4	1	5	.60

Table 2

Demographic Information and Relationship and Sexual History – Descriptive Statistics

Characteristic	*n*	*M*	*SD*	Median	Skewness	Kurtosis	Range
Age (Estimated)[a]	356	25.57	7.66	23.00	2.08	6.28	18-70
Number of Previous Sexual Partners	347[b]	9.83	14.98	5.00	4.93	34.61	0-150
Number of Long-Term Committed Relationships[c]	352[b]	2.34	1.94	2.00	2.48	11.02	0-15
Age of First Penetrative Sexual Activity	348[b]	17.14	17.00	2.54	1.42	4.79	12-32
Sexually Active Years (Estimated)[d]	346[b]	8.58	7.90	6.00	1.98	5.17	1-50

[a]Calculated by subtracting year of birth from 2018 (the year survey was completed).
[b]One participant removed from the analysis due to an extreme value.
[c]Defined as "a relationship that lasted more than 3 months, and it may or may not include people you have cohabitated (lived with)."
[d]Calculated by subtracting age of first penetrative sexual activity from estimated age

Table 3

Demographic Information and Relationship and Sexual History – Frequencies

Characteristic	*n*	%	Total *n*
Sexual Orientation			359
Heterosexual (other-sex attracted)	253	70.5	
Gay (same-sex attracted)	1	0.3	
Lesbian (same-sex attracted)	7	1.9	
Bisexual	81	22.6	
Queer	6	1.7	
Asexual	1	0.3	
Other	10	2.8	
Gender Identity			359
Cis (gender identity matches sex assigned at birth)	351	97.8	
Trans (gender identity does not match sex assigned at birth)	3	0.8	
Non-binary	5	1.4	
Sex Assigned at Birth			358
Male	1	0.3	
Female	357	99.7	
Partner(s)/Desired Partner(s) Genitalia			358
Male-typical genitalia (penis, scrotum) only	277	77.4	
Female-typical genitalia (vulva, vagina) only	10	2.8	
Both partners with male-typical and female-typical genitalia	71	19.8	
Current Residence			359
Canada	206	57.4	
United States	117	32.6	
Latin/South America	5[a]	1.4	
Australia/Oceania	4	1.1	
Eastern Europe	2	0.6	
Western Europe	21	5.8	
Middle East	1	0.3	
East Asia	1	0.3	
Other	2	0.6	

[a]One "Other" response of "Chile" was reclassified to "Latin/South America."

Table 3

Demographic Information and Relationship and Sexual History – Frequencies cont.

Characteristic	*n*	%	Total *n*
Ethnic Origin or Cultural Group[b]			359
North American Aboriginal	8	2.2	
Canadian	167	46.5	
American	101	28.1	
French Canadian	13	3.6	
Québécois(e)	5	1.4	
Mexican	3	0.8	
British Isles	25	7.0	
French	7	1.9	
Western European (except French)	31	8.6	
Northern European (except British Isles)	16	4.5	
Eastern European	29	8.1	
Southern European	10	2.8	
Caribbean	4	1.1	
Latin American	11	3.1	
South American	4	1.1	
West African	1	0.3	
Southern African	1	0.3	
West Central Asian	2	0.6	
Middle Eastern Asian	6	1.7	
Russian	5	1.4	
South Asian	7	1.9	
East Asian	10	2.8	
Southeast Asian	8	2.2	
Australian	5	1.4	
Pacific Islands	2	0.6	
Other	9	2.5	

[b]Participants were able to pick multiple responses (490 selections), so the total percentage adds to 136.5.

Table 3

Demographic Information and Relationship and Sexual History – Frequencies cont.

Characteristic	*n*	%	Total *n*
Religious Community			359
None	109	30.4	
Catholic	47	13.1	
Jewish	16	4.5	
Protestant	6	1.7	
Christian	25	7.0	
Muslim	3	0.8	
Mormon	1	0.3	
Hindu	2	0.6	
Buddhist	1	0.3	
Spiritual, no label	32	8.9	
Agnostic	50	13.9	
Atheist	57	15.9	
Other	10	2.8	
Highest Level of Formal Education			359
Less than high school	1	0.3	
Some high school	2	0.6	
High school graduate	46	12.8	
Some trade school	3	0.8	
Trade school graduate	5	1.4	
Some college/undergraduate degree	154	42.9	
College/undergraduate degree	81	22.6	
Some graduate school/professional training	19	5.3	
Graduate school/professional degree	48	13.4	
Occupational Status			359
Employed full-time	106	29.5	
Employed part-time	54	15.0	
Unemployed	27	7.5	
Retired	2	0.6	
Student	152	42.3	
On disability	2	0.6	
On employment insurance	1	0.3	
On social insurance	3	0.8	
Other	12	3.3	

Table 3

Demographic Information and Relationship and Sexual History – Frequencies cont.

Characteristic	*n*	%	Total *n*
Annual Household Income Before Taxes			326
0 - $19,999	74	22.7	
$20,000 - $39,999	49	15.0	
$40,000 - $59,999	45	13.8	
$60,000 - $79,999	38	11.7	
$80,000 - $99,999	21	6.4	
$100,000 - $119,999	19	5.8	
$120,000 - $139,999	23	7.1	
$140,000 - $159,000	10	3.1	
$160,000 – and up	47	14.4	
Current Relationship Status			359
Single, not dating	40	11.1	
Casual sex with one partner	28	7.8	
Casual sex with multiple partners	28	7.8	
Dating one partner regularly	91	25.3	
Dating one partner regularly (long distance)	45	12.5	
Living with a partner	53	14.8	
Married	47	13.1	
Common-law	15	4.2	
Other	12	3.3	

Table 4

Rotated (Varimax) Loadings of the 3 Component, 23 Item PCA Solution

ORS Item	Component		
	1 – Cognitive-Affective	2 – Sensory	3 – Rewards
Elated	.48		
Flooding		.45	
Pulsating		.65	
Satisfying			.63
Loving	.79		
Quivering		.64	
Swelling		.62	
Unifying	.80		
Building		.44	
Flushing		.52	
Passionate	.79		
Rapturous	.64		
Shuddering		.71	
Tender	.73		
Close	.77		
Fulfilling			.66
Peaceful			.71
Relaxing			.80
Soothing			.77
Throbbing		.74	
Ecstatic	.64		
Pleasurable			.58
Trembling		.71	

Table 5

Latent Profile Analysis Cluster Information

No. Clusters	AIC	BIC	Entropy	prob_min	prob_max	n_min	n_max	BLRT_p
1	3511.46	3534.76	1.00	1.00	1.00	1.00	1.00	
2	3225.16	3263.99	0.82	0.93	0.96	0.49	0.51	0.01
3	3125.39	3179.76	0.82	0.87	0.95	0.13	0.45	0.01
4	3109.37	3179.27	0.73	0.75	0.90	0.14	0.33	0.01
5	**3085.63**	**3171.07**	**0.76**	**0.81**	**0.91**	**0.09**	**0.30**	**0.01**
6	3083.31	3184.27	0.75	0.65	0.90	0.05	0.28	0.08

Note. AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; BLRT = Bootstrapped Likelihood Test (Rosenberg, 2020).

Table 6

Descriptive Information of All Five Clusters in Relation to the Three ORS Component

Component Information	Cluster				
	C1 – MMM (*n* = 96)	C2 – LLL (*n* = 32)	C3 – HHH (*n* = 106)	C4 – LMM (*n* = 77)	C5 – LMH (*n* = 48)
Cognitive-Affective					
M	2.88	0.43	3.86	1.03	1.27
SD	0.59	0.56	0.65	0.64	0.66
Variance	0.35	0.31	0.43	0.40	0.43
Sensory					
M	2.95	0.79	3.83	2.39	2.32
SD	0.73	0.70	0.70	0.90	0.79
Variance	0.54	0.50	0.49	0.82	0.62
Rewards					
M	3.10	1.21	4.41	2.44	4.17
SD	0.55	0.66	0.48	0.55	0.47
Variance	0.31	0.43	0.23	0.30	0.22

Table 7

Five Cluster Information on Select Demographic Variables

Demographic Information	Cluster				
	C1 – MMM (*n* = 96)	C2 – LLL (*n* = 32)	C3 – HHH (*n* = 106)	C4 – LMM (*n* = 77)	C5 – LMH (*n* = 48)
Age[a]					
Mean	24.36[b]	26.88	25.20	26.51	26.43[c]
Median	21.00	26.00	21.00	26.00	24.00
Sexual Orientation *n* (%)					
Heterosexual	70 (72.9)	19 (59.4)	77 (72.6)	50 (64.9)	37 (77.1)
Gay	0	0	0	0	1 (2.1)
Lesbian	2 (2.1)	1 (3.1)	3 (2.8)	1 (1.3)	0
Bisexual	17 (17.7)	10 (31.3)	24 (22.6)	20 (26.0)	10 (20.8)
Queer	3 (3.1)	0	0	3 (3.9)	0
Asexual	1 (1.0)	0	0	0	0
Other	3 (3.1)	2 (6.3)	2 (1.9)	3 (3.9)	0
Relationship Status *n* (%)					
Single, not dating	13 (13.5)	2 (6.3)	8 (7.5)	9 (11.7)	8 (16.7)
Casual sex with one partner	7 (7.3)	2 (6.3)	6 (5.7)	8 (10.4)	5 (10.4)
Casual sex with multiple partners	9 (9.4)	2 (6.3)	9 (8.5)	5 (6.5)	3 (6.3)
Dating one partner regularly	24 (25.0)	8 (25.0)	41 (38.7)	12 (15.6)	6 (12.5)
Dating one partner regularly (long distance)	15 (15.6)	3 (9.4)	12 (11.3)	10 (13.0)	5 (10.4)
Living with a partner	16 (16.7)	6 (18.8)	12 (11.3)	10 (13.0)	9 (18.8)
Married	10 (10.4)	5 (15.6)	13 (12.3)	12 (15.6)	7 (14.6)
Common-law	1 (1.0)	2 (6.3)	4 (3.8)	4 (5.2)	4 (8.3)
Other	1 (1.0)	2 (6.3)	1 (0.9)	7 (9.1)	1 (2.1)

[a]Calculated by subtracting year of birth from 2018 (the year survey was completed).
[b]*n* = 94 for Age for C1 – MMM.
[c]*n* = 47 for Age for C5 – LMH.

Table 8

One-way ANOVA Results of Select Continuous Demographic and Relationship and Sexual History Variables

Variable	Cluster					ANOVA				
	C1 – MMM	C2 – LLL	C3 – HHH	C4 – LMM	C5 – LMH	*F* ratio	df btw	df w/in	*p*	η2
Age						1.32	4	351	.263	.015
M	24.36	26.88	25.20	26.51	26.43					
SD	6.45	7.24	9.25	6.47	7.91					
# of sex partners						1.24	4	342	.292	.014
M	8.64	8.16	7.80	10.07	11.34					
SD	10.08	10.00	9.88	9.74	12.16					
# of long-term relas						1.76	4	347	.136	.020
M	2.31	2.78	1.98	2.54	2.42					
SD	1.82	1.60	1.67	1.87	2.01					
Age first penet. sex. activity						.918	4	343	.453	.011
M	16.87	16.88	17.19	17.56	17.04					
SD	2.31	3.70	2.06	2.74	2.31					
# of esti. sexually active yrs						.838	4	341	.502	.010
M	7.65	10.00	8.17	9.05	9.32					
SD	6.99	6.81	9.25	6.74	7.92					

Note. # of esti. sexually active yrs = number of estimated sexually active years; # of long-term relas = number of long-term relationships; Age first penet. sex. activity = age first engaged in penetrative sexual activity; ANOVA = analysis of variance; df btw = degrees of freedom between groups; df w/in = degrees of freedom within groups

Table 9

Chi-Square Results of Select Categorical Demographic, Relationship, and Sexual History Variables and Cluster Designation

Variable	Chi-Square				
	n	$\chi 2$	df	*p*	Cramer's V
Sexual orientation	359	4.55	4	.336	.113
Current relationship status	359	41.22	32	.127	.339
Last orgasm [Alone or with partner(s)]	346	44.78	4	<.001	.360

Note. Sexual orientation was dichotomized into heterosexual and non-heterosexual categories due to small *n*s in the latter category.

Table 10

Descriptives, One-way ANOVA Statistics, and Post-Hoc (Bonferroni) Test Results for Sexual Functioning (FSFI) Scales

FSFI Scale & Cluster	*N*	Mean	Std.	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Desire								
C1 – MMM	96	4.26	1.11	0.11	4.04	4.49	1.20	6.00
C2 – LLL	32	3.88	1.49	0.26	3.34	4.42	1.20	6.00
C3 – HHH	106	4.46	1.00	0.10	4.27	4.65	1.20	6.00
C4 – LMM	77	3.85	1.19	0.14	3.58	4.12	1.20	6.00
C5 – LMH	48	4.05	1.03	0.15	3.75	4.35	1.80	6.00
Total	359	4.17	1.15	0.06	4.05	4.29	1.20	6.00
Arousal								
C1 – MMM	95	5.12	0.79	0.08	4.96	5.28	2.70	6.00
C2 – LLL	32	4.09	1.27	0.22	3.63	4.54	1.20	5.70
C3 – HHH	105	5.18	0.83	0.08	5.02	5.34	2.10	6.00
C4 – LMM	77	4.86	0.97	0.11	4.64	5.08	2.10	6.00
C5 – LMH	47	5.10	0.96	0.14	4.82	5.38	1.50	6.00
Total	356	4.99	0.96	0.05	4.89	5.09	1.20	6.00
Lubrication								
C1 – MMM	95	5.56	0.63	0.06	5.43	5.69	2.70	6.00
C2 – LLL	32	4.85	1.38	0.24	4.35	5.34	1.20	6.00
C3 – HHH	105	5.35	0.96	0.09	5.17	5.54	1.20	6.00
C4 – LMM	75	5.28	0.94	0.11	5.07	5.50	2.70	6.00
C5 – LMH	48	5.37	0.89	0.13	5.11	5.63	1.20	6.00
Total	355	5.35	0.93	0.05	5.25	5.45	1.20	6.00
Orgasm								
C1 – MMM	94	4.15	1.48	0.15	3.85	4.45	0.00	6.00
C2 – LLL	32	3.70	1.55	0.27	3.14	4.26	1.20	6.00
C3 – HHH	104	4.49	1.47	0.14	4.21	4.78	0.00	6.00
C4 – LMM	77	4.29	1.38	0.16	3.97	4.60	1.20	6.00
C5 – LMH	48	4.42	1.35	0.20	4.02	4.81	1.20	6.00
Total	355	4.27	1.45	0.08	4.12	4.43	0.00	6.00
Satisfaction								
C1 – MMM	96	4.68	1.18	0.12	4.44	4.92	1.20	6.00
C2 – LLL	31	4.08	1.24	0.22	3.62	4.53	1.60	6.00
C3 – HHH	106	5.00	1.03	0.10	4.80	5.20	1.20	6.00
C4 – LMM	75	4.44	1.14	0.13	4.17	4.70	2.00	6.00
C5 – LMH	47	4.43	1.33	0.19	4.04	4.81	1.20	6.00
Total	355	4.64	1.18	0.06	4.51	4.76	1.20	6.00

Table 10

Descriptives, One-way ANOVA Statistics, and Post-Hoc (Bonferroni) Test Results for Sexual Functioning (FSFI) Scales cont.

FSFI Scale & Cluster	*N*	Mean	Std.	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Pain								
C1 – MMM	96	5.00	1.37	0.14	4.72	5.27	0.00	6.00
C2 – LLL	32	4.98	1.13	0.20	4.57	5.38	1.60	6.00
C3 – HHH	106	4.90	1.64	0.16	4.59	5.22	0.00	6.00
C4 – LMM	76	5.07	1.36	0.16	4.76	5.38	0.00	6.00
C5 – LMH	48	5.13	1.33	0.19	4.74	5.51	0.00	6.00
Total	358	5.00	1.42	0.08	4.85	5.15	0.00	6.00
Full Scale								
C1 – MMM	94	28.74	4.14	0.43	27.89	29.59	18.70	35.60
C2 – LLL	31	25.46	5.33	0.96	23.51	27.42	12.80	34.90
C3 – HHH	103	29.52	4.58	0.45	28.62	30.41	9.50	35.40
C4 – LMM	72	27.97	3.89	0.46	27.06	28.89	14.60	35.40
C5 – LMH	46	28.51	3.51	0.52	27.47	29.55	20.10	34.40
Total	346	28.49	4.38	0.24	28.02	28.95	9.50	35.60

Table 10

Descriptives, One-way ANOVA Statistics, and Post-Hoc (Bonferroni) Test Results for Sexual Functioning (FSFI) Scales cont.

FSFI Scale	Sum of Squares	df	Mean Square	*F*	Sig.	η2
Desire						
Between Groups	21.035	4	5.259	4.141	.003*	.045
Within Groups	449.520	354	1.270			
Total	470.555	358				
Arousal						
Between Groups	33.409	4	8.352	9.984	<.001**	.102
Within Groups	293.634	351	.837			
Total	327.043	355				
Lubrication						
Between Groups	12.550	4	3.137	3.724	.006*	.041
Within Groups	294.877	350	.843			
Total	307.427	354				
Orgasm						
Between Groups	17.957	4	4.489	2.150	.074	.024
Within Groups	730.890	350	2.088			
Total	748.847	354				
Satisfaction						
Between Groups	28.937	4	7.234	5.414	<.001**	.058
Within Groups	467.637	350	1.336			
Total	496.574	354				
Pain						
Between Groups	2.147	4	.537	.263	.902	.003
Within Groups	721.612	353	2.044			
Total	723.760	357				
Full Scale						
Between Groups	418.014	4	104.503	5.734	<.001**	.063
Within Groups	6214.595	341	18.225			
Total	6632.609	345				

Note. *$p < .05$, **$p <. 01$

Table 10

Descriptives, One-Way ANOVA Statistics, and Post-Hoc Bonferroni Test Results for Sexual Functioning (FSFI) Scales cont.

FSFI Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Desire	C1 – MMM	C2 – LLL	0.381	0.230	0.983	-0.268	1.031
		C3 – HHH	-0.198	0.159	1.000	-0.646	0.251
		C4 – LMM	0.413	0.172	0.171	-0.074	0.900
		C5 – LMH	0.213	0.199	1.000	-0.350	0.775
	C2 – LLL	C1 – MMM	-0.381	0.230	0.983	-1.031	0.268
		C3 – HHH	-0.579	0.227	0.113	-1.221	0.063
		C4 – LMM	0.032	0.237	1.000	-0.638	0.701
		C5 – LMH	-0.169	0.257	1.000	-0.895	0.558
	C3 – HHH	C1 – MMM	0.198	0.159	1.000	-0.251	0.646
		C2 – LLL	0.579	0.227	0.113	-0.063	1.221
		C4 – LMM	**.611***	**0.169**	**0.003**	**0.134**	**1.088**
		C5 – LMH	0.410	0.196	0.370	-0.143	0.964
	C4 – LMM	C1 – MMM	-0.413	0.172	0.171	-0.900	0.074
		C2 – LLL	-0.032	0.237	1.000	-0.701	0.638
		C3 – HHH	**-.611***	**0.169**	**0.003**	**-1.088**	**-0.134**
		C5 – LMH	-0.201	0.207	1.000	-0.786	0.385
	C5 – LMH	C1 – MMM	-0.213	0.199	1.000	-0.775	0.350
		C2 – LLL	0.169	0.257	1.000	-0.558	0.895
		C3 – HHH	-0.410	0.196	0.370	-0.964	0.143
		C4 – LMM	0.201	0.207	1.000	-0.385	0.786

Note. * = The mean difference is significant at the 0.05 level.

Table 10

Descriptives, One-Way ANOVA Statistics, and Post-Hoc Bonferroni Test Results for Sexual Functioning (FSFI) Scales cont.

FSFI Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Arousal	C1 – MMM	**C2 – LLL**	**1.035***	**0.187**	**0.000**	**0.507**	**1.563**
		C3 – HHH	-0.058	0.130	1.000	-0.424	0.308
		C4 – LMM	0.264	0.140	0.609	-0.133	0.660
		C5 – LMH	0.022	0.163	1.000	-0.439	0.483
	C2 – LLL	**C1 – MMM**	**-1.035***	**0.187**	**0.000**	**-1.563**	**-0.507**
		C3 – HHH	**-1.093***	**0.185**	**0.000**	**-1.614**	**-0.571**
		C4 – LMM	**-.771***	**0.192**	**0.001**	**-1.314**	**-0.228**
		C5 – LMH	**-1.013***	**0.210**	**0.000**	**-1.605**	**-0.420**
	C3 – HHH	C1 – MMM	0.058	0.130	1.000	-0.308	0.424
		C2 – LLL	**1.093***	**0.185**	**0.000**	**0.571**	**1.614**
		C4 – LMM	0.322	0.137	0.197	-0.066	0.709
		C5 – LMH	0.080	0.161	1.000	-0.373	0.533
	C4 – LMM	C1 – MMM	-0.264	0.140	0.609	-0.660	0.133
		C2 – LLL	**.771***	**0.192**	**0.001**	**0.228**	**1.314**
		C3 – HHH	-0.322	0.137	0.197	-0.709	0.066
		C5 – LMH	-0.242	0.169	1.000	-0.720	0.237
	C5 – LMH	C1 – MMM	-0.022	0.163	1.000	-0.483	0.439
		C2 – LLL	**1.013***	**0.210**	**0.000**	**0.420**	**1.605**
		C3 – HHH	-0.080	0.161	1.000	-0.533	0.373
		C4 – LMM	0.242	0.169	1.000	-0.237	0.720

Note. * = The mean difference is significant at the 0.05 level.

Table 10

Descriptives, One-Way ANOVA Statistics, and Post-Hoc Bonferroni Test Results for Sexual Functioning (FSFI) Scales cont.

FSFI Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Lubrication	C1 – MMM	**C2 – LLL**	**.711***	**0.188**	**0.002**	**0.181**	**1.241**
		C3 – HHH	0.206	0.130	1.000	-0.161	0.574
		C4 – LMM	0.274	0.142	0.542	-0.127	0.674
		C5 – LMH	0.189	0.163	1.000	-0.270	0.648
	C2 – LLL	**C1 – MMM**	**-.711***	**0.188**	**0.002**	**-1.241**	**-0.181**
		C3 – HHH	-0.505	0.185	0.068	-1.028	0.019
		C4 – LMM	-0.437	0.194	0.247	-0.985	0.110
		C5 – LMH	-0.522	0.209	0.132	-1.114	0.070
	C3 – HHH	C1 – MMM	-0.206	0.130	1.000	-0.574	0.161
		C2 – LLL	0.505	0.185	0.068	-0.019	1.028
		C4 – LMM	0.067	0.139	1.000	-0.325	0.459
		C5 – LMH	-0.017	0.160	1.000	-0.469	0.434
	C4 – LMM	C1 – MMM	-0.274	0.142	0.542	-0.674	0.127
		C2 – LLL	0.437	0.194	0.247	-0.110	0.985
		C3 – HHH	-0.067	0.139	1.000	-0.459	0.325
		C5 – LMH	-0.085	0.170	1.000	-0.564	0.395
	C5 – LMH	C1 – MMM	-0.189	0.163	1.000	-0.648	0.270
		C2 – LLL	0.522	0.209	0.132	-0.070	1.114
		C3 – HHH	0.017	0.160	1.000	-0.434	0.469
		C4 – LMM	0.085	0.170	1.000	-0.395	0.564

Note. * = The mean difference is significant at the 0.05 level.

Table 10

Descriptives, One-Way ANOVA Statistics, and Post-Hoc Bonferroni Test Results for Sexual Functioning (FSFI) Scales cont.

FSFI Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Orgasm	C1 – MMM	C2 – LLL	0.449	0.296	1.000	-0.387	1.284
		C3 – HHH	-0.343	0.206	0.959	-0.924	0.238
		C4 – LMM	-0.137	0.222	1.000	-0.764	0.491
		C5 – LMH	-0.268	0.256	1.000	-0.992	0.456
	C2 – LLL	C1 – MMM	-0.449	0.296	1.000	-1.284	0.387
		C3 – HHH	-0.792	0.292	0.070	-1.618	0.033
		C4 – LMM	-0.586	0.304	0.548	-1.444	0.273
		C5 – LMH	-0.717	0.330	0.304	-1.648	0.215
	C3 – HHH	C1 – MMM	0.343	0.206	0.959	-0.238	0.924
		C2 – LLL	0.792	0.292	0.070	-0.033	1.618
		C4 – LMM	0.207	0.217	1.000	-0.407	0.820
		C5 – LMH	0.076	0.252	1.000	-0.637	0.788
	C4 – LMM	C1 – MMM	0.137	0.222	1.000	-0.491	0.764
		C2 – LLL	0.586	0.304	0.548	-0.273	1.444
		C3 – HHH	-0.207	0.217	1.000	-0.820	0.407
		C5 – LMH	-0.131	0.266	1.000	-0.882	0.620
	C5 – LMH	C1 – MMM	0.268	0.256	1.000	-0.456	0.992
		C2 – LLL	0.717	0.330	0.304	-0.215	1.648
		C3 – HHH	-0.076	0.252	1.000	-0.788	0.637
		C4 – LMM	0.131	0.266	1.000	-0.620	0.882

Note. * = The mean difference is significant at the 0.05 level.

Table 10

Descriptives, One-Way ANOVA Statistics, and Post-Hoc Bonferroni Test Results for Sexual Functioning (FSFI) Scales cont.

FSFI Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Satisfaction	C1 – MMM	C2 – LLL	0.602	0.239	0.122	-0.073	1.276
		C3 – HHH	-0.321	0.163	0.496	-0.781	0.139
		C4 – LMM	0.242	0.178	1.000	-0.261	0.745
		C5 – LMH	0.254	0.206	1.000	-0.328	0.835
	C2 – LLL	C1 – MMM	-0.602	0.239	0.122	-1.276	0.073
		C3 – HHH	**-.923***	**0.236**	**0.001**	**-1.589**	**-0.256**
		C4 – LMM	-0.360	0.247	1.000	-1.057	0.337
		C5 – LMH	-0.348	0.267	1.000	-1.104	0.407
	C3 – HHH	C1 – MMM	0.321	0.163	0.496	-0.139	0.781
		C2 – LLL	**.923***	**0.236**	**0.001**	**0.256**	**1.589**
		C4 – LMM	**.563***	**0.174**	**0.014**	**0.070**	**1.055**
		C5 – LMH	**.574***	**0.203**	**0.048**	**0.002**	**1.147**
	C4 – LMM	C1 – MMM	-0.242	0.178	1.000	-0.745	0.261
		C2 – LLL	0.360	0.247	1.000	-0.337	1.057
		C3 – HHH	**-.563***	**0.174**	**0.014**	**-1.055**	**-0.070**
		C5 – LMH	0.012	0.215	1.000	-0.596	0.619
	C5 – LMH	C1 – MMM	-0.254	0.206	1.000	-0.835	0.328
		C2 – LLL	0.348	0.267	1.000	-0.407	1.104
		C3 – HHH	**-.574***	**0.203**	**0.048**	**-1.147**	**-0.002**
		C4 – LMM	-0.012	0.215	1.000	-0.619	0.596

Note. * = The mean difference is significant at the 0.05 level.

Table 10

Descriptives, One-Way ANOVA Statistics, and Post-Hoc Bonferroni Test Results for Sexual Functioning (FSFI) Scales cont.

FSFI Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Pain	C1 – MMM	C2 – LLL	0.021	0.292	1.000	-0.804	0.845
		C3 – HHH	0.094	0.201	1.000	-0.475	0.663
		C4 – LMM	-0.073	0.220	1.000	-0.693	0.548
		C5 – LMH	-0.129	0.253	1.000	-0.843	0.585
	C2 – LLL	C1 – MMM	-0.021	0.292	1.000	-0.845	0.804
		C3 – HHH	0.073	0.288	1.000	-0.742	0.888
		C4 – LMM	-0.093	0.301	1.000	-0.945	0.758
		C5 – LMH	-0.150	0.326	1.000	-1.072	0.772
	C3 – HHH	C1 – MMM	-0.094	0.201	1.000	-0.663	0.475
		C2 – LLL	-0.073	0.288	1.000	-0.888	0.742
		C4 – LMM	-0.167	0.215	1.000	-0.774	0.441
		C5 – LMH	-0.223	0.249	1.000	-0.926	0.480
	C4 – LMM	C1 – MMM	0.073	0.220	1.000	-0.548	0.693
		C2 – LLL	0.093	0.301	1.000	-0.758	0.945
		C3 – HHH	0.167	0.215	1.000	-0.441	0.774
		C5 – LMH	-0.057	0.264	1.000	-0.801	0.688
	C5 – LMH	C1 – MMM	0.129	0.253	1.000	-0.585	0.843
		C2 – LLL	0.150	0.326	1.000	-0.772	1.072
		C3 – HHH	0.223	0.249	1.000	-0.480	0.926
		C4 – LMM	0.057	0.264	1.000	-0.688	0.801

Note. * = The mean difference is significant at the 0.05 level.

Table 10

Descriptives, One-Way ANOVA Statistics, and Post-Hoc Bonferroni Test Results for Sexual Functioning (FSFI) Scales cont.

FSFI Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Full Scale	C1 – MMM	**C2 – LLL**	**3.281***	**0.884**	**0.002**	**0.783**	**5.779**
		C3 – HHH	-0.773	0.609	1.000	-2.494	0.948
		C4 – LMM	0.770	0.669	1.000	-1.119	2.659
		C5 – LMH	0.230	0.768	1.000	-1.941	2.400
	C2 – LLL	**C1 – MMM**	**-3.281***	**0.884**	**0.002**	**-5.779**	**-0.783**
		C3 – HHH	**-4.054***	**0.875**	**0.000**	**-6.525**	**-1.583**
		C4 – LMM	-2.511	0.917	0.065	-5.102	0.080
		C5 – LMH	**-3.052***	**0.992**	**0.023**	**-5.855**	**-0.249**
	C3 – HHH	C1 – MMM	0.773	0.609	1.000	-0.948	2.494
		C2 – LLL	**4.054***	**0.875**	**0.000**	**1.583**	**6.525**
		C4 – LMM	1.543	0.656	0.192	-0.310	3.396
		C5 – LMH	1.002	0.757	1.000	-1.136	3.141
	C4 – LMM	C1 – MMM	-0.770	0.669	1.000	-2.659	1.119
		C2 – LLL	2.511	0.917	0.065	-0.080	5.102
		C3 – HHH	-1.543	0.656	0.192	-3.396	0.310
		C5 – LMH	-0.541	0.806	1.000	-2.818	1.736
	C5 – LMH	C1 – MMM	-0.230	0.768	1.000	-2.400	1.941
		C2 – LLL	**3.052***	**0.992**	**0.023**	**0.249**	**5.855**
		C3 – HHH	-1.002	0.757	1.000	-3.141	1.136
		C4 – LMM	0.541	0.806	1.000	-1.736	2.818

Note. * = The mean difference is significant at the 0.05 level.

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales

MAIA Scale & Cluster	*N*	Mean	Std.	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Noticing								
C1 – MMM	95	3.56	0.81	0.08	3.39	3.72	1.50	5.00
C2 – LLL	32	3.56	1.11	0.20	3.16	3.96	0.50	5.00
C3 – HHH	105	3.82	0.81	0.08	3.66	3.97	1.25	5.00
C4 – LMM	77	3.72	0.94	0.11	3.51	3.93	1.00	5.00
C5 – LMH	48	3.57	0.88	0.13	3.31	3.82	1.75	5.00
Total	357	3.67	0.88	0.05	3.58	3.76	0.50	5.00
Not Distracting								
C1 – MMM	96	2.14	1.07	0.11	1.92	2.36	0.33	5.00
C2 – LLL	32	1.83	1.11	0.20	1.43	2.23	0.00	4.00
C3 – HHH	106	2.16	1.08	0.10	1.95	2.37	0.00	5.00
C4 – LMM	77	2.24	0.95	0.11	2.02	2.45	0.00	4.33
C5 – LMH	48	1.96	1.05	0.15	1.65	2.26	0.00	5.00
Total	359	2.12	1.05	0.06	2.01	2.22	0.00	5.00
Not Worrying								
C1 – MMM	96	2.40	0.98	0.10	2.20	2.60	0.67	4.67
C2 – LLL	31	2.47	0.92	0.17	2.13	2.81	0.00	3.67
C3 – HHH	106	2.42	1.10	0.11	2.21	2.63	0.00	5.00
C4 – LMM	76	2.41	1.20	0.14	2.13	2.68	0.00	4.67
C5 – LMH	48	2.42	1.05	0.15	2.12	2.73	0.33	4.67
Total	357	2.42	1.07	0.06	2.31	2.53	0.00	5.00
Attention Regulation								
C1 – MMM	95	2.86	0.86	0.09	2.68	3.04	0.00	4.43
C2 – LLL	32	2.75	1.13	0.20	2.35	3.16	1.14	5.00
C3 – HHH	105	3.26	0.93	0.09	3.08	3.44	1.00	5.00
C4 – LMM	77	2.86	0.86	0.10	2.66	3.05	0.71	4.86
C5 – LMH	47	2.82	0.95	0.14	2.54	3.10	0.86	5.00
Total	356	2.96	0.94	0.05	2.87	3.06	0.00	5.00

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales cont.

MAIA Scale & Cluster	*N*	Mean	Std.	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Emotional Awareness								
C1 – MMM	95	3.61	0.81	0.08	3.45	3.78	0.00	5.00
C2 – LLL	32	3.41	1.30	0.23	2.94	3.88	0.60	5.00
C3 – HHH	105	3.86	0.79	0.08	3.71	4.01	1.80	5.00
C4 – LMM	77	3.44	0.88	0.10	3.24	3.64	0.40	5.00
C5 – LMH	48	3.52	0.89	0.13	3.26	3.78	1.20	5.00
Total	357	3.62	0.90	0.05	3.52	3.71	0.00	5.00
Self-Regulation								
C1 – MMM	95	2.68	1.12	0.11	2.46	2.91	0.25	5.00
C2 – LLL	32	1.99	1.30	0.23	1.52	2.46	0.00	5.00
C3 – HHH	105	3.18	1.09	0.11	2.97	3.39	0.25	5.00
C4 – LMM	77	2.64	1.03	0.12	2.41	2.88	0.50	5.00
C5 – LMH	48	2.59	0.96	0.14	2.31	2.87	0.50	4.75
Total	357	2.75	1.13	0.06	2.63	2.86	0.00	5.00
Body Listening								
C1 – MMM	96	2.51	1.10	0.11	2.29	2.73	0.00	4.67
C2 – LLL	32	2.23	1.29	0.23	1.76	2.69	0.00	5.00
C3 – HHH	106	2.89	1.21	0.12	2.66	3.13	0.33	5.00
C4 – LMM	77	2.52	1.18	0.13	2.26	2.79	0.00	4.67
C5 – LMH	48	2.54	1.16	0.17	2.21	2.88	0.00	5.00
Total	359	2.61	1.19	0.06	2.48	2.73	0.00	5.00
Trusting								
C1 – MMM	95	3.26	1.10	0.11	3.04	3.48	0.00	5.00
C2 – LLL	31	2.77	1.31	0.24	2.29	3.25	0.00	5.00
C3 – HHH	106	3.59	1.19	0.12	3.36	3.82	0.00	5.00
C4 – LMM	75	2.96	1.20	0.14	2.69	3.24	0.00	5.00
C5 – LMH	48	3.69	1.25	0.18	3.33	4.05	0.67	5.00
Total	355	3.31	1.22	0.06	3.18	3.44	0.00	5.00

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales cont.

MAIA Scale	Sum of Squares	df	Mean Square	*F*	Sig.	η2
Noticing						
Between Groups	4.523	4	1.131	1.461	0.214	.016
Within Groups	272.429	352	0.774			
Total	276.952	356				
Not Distracting						
Between Groups	5.157	4	1.289	1.173	0.322	.013
Within Groups	388.973	354	1.099			
Total	394.130	358				
Not Worrying						
Between Groups	0.138	4	0.035	0.030	0.998	.000
Within Groups	403.785	352	1.147			
Total	403.923	356				
Attention Regulation						
Between Groups	13.561	4	3.390	3.999	0.003**	.044
Within Groups	297.546	351	0.848			
Total	311.107	355				
Emotional Awareness						
Between Groups	10.515	4	2.629	3.361	0.010*	.037
Within Groups	275.304	352	0.782			
Total	285.819	356				
Self-Regulation						
Between Groups	39.987	4	9.997	8.445	0.000**	.088
Within Groups	416.692	352	1.184			
Total	456.679	356				
Body Listening						
Between Groups	14.876	4	3.719	2.693	0.031*	.030
Within Groups	488.887	354	1.381			
Total	503.763	358				
Trusting						
Between Groups	33.131	4	8.283	5.860	0.000**	.063
Within Groups	494.688	350	1.413			
Total	527.820	354				

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

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales cont.

MAIA Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Noticing	C1 – MMM	C2 – LLL	-0.005	0.180	1.000	-0.513	0.503
		C3 – HHH	-0.259	0.125	0.385	-0.611	0.093
		C4 – LMM	-0.163	0.135	1.000	-0.544	0.218
		C5 – LMH	-0.010	0.156	1.000	-0.450	0.430
	C2 – LLL	C1 – MMM	0.005	0.180	1.000	-0.503	0.513
		C3 – HHH	-0.254	0.178	1.000	-0.756	0.248
		C4 – LMM	-0.158	0.185	1.000	-0.681	0.364
		C5 – LMH	-0.005	0.201	1.000	-0.572	0.562
	C3 – HHH	C1 – MMM	0.259	0.125	0.385	-0.093	0.611
		C2 – LLL	0.254	0.178	1.000	-0.248	0.756
		C4 – LMM	0.096	0.132	1.000	-0.277	0.469
		C5 – LMH	0.249	0.153	1.000	-0.184	0.682
	C4 – LMM	C1 – MMM	0.163	0.135	1.000	-0.218	0.544
		C2 – LLL	0.158	0.185	1.000	-0.364	0.681
		C3 – HHH	-0.096	0.132	1.000	-0.469	0.277
		C5 – LMH	0.153	0.162	1.000	-0.304	0.610
	C5 – LMH	C1 – MMM	0.010	0.156	1.000	-0.430	0.450
		C2 – LLL	0.005	0.201	1.000	-0.562	0.572
		C3 – HHH	-0.249	0.153	1.000	-0.682	0.184
		C4 – LMM	-0.153	0.162	1.000	-0.610	0.304

Note. * = The mean difference is significant at the 0.05 level.

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales cont.

MAIA Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Not Distracting	C1 – MMM	C2 – LLL	0.306	0.214	1.000	-0.299	0.910
		C3 – HHH	-0.021	0.148	1.000	-0.439	0.396
		C4 – LMM	-0.099	0.160	1.000	-0.552	0.354
		C5 – LMH	0.181	0.185	1.000	-0.343	0.704
	C2 – LLL	C1 – MMM	-0.306	0.214	1.000	-0.910	0.299
		C3 – HHH	-0.327	0.211	1.000	-0.924	0.270
		C4 – LMM	-0.405	0.220	0.672	-1.028	0.218
		C5 – LMH	-0.125	0.239	1.000	-0.801	0.551
	C3 – HHH	C1 – MMM	0.021	0.148	1.000	-0.396	0.439
		C2 – LLL	0.327	0.211	1.000	-0.270	0.924
		C4 – LMM	-0.078	0.157	1.000	-0.521	0.366
		C5 – LMH	0.202	0.182	1.000	-0.313	0.717
	C4 – LMM	C1 – MMM	0.099	0.160	1.000	-0.354	0.552
		C2 – LLL	0.405	0.220	0.672	-0.218	1.028
		C3 – HHH	0.078	0.157	1.000	-0.366	0.521
		C5 – LMH	0.280	0.193	1.000	-0.265	0.824
	C5 – LMH	C1 – MMM	-0.181	0.185	1.000	-0.704	0.343
		C2 – LLL	0.125	0.239	1.000	-0.551	0.801
		C3 – HHH	-0.202	0.182	1.000	-0.717	0.313
		C4 – LMM	-0.280	0.193	1.000	-0.824	0.265

Note. * = The mean difference is significant at the 0.05 level.

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales cont.

MAIA Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Not Worrying	C1 – MMM	C2 – LLL	-0.074	0.221	1.000	-0.699	0.551
		C3 – HHH	-0.022	0.151	1.000	-0.448	0.404
		C4 – LMM	-0.009	0.164	1.000	-0.473	0.456
		C5 – LMH	-0.024	0.189	1.000	-0.559	0.511
	C2 – LLL	C1 – MMM	0.074	0.221	1.000	-0.551	0.699
		C3 – HHH	0.052	0.219	1.000	-0.566	0.670
		C4 – LMM	0.065	0.228	1.000	-0.580	0.710
		C5 – LMH	0.050	0.247	1.000	-0.648	0.747
	C3 – HHH	C1 – MMM	0.022	0.151	1.000	-0.404	0.448
		C2 – LLL	-0.052	0.219	1.000	-0.670	0.566
		C4 – LMM	0.013	0.161	1.000	-0.441	0.468
		C5 – LMH	-0.002	0.186	1.000	-0.529	0.524
	C4 – LMM	C1 – MMM	0.009	0.164	1.000	-0.456	0.473
		C2 – LLL	-0.065	0.228	1.000	-0.710	0.580
		C3 – HHH	-0.013	0.161	1.000	-0.468	0.441
		C5 – LMH	-0.016	0.197	1.000	-0.574	0.542
	C5 – LMH	C1 – MMM	0.024	0.189	1.000	-0.511	0.559
		C2 – LLL	-0.050	0.247	1.000	-0.747	0.648
		C3 – HHH	0.002	0.186	1.000	-0.524	0.529
		C4 – LMM	0.016	0.197	1.000	-0.542	0.574

Note. * = The mean difference is significant at the 0.05 level.

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales cont.

MAIA Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Attention Regulation	C1 – MMM	C2 – LLL	0.106	0.188	1.000	-0.426	0.637
		C3 – HHH	**-.401***	**0.130**	**0.023**	**-0.769**	**-0.033**
		C4 – LMM	0.001	0.141	1.000	-0.398	0.400
		C5 – LMH	0.043	0.164	1.000	-0.421	0.506
	C2 – LLL	C1 – MMM	-0.106	0.188	1.000	-0.637	0.426
		C3 – HHH	-0.507	0.186	0.067	-1.032	0.018
		C4 – LMM	-0.105	0.194	1.000	-0.652	0.443
		C5 – LMH	-0.063	0.211	1.000	-0.659	0.533
	C3 – HHH	**C1 – MMM**	**.401***	**0.130**	**0.023**	**0.033**	**0.769**
		C2 – LLL	0.507	0.186	0.067	-0.018	1.032
		C4 – LMM	**.402***	**0.138**	**0.038**	**0.012**	**0.792**
		C5 – LMH	0.444	0.162	0.064	-0.013	0.900
	C4 – LMM	C1 – MMM	-0.001	0.141	1.000	-0.400	0.398
		C2 – LLL	0.105	0.194	1.000	-0.443	0.652
		C3 – HHH	**-.402***	**0.138**	**0.038**	**-0.792**	**-0.012**
		C5 – LMH	0.041	0.170	1.000	-0.440	0.523
	C5 – LMH	C1 – MMM	-0.043	0.164	1.000	-0.506	0.421
		C2 – LLL	0.063	0.211	1.000	-0.533	0.659
		C3 – HHH	-0.444	0.162	0.064	-0.900	0.013
		C4 – LMM	-0.041	0.170	1.000	-0.523	0.440

Note. * = The mean difference is significant at the 0.05 level.

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales cont.

MAIA Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Emotional Awareness	C1 – MMM	C2 – LLL	0.198	0.181	1.000	-0.313	0.709
		C3 – HHH	-0.250	0.125	0.463	-0.604	0.103
		C4 – LMM	0.172	0.136	1.000	-0.212	0.555
		C5 – LMH	0.094	0.157	1.000	-0.349	0.536
	C2 – LLL	C1 – MMM	-0.198	0.181	1.000	-0.709	0.313
		C3 – HHH	-0.448	0.179	0.125	-0.953	0.056
		C4 – LMM	-0.026	0.186	1.000	-0.552	0.499
		C5 – LMH	-0.104	0.202	1.000	-0.674	0.466
	C3 – HHH	C1 – MMM	0.250	0.125	0.463	-0.103	0.604
		C2 – LLL	0.448	0.179	0.125	-0.056	0.953
		C4 – LMM	**.422***	**0.133**	**0.016**	**0.047**	**0.797**
		C5 – LMH	0.344	0.154	0.261	-0.091	0.780
	C4 – LMM	C1 – MMM	-0.172	0.136	1.000	-0.555	0.212
		C2 – LLL	0.026	0.186	1.000	-0.499	0.552
		C3 – HHH	**-.422***	**0.133**	**0.016**	**-0.797**	**-0.047**
		C5 – LMH	-0.078	0.163	1.000	-0.537	0.382
	C5 – LMH	C1 – MMM	-0.094	0.157	1.000	-0.536	0.349
		C2 – LLL	0.104	0.202	1.000	-0.466	0.674
		C3 – HHH	-0.344	0.154	0.261	-0.780	0.091
		C4 – LMM	0.078	0.163	1.000	-0.382	0.537

Note. * = The mean difference is significant at the 0.05 level.

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales cont.

MAIA Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Self-Regulation	C1 – MMM	**C2 – LLL**	**.692***	**0.222**	**0.020**	**0.064**	**1.320**
		C3 – HHH	**-.492***	**0.154**	**0.015**	**-0.927**	**-0.057**
		C4 – LMM	0.041	0.167	1.000	-0.430	0.513
		C5 – LMH	0.096	0.193	1.000	-0.449	0.640
	C2 – LLL	**C1 – MMM**	**-.692***	**0.222**	**0.020**	**-1.320**	**-0.064**
		C3 – HHH	**-1.184***	**0.220**	**0.000**	**-1.805**	**-0.563**
		C4 – LMM	**-.651***	**0.229**	**0.047**	**-1.297**	**-0.004**
		C5 – LMH	-0.596	0.248	0.168	-1.298	0.105
	C3 – HHH	**C1 – MMM**	**.492***	**0.154**	**0.015**	**0.057**	**0.927**
		C2 – LLL	**1.184***	**0.220**	**0.000**	**0.563**	**1.805**
		C4 – LMM	**.533***	**0.163**	**0.012**	**0.072**	**0.994**
		C5 – LMH	**.588***	**0.190**	**0.021**	**0.052**	**1.123**
	C4 – LMM	C1 – MMM	-0.041	0.167	1.000	-0.513	0.430
		C2 – LLL	**.651***	**0.229**	**0.047**	**0.004**	**1.297**
		C3 – HHH	**-.533***	**0.163**	**0.012**	**-0.994**	**-0.072**
		C5 – LMH	0.054	0.200	1.000	-0.511	0.620
	C5 – LMH	C1 – MMM	-0.096	0.193	1.000	-0.640	0.449
		C2 – LLL	0.596	0.248	0.168	-0.105	1.298
		C3 – HHH	**-.588***	**0.190**	**0.021**	**-1.123**	**-0.052**
		C4 – LMM	-0.054	0.200	1.000	-0.620	0.511

Note. * = The mean difference is significant at the 0.05 level.

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales cont.

MAIA Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Body Listening	C1 – MMM	C2 – LLL	0.281	0.240	1.000	-0.396	0.959
		C3 – HHH	-0.383	0.166	0.214	-0.850	0.085
		C4 – LMM	-0.013	0.180	1.000	-0.521	0.494
		C5 – LMH	-0.031	0.208	1.000	-0.618	0.556
	C2 – LLL	C1 – MMM	-0.281	0.240	1.000	-0.959	0.396
		C3 – HHH	-0.664	0.237	0.054	-1.333	0.006
		C4 – LMM	-0.295	0.247	1.000	-0.993	0.404
		C5 – LMH	-0.313	0.268	1.000	-1.070	0.445
	C3 – HHH	C1 – MMM	0.383	0.166	0.214	-0.085	0.850
		C2 – LLL	0.664	0.237	0.054	-0.006	1.333
		C4 – LMM	0.369	0.176	0.366	-0.128	0.866
		C5 – LMH	0.351	0.204	0.865	-0.226	0.929
	C4 – LMM	C1 – MMM	0.013	0.180	1.000	-0.494	0.521
		C2 – LLL	0.295	0.247	1.000	-0.404	0.993
		C3 – HHH	-0.369	0.176	0.366	-0.866	0.128
		C5 – LMH	-0.018	0.216	1.000	-0.628	0.593
	C5 – LMH	C1 – MMM	0.031	0.208	1.000	-0.556	0.618
		C2 – LLL	0.313	0.268	1.000	-0.445	1.070
		C3 – HHH	-0.351	0.204	0.865	-0.929	0.226
		C4 – LMM	0.018	0.216	1.000	-0.593	0.628

Note. * = The mean difference is significant at the 0.05 level.

Table 11

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for Interoceptive Awareness (MAIA) Scales cont.

MAIA Scale	(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Trusting	C1 – MMM	C2 – LLL	0.485	0.246	0.492	-0.209	1.180
		C3 – HHH	-0.328	0.168	0.514	-0.803	0.146
		C4 – LMM	0.295	0.184	1.000	-0.224	0.814
		C5 – LMH	-0.428	0.211	0.429	-1.023	0.167
	C2 – LLL	C1 – MMM	-0.485	0.246	0.492	-1.180	0.209
		C3 – HHH	**-.814***	**0.243**	**0.009**	**-1.500**	**-0.128**
		C4 – LMM	-0.190	0.254	1.000	-0.907	0.527
		C5 – LMH	**-.913***	**0.274**	**0.009**	**-1.687**	**-0.139**
	C3 – HHH	C1 – MMM	0.328	0.168	0.514	-0.146	0.803
		C2 – LLL	**.814***	**0.243**	**0.009**	**0.128**	**1.500**
		C4 – LMM	**.624***	**0.179**	**0.006**	**0.117**	**1.130**
		C5 – LMH	-0.099	0.207	1.000	-0.684	0.485
	C4 – LMM	C1 – MMM	-0.295	0.184	1.000	-0.814	0.224
		C2 – LLL	0.190	0.254	1.000	-0.527	0.907
		C3 – HHH	**-.624***	**0.179**	**0.006**	**-1.130**	**-0.117**
		C5 – LMH	**-.723***	**0.220**	**0.011**	**-1.344**	**-0.102**
	C5 – LMH	C1 – MMM	0.428	0.211	0.429	-0.167	1.023
		C2 – LLL	**.913***	**0.274**	**0.009**	**0.139**	**1.687**
		C3 – HHH	0.099	0.207	1.000	-0.485	0.684
		C4 – LMM	**.723***	**0.220**	**0.011**	**0.102**	**1.344**

Note. * = The mean difference is significant at the 0.05 level.

Table 12

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for the Attention to Genital Cues (AGC) Scale

AGC Scale & Cluster	*N*	Mean	Std.	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
AGC								
C1 – MMM	78	4.30	0.52	0.06	4.18	4.41	2.75	5.00
C2 – LLL	25	4.14	0.53	0.11	3.92	4.36	3.25	5.00
C3 – HHH	88	4.36	0.52	0.06	4.24	4.47	3.00	5.00
C4 – LMM	74	4.25	0.56	0.06	4.12	4.38	2.75	5.00
C5 – LMH	45	4.50	0.56	0.08	4.33	4.67	2.75	5.00
Total	310	4.32	0.54	0.03	4.26	4.38	2.75	5.00

Table 12

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for the Attention to Genital Cues (AGC) Scale cont.

Source	Sum of Squares	df	Mean Square	*F*	Sig.	η2
Between Groups	2.812	4	0.703	2.439	0.047*	0.031
Within Groups	87.919	305	0.288			
Total	90.731	309				

Note. *$p < .05$

Table 12

Descriptives, One-way ANOVA and Post-Hoc (Bonferroni) Test Results for the Attention to Genital Cues (AGC) Scale cont.

(I) Class	(J) Class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
C1 – MMM	C2 – LLL	0.158	0.123	1.000	-0.191	0.507
	C3 – HHH	-0.057	0.083	1.000	-0.293	0.179
	C4 – LMM	0.051	0.087	1.000	-0.195	0.298
	C5 – LMH	-0.202	0.101	0.454	-0.486	0.082
C2 – LLL	C1 – MMM	-0.158	0.123	1.000	-0.507	0.191
	C3 – HHH	-0.215	0.122	0.781	-0.559	0.129
	C4 – LMM	-0.107	0.124	1.000	-0.458	0.245
	C5 – LMH	-0.360	0.134	0.076	-0.739	0.019
C3 – HHH	C1 – MMM	0.057	0.083	1.000	-0.179	0.293
	C2 – LLL	0.215	0.122	0.781	-0.129	0.559
	C4 – LMM	0.108	0.085	1.000	-0.131	0.348
	C5 – LMH	-0.145	0.098	1.000	-0.423	0.133
C4 – LMM	C1 – MMM	-0.051	0.087	1.000	-0.298	0.195
	C2 – LLL	0.107	0.124	1.000	-0.245	0.458
	C3 – HHH	-0.108	0.085	1.000	-0.348	0.131
	C5 – LMH	-0.253	0.101	0.131	-0.540	0.034
C5 – LMH	C1 – MMM	0.202	0.101	0.454	-0.082	0.486
	C2 – LLL	0.360	0.134	0.076	-0.019	0.739
	C3 – HHH	0.145	0.098	1.000	-0.133	0.423
	C4 – LMM	0.253	0.101	0.131	-0.034	0.540

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