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Comparison of two screening tools for borderline personality disorder (BSL-23 and MSI-BPD) among Indian gay, bisexual, and heterosexual men

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Abstract

Men are underrepresented among those diagnosed with borderline personality disorder (BPD). Paradoxically, gay and bisexual men are overrepresented among BPD-diagnosed individuals. This study compared McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD) and Borderline Symptom List (BSL-23), two popular BPD screening tools, among Indian men, in the context of sexual orientation concealment (SOC) among gay and bisexual men, and dysfunctional behaviors (DBs) and the quality of overall personal state (QOPS) in general. The sample consisted of 45 gay, 43 bisexual and 28 heterosexual men (n = 116) without gender dysphoria aged between 21 and 45. Tools used to evaluate the participants included questions related to sociodemographic variables, MSI-BPD, BSL-23 and the Minority Stress Scale. MSI-BPD and BSL-23 were positively correlated with each other among all the three groups. MSI-BPD was not associated with age, years of education, sexual orientation, or SOC among any of the groups. BSL-23 was negatively correlated with age among gay men. Gay and bisexual men had higher median MSI-BPD scores than heterosexual men, whereas only gay men had a higher median BSL-23 score. Bisexual men had a higher level of SOC than gay men. Education and QOPS were not associated with SOC among gay and bisexual men. Age was positively correlated with SOC among bisexual men, and DBs were negatively correlated with SOC among gay men. There were no differences in DBs or QOPS among the three groups. MSI-BPD is a short and convenient tool to screen men for BPD regardless of their age, education, sexual orientation, or SOC in both clinical and research settings. BSL-23 can be used among men regardless of their sexual orientation as an initial BPD screening tool in clinical settings. Both the tools must be validated among larger samples in India, and translated into regional languages to ensure sociocultural suitability.

Keywords

Borderline personality disorder; Sexual orientation concealment; Minority stress; Minority stressors; Sexual orientation; Homosexuality; Bisexuality; Gay; Bisexual

1. Introduction

Borderline personality disorder (BPD) is associated with emotion regulation issues, impulsivity, self-harm behaviors, interpersonal instability, fear of abandonment, shifty moods, and anger management issues, among other symptoms [1]. It is a serious mental health condition that is responsive to different kinds of evidence-based psychotherapies such as dialectical behavior therapy, mentalization therapy, and cognitive behavior therapy [2]. It was most commonly associated with women in the past [3], but recent studies indicate that there may not be a difference in the prevalence of BPD among the two sexes, but the presentation may be different. Men with BPD are more likely to abuse substances, seek novelty, and display an explosive temperament. Women with BPD report higher rates of post-traumatic stress disorder (PTSD), mood and anxiety disorders, and eating disorders [3]. Among men, gay (homosexual) and bisexual men are often overrepresented among those diagnosed with BPD [4]. Some attribute this to clinician bias [5], while others associate it with minority stress and other factors [6].

Meyer described the stress that members of sexual minority groups (lesbians, gay and bisexual men) experience as "minority stress" [7]. The minority stress model theorizes that every individual who isn't heterosexual experiences stigmatizing events, discrimination and internalized homophobia. As a result, gay and bisexual men often keep their sexual orientation concealed from others at varying degrees [8] to avoid discrimination, stigma and violence. However, concealing one's sexual orientation, also known as sexual orientation con-

cealment (SOC), places enormous pressure on the individual to navigate through different adversities [8]. It is a known minority stressor [7], and may cause emotion dysregulation [9] which is a key symptom of borderline personality disorder [10].

For clarity, minority stress can be further classified into sexual minority stress and gender minority stress [11]. Sexual minority stress includes all the minority stressors that an individual experiences during his or her lifetime as a result of one's sexual orientation which cannot be changed. Gender minority stress refers to unique minority stressors that gender nonconforming or gender dysphoric individuals endure. Minority stress is strongly correlated with poor physical and mental health [12], and maladaptive coping mechanisms such as risky sexual behaviors, relationship instability, and poor health-related choices [13].

There have been criticisms against the minority stress model [6] for not factoring in gay and bisexual men's strengths [14], and the positive roles of resilience and personal agency [15]. Some researchers suggest minority stress model does not consider the importance of social safety, which includes social connection, protection, and inclusion, which are all basic human needs. It was proposed that the absence of social safety is just as important as the presence of minority stress [16]. Some have suggested expanding the minority stress model to include community connectedness [17]. There has also been criticism against the minority stress model from a genetic perspective. Some have suggested that there could be a common genetic cause underlying one's sexual orientation and mental health problems [18], although causality cannot be established [19, 20].

1.1 Sexual orientation concealment and BPD

Although a client's sexual orientation cannot be conflated with the totality of that individual, it does surface during psychotherapy. This is especially true in the context of BPD, as interpersonal problems related to sexual and romantic relationships are shared and discussed as part of the therapeutic process [21]. Hence, sexual orientation concealment (SOC) by gay and bisexual men may leave crucial interpersonal problems unaddressed during therapy. According to Chang *et al*. [22], outness, or being open about one's homosexuality was associated with fewer BPD symptoms only if there was no resulting discrimination and if there was enough social support. Based on clinical experience, the authors note that in countries like India, most gay and bisexual men live in the closet, and may not disclose their sexual orientation even to their therapists and care-givers, leading to poor therapeutic outcomes. Coming out of the closet refers to the act of revealing one's sexual orientation to another person. It is an emotionally and cognitively challenging experience, and coming out to oneself often precedes coming out to others [21]. To be in the closet refers to the state of keeping one's sexual orientation a secret from others.

Studies that have explored the relationship between sexual orientation concealment (SOC) and mental health problems have found contradictory results. While some have found a positive relationship, others have found a negative or no relationship [8]. The extent to which a person conceals his or her sexual orientation depends on both the environment one lives in and the individual's beliefs and attitudes towards homosexuality [7]. These beliefs and attitudes are internalized through exposure to homophobic situations, environments and societal structures [23]. Most research studies focus on the coming out process among gay men. In some studies, distinctions between gay and bisexual men are not made [24] although bisexual men are less likely to disclose their sexual orientation [25]. Behaviorally bisexual men often do not come out to their female partners as bisexual [26]. They are also less likely to reveal their sexual orientation to their friends and family [26]. Non-disclosure is correlated with psychological distress, unprotected sex [27], and internalized homophobia [26]. Most bisexual men do not disclose their sexual orientation to avoid stigmatization. Other reasons include anticipation of adverse emotional reactions and changes in relationships, internalized homophobia, and fear of being further outed [26]. As fear of abandonment, a pattern of intense and unstable relationships, and a shifty self-identity are important symptoms of BPD [28], it is essential to consider the roles and ramifications of same-sex attraction and interpersonal relationships in the manifestation of BPD and related therapeutic outcomes.

1.2 Dysfunctional behaviors and quality of life among gay and bisexual men

Being gay or bisexual is associated with dysfunctional behaviors (DBs) such as self-harm [29], suicide attempts, and substance dependence [30], which often overlap with the symptoms of BPD [31]. Being gay or bisexual has also been associated with engaging in high-risk sexual behaviors and having multiple casual sexual partners [32]. Other DBs that are more prevalent among gay and bisexual men include binge eating disorder [33] and other eating disorders [34], and a tendency to use words associated with anger, sadness, and anxiety on social media [35].

Relationship between quality of life and sexual orientation is conflicting in high-stigma countries. Although some gay and bisexual men in India cope with their sexuality without any adverse psychological outcomes, internalized homophobia and ageism persist [36]. While being gay or bisexual is often linked with poorer quality of life [37], many gay and bisexual men may find adaptive coping mechanisms despite internalized homophobia, as found in a study conducted in Nigeria, a high-stigma country [38]. DBs such as substance abuse, self-harm, and impulsive behavior are associated with BPD symptoms among men in general [39]. However, gay and bisexual men may engage in DBs as benign coping mechanisms [40], requiring mental health professionals to be cautious before pathologizing these behaviors.

1.3 Choosing the right tool to screen men for BPD

An initial screening tool that recognizes symptoms of borderline personality disorder (BPD) among men regardless of their sexual orientation is necessary to provide timely and equitable mental health care. Such a tool reduces the need for lengthy

clinical interviews right at the outset, and helps clinicians to identify at-risk individuals before subjecting them to formal diagnostic clinical interviews. As age [41], education [1] and sexual orientation [42] have previously been associated with BPD, it is essential to use BPD screening tools that are not particularly affected by these factors.

BSL-23 [43] and MSI-BPD [44] are two popular screening tools that yield clinical severity scores, and have been validated and standardized among clinical populations. While BSL-23 consists of 23 questions related to BPD symptomatology, it separately includes two scales to measure quality of overall personal state (QOPS) and dysfunctional behaviors (DBs). MSI-BPD, on the other hand, is BPD-specific, and consists of only ten items. BSL-23 has six grades of symptom severity, ranging from none or low to extremely high. For clinical purposes, it is suggested to calculate a mean score by dividing the total score obtained by 23 [43]. A mean of 1.50 separates treatment-seeking BPD patients from healthy controls, while 0.64 determines the distinction between healthy controls and BPD patients. Similarly, scores of 7 and above on MSI-BPD are strongly correlated with a clinical diagnosis of BPD. Recent studies indicate a score of 5 and 6 are also associated with possible BPD diagnosis [45].

According to available literature, both tools are valid and reliable as screening measures for BPD. With a Cronbach alpha of 0.78 [44], MSI-BPD is a reliable and valid tool that strongly correlates with other BPD screening tools [46]. MSI-BPD has been translated into different languages, including Persian [47], Finnish [48], French [49], Urdu [50], Spanish [51], Chinese [52], Arabic [53] and Dutch [54]. All these studies confirmed the validity and reliability of MSI-BPD and its suitability in screening for BPD among the target demographics. MSI-BPD also showed good sensitivity and specificity [44]. Similarly, BSL-23 has been translated and validated into 18 languages, including French, Spanish, and Chinese [43]. BSL-23 is a valid self-report measure of BPD symptomatology [55] and has a single highly dominant eigenvalue, which highlights the underlying single-factor structure despite the length of the questionnaire [43]. In addition, there is a high correlation between BSL-23 and BSL-95, its much lengthier counterpart with 95 items. It also has a high internal consistency with Cronbach's alpha ranging between 0.935 and 0.969 [43]. Both MSI-BPD and BSL-23 can be used in clinical and research settings, although MSI-BPD has the advantage of being significantly shorter with only 10 items.

MSI-BPD and BSL-23 are standardized among various populations, but they have not been studied specifically in the context of sexual orientation or sexual orientation concealment (SOC), which have an effect on BPD symptomatology [22] and diagnosis [56]. As minority stressors such as SOC can cause BPD-like symptoms ranging from relationship instability to mood swings and impulsivity [9], choosing an SOC-agnostic tool to screen men for BPD symptoms is practical, whether or not they openly declare their sexual orientation to mental healthcare professionals during initial intake. The effects of minority stressors including SOC will usually surface during subsequent psychotherapeutic sessions [21].

1.4 Rationale for the study

Choudhary *et al.* [57] noted that research related to BPD was sparse in India and consisted of a few case studies and research studies with small sample sizes. They observed that the cultural context of BPD in India at the moment is limited and minimal [57]. From clinical experience, the authors observed that gay and bisexual men are diagnosed with borderline personality disorder (BPD) more often than their heterosexual counterparts in India, which is consistent with trends found by other studies abroad [5]. To the best knowledge of the authors, no study has been conducted in India to compare sexual orientation concealment (SOC) among gay and bisexual men objectively. Further, the authors could not find any Indian study that explored the relationship between SOC and borderline symptomatology. Hence, the authors evaluated two easily available BPD screening tools—BSL-23 [43] and MSI-BPD [44] which are self-administered. The purpose of this study was to examine whether MSI-BPD and BSL-23 were equally capable of identifying BPD regardless of age, education levels, sexual orientation and SOC. In addition, the results would help the researchers to choose between MSI-BPD and BSL-23 to analyze their doctoral pool of data efficiently.

Current piece of research also intended to re-examine SOC as the target minority stressor to correlate with BPD, as a previous study noted a strong association between the two [22]. In addition, as both gay and bisexual men in India choose to remain in the closet at varying degrees and as authors have noted that they are frequently diagnosed with BPD in India, it made sense to explore the relationship between SOC and the following BPD-related variables: age, education, DBs and QOPS. In addition, it was also explored if gay and bisexual men differed from heterosexual men with respect to QOPS and DBs.

1.5 Hypotheses

Based on previous studies and authors' clinical observations, the following hypotheses were developed:

1. MSI-BPD will be positively correlated with BSL-23 regardless of sexual orientation.
2. Bisexual men will have higher levels of sexual orientation concealment in comparison with gay men.
3. There will be no difference in dysfunctional behaviors or overall quality of personal state among gay, bisexual and heterosexual men.

2. Materials and methods

2.1 Research design

A cross-sectional design was used for this study, which was a part of a larger exploratory doctoral research endeavor that attempted to locate gay and bisexual men's experiences among a constellation of variables associated with borderline personality disorder (BPD). The sample for the current study consisted of 116 men without gender dysphoria (45 gay, 43 bisexual and 28 heterosexual men aged between 21 and 45 years) and was derived from the larger pool of doctoral data, which was not part of the current analysis.

The larger doctoral data consisted of 157 participants' responses, aged between 18 and 65. Data collection was completed in two separate sequences between April–June 2022 to reduce fatigue. All the participants were recruited from Bangalore, New Delhi, and other cities of India. For the doctoral research project, gay and bisexual men were compared with heterosexual men and clinically diagnosed men with BPD regardless of sexual orientation. Gender dysphoria was an exclusion criterion. The carefully selected BPD-related variables (adverse childhood experiences, positive childhood experiences, maternal and paternal invalidation, family type, perceived emotion invalidation, mentalization, emotion regulation, depression, stress, anxiety, sensation seeking, sadism and benign masochism) were studied in the context of sexual minority stressors (structural stigma, enacted stigma, expectations of discrimination in general, expectations of discrimination from family members, sexual orientation concealment, internalized homophobia toward oneself, internalized homophobia towards others, and stigma awareness) among gay and bisexual men.

As sexual minority stressors are relevant only to non-heterosexual populations such as gay and bisexual individuals, heterosexual men did not respond to the Minority Stress Questionnaire. A separate online form without the Minority Stress Questionnaire was developed for heterosexual men to eliminate confusion, and was administered during the second sequence. Adult men aged between 18 and 65 were included to allow more men to participate in the study. However, as all questionnaires were developed in English, only English-speaking participants were included in the study. English is one of India's two official languages and the lingua franca among urban Indian population, particularly in Bangalore. It is also the official language of Karnataka state, in addition to Kannada, and an official language of Delhi, in addition to Hindi. Gay and bisexual participants were recruited from different dating applications such as Grindr, PlanetRomeo and OhMojo.com, in addition to approaching them physically at cruising places, bars, clubs, and other social spaces frequented by gay and bisexual men in Bangalore and New Delhi. Participants were also solicited at non-governmental organizations (NGOs) that work with sexual minority individuals. Due to Covid-related restrictions that were in place during data collection, dating applications and social media platforms proved to be more helpful. Heterosexual men were recruited on LinkedIn, Facebook and through purposive and snowball sampling. BPD-diagnosed men, regardless of sexual orientation, were referred to by psychiatrists and clinical psychologists.

The purpose of collecting data via online forms was to eliminate the use of paper, reduce manual data entry and human errors, and to ensure smooth data collection during on-and-off covid restrictions. Online forms also helped encourage gay and bisexual men who were not comfortable to meet face-to-face to participate in the study. Google Forms were used to collect data, and prior permission was sought from all the test authors to use them. As there were multiple questionnaires, participants were requested to fill in the forms in two sequences. All questions were mandatory except a few in the personal information sheet to ensure privacy and psychological comfort. Before sharing the links, the participants were briefed regarding the research verbally, and then given an information sheet to read. The first author was available over telephone, email and text message to respond to queries, and support the participants.

Each participant was assigned a unique code number to ensure accurate data management. In addition to the questionnaires that assessed the selected variables, all participants responded to a personal information sheet, which included questions related to physical and mental health, age, contact details, marital status and sex. Only those who clicked on "male" in the personal information sheet were considered for the study. An additional gender and sexual orientation questionnaire was administered to accurately classify the participants under gay, bisexual and heterosexual groups, and to exclude those with potential gender dysphoria. The questions included:

Question 1. *What is your gender?*—Only those who chose "man" were recruited for the study. Those who self-declared their gender to be non-binary, transgender, intersex, *kothi*, *hijra* and "other" were not recruited as they may have had gender dysphoria. Men who identified as "woman" were not recruited either. All these gender-related terminologies were listed to make the questionnaire more inclusive for the participants.

Question 2. *Are you completely comfortable being a man?*

The options to this question were "yes" and "no". If the participant clicked on "yes", it was understood that he was comfortable being a man. This excluded gender dysphoria. If the participant clicked on "no", there was a chance that he could have unresolved gender identity issues (different from sexual orientation). Hence, such men were not recruited for the study.

Question 3. *In the last one year, whom have you had sex with?* Options: Men only, mostly men, women only, mostly women, both men and women, only transgender individuals, transgender individuals and men, transgender individuals, men and women, transgender individuals and women, nobody and other.

Question 4. *People are all different when it comes to their sexual attraction to other people. Which of these best describes your feelings?* Options: I am only attracted to women, I am mostly attracted to women, I am equally attracted to women and men, I am mostly attracted to men, I am only attracted to men, I am attracted to women and transgender individuals, I am attracted to men and transgender individuals, I am only attracted to transgender/non-binary/queer individuals, I am attracted to all genders, gender does not matter to me, I am not sexually attracted to anyone—asexual, I am not sure, I don't know.

Question 5. *How do you identify yourself in terms of your sexual orientation?* Options: Gay, mostly gay, bisexual, bicurious, confused, mostly heterosexual, pansexual, asexual, heterosexual, not sure/I don't know.

Asexual individuals were excluded from non-clinical groups (gay, bisexual and heterosexual) but retained in the BPD group regardless of sexual orientation. Those who chose "queer" as their identity were followed up over telephone or email in order to confirm the nature of their sexual orientation. They were then classified under gay, bisexual, or heterosexual groups. As social desirability bias and sexual orientation concealment play

a role in how people identify their sexual orientation, those who chose "mostly gay" and "mostly heterosexual" were followed up and categorized accordingly after telephonic or email confirmation. Further, those who identified as pansexual were grouped under the bisexual group, as the current definition of "bisexual" is "being attracted to two or more genders". Sexual behaviors were verified with the responses given to questions "whom have you had sex with in the last year?" and "whom are you most attracted to?". Discrepancies were confirmed in person, over the telephone, or via text and email during data management.

Question 6. *Please share with us any query or concern you may have regarding your gender or sexuality.* This question elicited qualitative responses.

2.2 Study tools

For this particular analysis, the following questionnaires from the larger pool of data were used:

1. Personal Information Sheet.
2. Gender and sexual orientation questionnaire, prepared by the authors.
3. McLean Screening Instrument: Borderline Personality Disorder (MSI-BPD) [44]. This is a commonly used ten-item screening tool. Each time is scored either 0 or 1. A total score of 7 and above is consistent with clinically diagnosable borderline personality disorder. The questionnaire has an internal consistency of 0.74 and an excellent test-retest reliability (Spearman's rho = 0.72, $p < 0.0001$).
4. The Borderline Symptom List-23 (BSL-23) [43]. This is a shorter version of the Borderline Symptom List-95. It consists of 23 items and has a high internal consistency and test-retest reliability ($r = 0.84$, $p < 0.0001$). The tool also has separate scales to yield Quality of Overall Personal State and Dysfunctional Behavior scores.
5. The Minority Stress Scale [58]. The Minority Stress Scale was developed on a sample of gay and bisexual men in Italy. It is based on the minority stress theory developed by Meyer. It consists of 43 items that assess the following minority stressors: Structural Stigma, Enacted Stigma, Expectations of Discrimination, Expectations of Discrimination from Family Members, Sexual Orientation Concealment, Internalized Homophobia toward Others, Internalized Homophobia toward Self, and Stigma Awareness. For this study, authors analyzed the Sexual Orientation Concealment sub-scale of the Minority Stress Questionnaire. Heterosexual men did not respond to the Minority Stress Questionnaire, as Sexual Orientation Concealment is assumed not to be relevant to them.

2.3 Data management

As most variables were not normally distributed in any of the groups studied (Shapiro Wilk <0.05), Kruskal-Wallis test, Mann-Whitney U test, and Spearman's correlation test were used to explore the differences and relationships between scores on MSI-BPD and BSL-23, sexual orientation concealment (SOC), age, education level, quality of personal state (QOPS), and dysfunctional behaviors (DBs) among gay, bisexual, and heterosexual men. Kruskal-Wallis test, Mann-Whitney U test, and Spearman's correlation test are non-parametric tests that are recommended to be used when data is not normally distributed, or when the sample size is small. Power analysis was not attempted due to the highly specific nature of the sample. SOC was not analyzed among heterosexual men as minority stressors including SOC pertain to non-heterosexual individuals. Data were analyzed with the help of SPSS Statistics (version 28.0, IBM Corp., Armonk, NY, USA) and a p-value < 0.05 was considered significant for all the analyses.

3. Results

Table 1 shows that although there were differences in median age among the three groups ($p = 0.017$), they were all aged between 21 and 45, making it relatively easy to compare. The median ages of gay, bisexual, and heterosexual men were 31, 34 and 29.5 respectively. The median number of years of education among gay, bisexual and heterosexual men were 16, 15 and 17, respectively. In pair-wise comparisons, it was observed that bisexual men had a higher median age than gay and heterosexual men. There were no significant differences in the median number of years of education ($p = 0.197$) among the three groups. No other sociodemographic variables were analyzed in this study.

To compare the severity of borderline personality disorder (BPD) symptoms among the groups, MSI-BPD and BSL-23 screening tools were used. Table 1 shows that there were differences among gay, bisexual and heterosexual men with respect to MSI-BPD ($p = 0.017$) and BSL-23 median scores ($p = 0.017$). Pairwise comparisons revealed that both gay and bisexual men had higher median scores on MSI-BPD when compared with heterosexual men. In addition, it was found that only gay men had a significantly higher median BSL-23 score than heterosexual men. Tables 2A,2B and 2C show that there were significant positive correlations between MSI-BPD scores and BSL-23 scores among gay ($r_s = 0.70$), bisexual ($r_s = 0.70$) and heterosexual men ($r_s = 0.44$), supporting hypothesis 1. Sexual orientation concealment (SOC) was not associated with either MSI-BPD or BSL-23 total scores among gay ($r_s = 0.03$ & $r_s = 0.03$) and bisexual men ($r_s = 0.13$ & $r_s = 0.15$). Higher scores on MSI-BPD among gay and bisexual men may not be adequately explained by SOC. Hence, it is necessary to explore other minority stressors that may contribute to emotion regulation issues typical with borderline symptomatology. MSI-BPD was not correlated with age or education among gay ($r_s = -0.24$ & -0.12), bisexual ($r_s = -0.14$ & 0.13), and heterosexual men ($r_s = 0.15$ & 0.01). In addition, BSL-23 was not correlated with age and education among bisexual ($r_s = -0.09$ & 0.15) and heterosexual men ($r_s = -0.16$ & 0.13). However, there was a negative correlation between age and BSL-23 raw scores among gay men ($r_s = -0.30$).

Table 1 shows that bisexual men had higher levels of sexual orientation concealment (SOC) than gay men ($p = 0.04$) in accordance with previous studies [59, 60], supporting hypothesis 2. In addition, SOC was not correlated with education among gay ($r_s = -0.18$) and bisexual men ($r_s = 0.24$), but was positively correlated with age among bisexual men ($r_s = 0.50$). This suggests that regardless of the level of education, gay and

TABLE 1. Differences in age, education, McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD) total score, Borderline Symptom List (BSL-23) total score, Quality of Overall Personal State (QOPS), and Dysfunctional Behaviors (DBs) among gay, bisexual, and heterosexual men, N = 116; and difference in sexual orientation concealment (SOC) between gay and bisexual men, n = 88.

Variables	Groups			Test statistics	*p*-value	Pair wise results
	Gay (n = 45)	Bisexual (n = 43)	Heterosexual (n = 28)			
	Median (IQR); Mean ± SD					
Age (yr)	31 (26–34.50) 30.69 ± 4.84	34 (29–37) 33.16 ± 4.75	29.50 (25–35.5) 30.43 ± 6.46	6.96	0.017	G-BS* G-HS BS-HS*
Education (yr)	16 (15–17) 16.04 ± 0.93	15 (16–17) 16.09 ± 1.55	17 (16–17) 16.43 ± 0.92	3.25	0.197	G-BS G-HS BI-HS
MSI-BPD (total score)	3 (1–7) 3.84 ± 3.08	3 (1–5) 3.37 ± 2.53	0.5 (2–3) 1.82 ± 1.66	7.87	0.017	G-BS G-HS* BI-HS*
BSL-23 (total score)	14 (3–32.50) 21.78 ± 22.89	0 (1–18) 15.56 ± 19.49	4 (1–11.50) 9.29 ± 13.36	7.09	0.017	G-BS G-HS* BI-HS
QOPS	70 (55–85) 69.33 ± 22.80	80 (70–90) 76.98 ± 23.76	80 (60–90) 72.14 ± 27.53	4.33	0.114	G-BS G-HS BI-HS
DBs	1 (0–2) 2.71 ± 5.78	1 (0–4) 2.26 ± 3.21	0 (0–1) 0.64 ± 0.91	3.49	0.174	G-BS G-HS BI-HS
SOC~	24 (19–28) 24.04 ± 5.50	28 (23–31) 26.16 ± 6.26	–	−2.05~	0.040	G-BS*

*Abbreviations: IQR, interquartile range; SD, standard deviation; yr, year; G, gay; BS, bisexual; HS, heterosexual. *p < 0.05, ~Mann-Whitney U Test; IQR, Interquartile Range; SD, Standard Deviation.*

TABLE 2A. Correlation matrix (Spearman's rho) of age, education, sexual orientation concealment (SOC), McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD) total score, Borderline Symptom List (BSL-23) total score, Quality of Overall Personal State (QOPS), and Dysfunctional Behaviors (DBs) among gay men, n = 45.

Variables	Age (yr): M = 30.69 SD = 4.84	Education (yr): M = 16.04 SD = 0.94	SOC: M = 24.04 SD = 5.50	MSI-BPD: M = 3.84 SD = 3.08	BSL-23: M = 21.78 SD = 22.89	QOPS: M = 69.33 SD = 22.80	DBs: M = 2.71 SD = 5.78
Age	1.00						
Education	−0.05	1.00					
SOC	0.00	−0.18	1.00				
MSI-BPD	−0.24	−0.12	0.03	1.00			
BSL-23	−0.30*	0.03	0.03	0.70**	1.00		
QOPS	0.42**	0.02	−0.10	−0.45**	−0.65**	1.00	
DBs	−0.19	0.22	−0.31*	0.41**	0.48**	−0.21	1.00

*Abbreviations: yr, year; M, Mean; SD, Standard Deviation. *p < 0.05, **p < 0.01.*

bisexual men experience structural stigma, discrimination, and violence that necessitate concealing their sexual orientation.

Table 1 shows that there were no differences with respect to dysfunctional behaviors (DBs) (p = 0.174) or quality of overall personal state (QOPS) (p = 0.114) among gay, bisexual and heterosexual men, supporting hypothesis 3. Tables 2A,2B and 2C show that there was no relationship between age and dysfunctional behaviors among gay (r_s = −0.19), bisexual (r_s = 0.02), and heterosexual (r_s = −0.06) men. There was a positive correlation between age and QOPS among gay men (r_s = 0.42), but not among bisexual (r_s = −0.16) and heterosexual men (r_s = 0.27). While SOC was negatively correlated with DBs only among gay men (r_s = −0.31), DBs were negatively correlated with QOPS only among bisexual men (r_s = −0.33). Further analysis showed that there was a negative correlation between QOPS and MSI-BPD among gay (r_s = −0.45) and bisexual

TABLE 2B. Correlation matrix (Spearman's rho) of age, education, sexual orientation concealment (SOC), McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD) total score, Borderline Symptom List (BSL-23) total score, Quality of Overall Personal State (QOPS), and Dysfunctional Behaviors (DBs) among bisexual men, n = 43.

Variables	Age (yr): M = 33.16 SD = 4.75	Education (yr): M = 16.09 SD = 1.55	SOC: M = 26.16 SD = 6.26	MSI-BPD: M = 3.37 SD = 2.53	BSL-23: M = 15.56 SD = 19.49	QOPS: M = 76.98 SD = 23.76	DBs: M = 2.26 SD = 3.21
Age	1.00						
Education	0.37*	1.00					
SOC	0.50**	0.24	1.00				
MSI-BPD	−0.14	0.13	−0.02	1.00			
BSL-23	−0.09	0.15	−0.21	0.70**	1.00		
QOPS	−0.16	−0.19	0.03	−0.31*	−0.49**	1.00	
DBs	0.02	0.12	−0.34	0.63**	0.83**	−0.33*	1.00

*Abbreviations: yr, year; M, Mean; SD, Standard Deviation. *p < 0.05, **p < 0.01.*

TABLE 2C. Correlation matrix (Spearman's rho) of age, education, McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD) total score, Borderline Symptom List (BSL-23) total score, Quality of Overall Personal State (QOPS), and Dysfunctional Behaviors (DBs) among heterosexual men, n = 28.

Variables	Age (yr): M = 30.43 SD = 6.46	Education (yr): M = 16.43 SD = 0.92	MSI-BPD: M = 1.82 SD = 1.66	BSL-23: M = 9.29 SD =13.36	QOPS: M = 72.14 SD = 27.53	DBs: M = 0.64 SD = 0.91
Age	1.00					
Education	0.25	1.00				
MSI-BPD	0.15	0.01	1.00			
BSL-23	−0.16	0.13	0.44*	1.00		
QOPS	0.27	0.05	0.14	−0.39*	1.00	
DBs	−0.06	0.21	0.35	0.51*	−0.03	1.00

*Abbreviations: yr, year; M, Mean; SD, Standard Deviation. *p < 0.05.*

men (r_s = −0.31), whereas no such relationship was found among heterosexual men (r_s = 0.14). QOPS was significantly correlated with BSL-23 among gay (r_s = −0.65), bisexual (r_s= −0.49) & heterosexual (r_s = −0.39) men.

4. Discussion

4.1 Comparison of MSI-BPD and BSL-23 among gay, bisexual, and heterosexual men

Consistent with previous studies [22], both gay and bisexual men had higher median MSI-BPD scores in comparison with heterosexual men. This could be due to the individual responses to items pertaining to substance use, self-harm, and mood swings, which are prevalent among gay and bisexual men at higher levels. However, BSL-23 revealed a significantly higher median score only among gay men in comparison with heterosexual men, in contrast to other studies that have noted a higher prevalence of mental health issues among bisexual men, including BPD [61].

There was also a significant positive correlation between MSI-BPD and BSL-23 scores among the groups of men who participated (n = 116), suggesting both the tools may be useful in clinical and research settings to screen men for BPD regardless of their sexual orientation before a diagnostic interview. An Indian study examined the validity of MSI-BPD among 22 BPD-diagnosed patients after translating it into Hindi [62]. MSI-BPD was compared against Millon's Clinical Multi-axial Inventory (MCMI-III) and Personality Assessment Inventory-Borderline Features (PAI-BOR). The diagnostic accuracy (DA) of MCMI-III, PAI-BOR and MSI-BPD was found to be 75%, 79.1% and 97.7%, respectively. The discriminatory ability of MCMI-III, PAI-BOR and MSI-BPD was found to be 87.7%, 89.7% and 98.97%. MSI-BPD was also found to be the most sensitive and specific among the three tools. It was acknowledged that MSI-BPD could be used among Hindi and English-speaking populations in North India.

Although gay and bisexual men are over-represented among men diagnosed with BPD, BPD is under-diagnosed among

men in general. Many studies have noted the disparities between men and women when it comes to BPD diagnoses. The Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revision (DSM-IV-TR) stated that BPD is predominantly (about 75%) diagnosed in females. The 3:1 female-to-male ratio has raised questions related to sampling and diagnostic bias, in addition to probable sociocultural and biological differences between men and women. The actual prevalence of BPD among men is largely unknown, and the differences in BPD diagnoses among men and women in clinical settings could be due to sampling bias [63]. Yet another study conducted at a prison in Iowa found the prevalence of BPD was 50% higher among female offenders in contrast to male offenders [64]. A large Swedish study with access to Swedish health and administrative registers identified 5530 patients with BPD in Stockholm County between 2012 and 2016. Of these, 802 were men, and they were less likely than women to have been treated with other psychotherapy or psychiatric medicines. The study proposed that men are less likely to receive BPD-specific care and that there is a need to improve interventions for BPD among men and ensure equal access to treatment [65]. Bjorklund reviewed existing literature to determine the reasons for the 3:1 ratio in the diagnosis of BPD among women and men. Some of the potential reasons suggested include sociocultural factors, cultural histories of personality disorders, including BPD, and the fact that BPD has a "number of complex, interactive, biological, psychological and sociocultural determinants" [66].

With sex-related disparities in mind, screening questionnaires can significantly improve the quality and timeliness of detecting BPD among men regardless of their sexual orientation. Most importantly, as Zimmerman *et al*. [45] noted, a screening test is complementary to a diagnostic test, which usually follows if the screening test is positive. As diagnostic tests such as a clinical psychiatric interview are expensive and time-consuming, a valid screening test can quickly identify individuals at risk for BPD before being scrutinized further by a diagnostic test. Time-intensive diagnostic follow-ups can be expensive for patients, and a short questionnaire can alleviate these issues [45]. It's also important to note that gold standard treatments for BPD are expensive and require multiple sessions. This proves to be a burden to patients who are newly diagnosed and many may often drop out of treatment. Moreover, studies have consistently shown that treatments specifically tailored to BPD are more effective than those that are not. Positive results on screening tools like MSI-BPD and BSL-23 pave the way for BPD-specific treatment planning. Psychoeducation is a cost-effective approach to help patients who have been diagnosed with BPD. Online assessments may not only help detect BPD but also act as auxiliary intervention by allowing patients to access initial treatment [67].

As MSI-BPD was not correlated with SOC, age or education levels, it may be a useful tool to screen men for BPD when time is a constraint in clinical settings, or when research surveys need to be short. Moreover, it retained a strong correlation with BSL-23 among all the three groups studied. BSL-23 may serve specific clinical purposes such as initially screening men for BPD, evaluating dysfunctional behaviors (DBs), and assessing quality of personal state (QOPS), all of which are clinically relevant regardless of one's sexual orientation.

4.2 Sexual orientation concealment in the context of borderline personality disorder

The current study found that bisexual men have a higher level of sexual orientation concealment (SOC) than gay men. Older bisexual men in countries like India are usually married to women, and may conceal their sexual orientation due to both internalized homophobia and societal expectations to raise families and have children [68]. According to Dodge *et al*. [68], many Indian men who are "mostly homosexual" enter into marriages with the opposite sex to meet cultural expectations, while same-sex behavior is prevalent among heterosexual-identified men as well. This leads the authors to hypothesize that many bisexual individuals present or identify as being heterosexual due to internalized homophobia or social non-acceptance but engage in same-sex activities nonetheless. Similarly, many exclusively homosexual or gay men may state they are "mostly homosexual" or even bisexual to provide a favorable response or conceal their true sexual orientation. As many of these individuals may never share their sexual orientation with even health care providers, it's contingent upon clinicians to consider the possibility of different minority stressors playing a role in the genesis and maintenance of various mental health conditions among men including borderline personality disorder (BPD), regardless of what they claim their sexual orientation to be. If and when the topic of sexual orientation arises during therapy, mental health professionals can help the client come to terms with their sexuality. They can also address unstable relationships, interpersonal problems, and other symptoms associated with BPD more effectively.

Although bisexual men may conceal their sexual orientation at a greater level, gay men conceal their sexual orientation from healthcare providers and family members too [69]. In high-stigma countries like India, concealing one's sexual orientation can protect one from discrimination but generates stress and leads to isolation from support systems [8]. However, studies conducted in other high-stigma countries have also found that SOC protects individuals from lower life satisfaction by safeguarding them from victimization and discrimination [70]. Nevertheless, homosexual men may find it difficult to hide their sexual orientation, especially when higher cognitive demands are placed, such as being interviewed in controlled environments. Studies show that raters can distinguish homosexual individuals from those who are heterosexual which shows that SOC as a strategy may only be partially effective at evading discrimination [71]. Although SOC may provide certain benefits, it also causes loneliness [72], immense stress and drains one's cognitive resources [70]. Poor cognitive resources predispose one to emotional dysregulation, a key characteristic of borderline personality disorder (BPD). Chang *et al*. [22] studied the association between BPD symptoms and outness, and the indirect effects of outness on BPD symptoms through discrimination and social support. A higher level of outness was associated with lower BPD and depressive symptoms. However, greater discrimination as a result of greater outness was associated with a higher level of BPD

symptoms. In contrast, greater social support as a result of greater outness was associated with a lower level of BPD symptoms. This study suggests that people who reveal their sexual orientation are at risk of experiencing higher levels of BPD symptoms if they are likely to be discriminated against or if they received lower social support [22].

In the current study, there was no association between SOC and BPD-screening tools (MSI-BPD and BSL-23) studied among gay and bisexual men. Moreover, SOC was not associated with quality of overall personal state (QOPS) either among gay or bisexual men. This suggests that sexual orientation concealment may be a benign coping mechanism used by both gay and bisexual men in hostile environments, albeit not always successfully [71]. In addition, concealing one's sexual orientation from the therapist may leave crucial interpersonal problems and relationship instability unaddressed. It is important to note that cultural aspects play a role in the symptomatology, assessment and treatment of BPD. It is essential to take culture and society into consideration while addressing personality disorders, including BPD. Specifically, they underscore the importance of emotion dysregulation and interpersonal functioning, both of which are influenced by cultural context and existing norms [73]. Similarly, Munson *et al*. [74] noted that the presentation of BPD may differ based on the cultural context. For example, "Eastern" countries such as India reported self-poisoning at a higher rate than "Western" countries, while interpersonal problems were higher in "Western" countries [74]. The east-west binary is simplistic and can be disputed to an extent, as there are large differences within each specific region of every country. Neacsiu *et al*. [75] noted that Southern Asia consists of collectivist cultures that give importance to hierarchical structures. However, they note that the Indian society places a moderate to low value to hierarchical structures, and that there is a balance between masculine and feminine aspects of life, unlike in Bangladesh or Iran. The article also notes that the BPD profile of Indian patients is similar to that of those in the US, and that BPD is not particularly a "Western disorder". This gives impetus to BPD-related research conducted in India, and encourages researchers to adopt the tangent that American studies do, considering the cultural similarities of BPD between the two countries [75].

To understand a gay or bisexual man's rationale for concealing sexual orientation in India and to situate SOC in the milieu of BPD, it is important to understand the sociocultural context. In particular, BPD is characterized by unstable relationships, fear of abandonment, and other interpersonal issues, which make relationships with significant people very crucial to an individual's mental health. There are legal, social and cultural barriers that prevent both rural and urban gay and bisexual men from living their personal and interpersonal lives to the fullest. The Supreme Court of India decriminalized sexual activity between men only in 2018 [76]. Hence, both homosexual and bisexual adult males living in India are personally familiar with their homosexuality being treated as a crime by both the law and the society for much of their lives. Further, same-sex marriages are not legal in India, and the Supreme Court of India put the marriage equality case to rest in September 2023 [77]. As a result, gay men continue to remain unable to marry their same-sex partners, and most bisexual men marry women and live dual lives [68]. In addition, professionals estimate that between 70 percent to 80 percent of gay men are married to women due to family pressure [78]. To be forced into sexual relationships with women is traumatic to homosexual men, and Kort terms this phenomenon as covert cultural sexual abuse [79]. To cope with families pressuring them into heterosexual marriages and to escape physical harm, many gay men move away from their homes, some resorting to legal and illegal immigration to countries where homosexuality is legalized with adequate protections against discrimination [80]. Gender non-conforming children may face additional discrimination and ridicule regardless of their sexual orientation [81]. Consequently, most gay and bisexual children learn to hide their sexual orientation from a young age which persists into adulthood [82]. In addition, like in most parts of the world, children suspected of being gay or bisexual experience bullying, homophobic violence, and discrimination at school, forcing many to drop out of school. These extreme conditions highlight the emotional turmoil and cognitive stress that gay and bisexual men in India arguably experience while navigating different sexual minority stressors. The authors speculate emotion dysregulation could be a consequence of these psychosocial challenges. In addition, inability to form meaningful relationships with same-sex individuals, being forced into monogamous marriages with the opposite sex, and frequent and unstable sexual encounters and romantic relationships with members of the same sex can all contribute to relationship instability and insecurity, interpersonal difficulties, and a shifty self-identity. All these phenomena mimic symptoms of BPD, and in therapy, these themes emerge after rapport has been built during the initial few psychotherapeutic sessions. Hence, an initial screening for BPD using either MSI-BPD or BSL-23 helps quantify severity of BPD or a BPD-like syndrome among men, regardless of their sexual orientation. This helps during later stages in therapy, if and when symptoms related to BPD are addressed.

4.3 Dysfunctional behaviors and overall quality of personal state

The current study did not reveal any differences with respect to dysfunctional behaviors (DBs) or quality of overall personal state (QOPS) among gay, bisexual, and heterosexual men. There was also no relationship between age and dysfunctional behaviors among gay, bisexual, or heterosexual men. However, there was a positive correlation between age and QOPS only among gay men. This adds credence to the opinion that gay men's quality of life may improve with age. These results contradict popular beliefs that gay and bisexual men are more susceptible to engage in DBs or that they have a lower quality of living. The current study also shows that a lower QOPS is associated with a higher median MSI-BPD score among gay and bisexual men, which probably indicates that poor living circumstances as a result of minority stressors may lead to a lower perceived QOPS. This does not appear to be the case among heterosexual men. However, QOPS was significantly correlated with BSL-23 among all the groups. Hence, BSL-23 may be a useful tool to assess the quality of

life among men regardless of sexual orientation during intake, while simultaneously assessing severity of borderline features and DBs. In addition, sexual orientation concealment (SOC) was negatively correlated with DBs only among gay men while DBs were negatively correlated with QOPS only among bisexual men. This supports the idea that DBs are sometimes coping mechanisms or normalized behaviors among urban gay subcultures [40], in which bisexual men participate too, as observed by the authors during their clinical practice. This is in accordance with others' observations that gay and bisexual men often use substances, engage in risky sexual activities, and have multiple sexual partners [83] in line with prevailing urban gay and bisexual subcultures. The results may also indicate that outness maybe linked to participation in gay subcultures that involve DBs such as using substances, and having multiple sexual partners.

In particular, many gay and bisexual men engage in chemsex, also known as "high fun" in Indian urban contexts, as observed by the authors. Consumption of psychoactive substances such as crystal methamphetamine, gamma-hydroxybutyrate (GHB)/gamma-butyrolactone (GBL), and mephedrone have been observed in various locations across the world as part of gay subcultures. A study conducted in London revealed that more than half of the participants had used a range of psychoactive substances over the years, with many reporting concerns related to sexual consent [84], whereas sexualized drug use (SDU) was found to be prevalent in Latin America [85] and China [86] as well. The use of alcohol and psychoactive substances for recreational use has been observed to be a response to social marginalization and not necessarily dysfunctional [40]. However, substance use is associated with higher rates of human immunodeficiency virus (HIV) and syphilis infections among men who have sex with men (MSM) [87].

However, DBs such as substance use, self-harm, and aggressiveness are all symptoms of BPD. Moreover, the presentation of BPD seems to differ among men and women regardless of their sexual orientation. Bayes *et al.* [39] reviewed the available literature and found evidence for elevated levels of substance abuse and externalizing patterns of behavior in men diagnosed with BPD. Men also frequently exhibited violent self-harm and interpersonal aggression. Women, on the other hand, displayed more internalizing strategies. They concluded by suggesting men have an increasing tendency to be diagnosed with antisocial personality disorder (ASPD) and that BPD may not be as rare as believed among men [39]. Hoertel *et al.* [88] compared both men and women and found that men were more likely to engage in impulsivity at lower levels of BPD severity, suggesting that BPD could be understood as a phenomenon that partially differs among the two sexes. A Dutch study evaluated 167 men and women with BPD and found that both sexes recalled high rates of child abuse, but male patients were more likely than female patients to have a comorbid substance abuse disorder [89]. Goodman *et al.* [90] emphasized that there is a dearth of literature about BPD among men and minimal information about male developmental trajectories of BPD. After surveying parents of 263 male offspring, among whom 97 met the criteria for BPD, Goodman *et al.* [90] noted that the parents of males with BPD recalled a pattern of symptoms starting in infancy through adolescence. These included separation anxiety during infancy, body image concerns during childhood, and impulsivity, emptiness, and peculiar thinking during teenage years. They noted that this trajectory is different from what has been noticed among females with BPD [90].

The current study supports previous studies which show that same-sex attracted individuals do not differ from heterosexuals in terms of happiness [91] and that they may develop adaptive coping mechanisms despite minority stressors such as internalized homophobia [38]. Nevertheless, it is essential to screen men for BPD when their presenting complaints consist of one or more DBs, regardless of their sexual orientation, as men in general are underserved when it comes to intervention approaches for BPD. Substance abuse in particular is implicated in BPD, and men who seek intervention for substance use disorders must be screened for underlying BPD as well. A discerning clinician can identify DBs while taking case history, and make a decision to administer a screening tool for BPD such as MSI-BPD or BSL-23. This helps identify potential cases of BPD which can later be confirmed with the help of a diagnostic clinical interview. Both MSI-BPD and BSL-23 are suitable in this context, although BSL-23 additionally quantifies DBs and QOPS, making it easier to track therapeutic progress.

5. Limitations of the study

This study was conducted during the Covid-19 pandemic, and data were collected online. Collecting data online may have introduced social desirability bias, especially when exploring a sensitive topic such as sexual orientation. Recruitment was done both physically and via online applications such as Grindr, PlanetRomeo and other online forums used by gay and bisexual men. Snowball and purposive sampling were used, which may have introduced bias as the participants may not have represented the larger Indian society. Information related to socio-economic status in terms of annual income was not collected as part of this study to be less intrusive and respect participants' privacy. As participants were required to have a working knowledge of English, they may not have represented the larger population of India which speaks multiple languages. The participants in the study were mostly based in Bangalore or New Delhi at the time of the study, skewing the data toward a predominantly urban population. As data were not normally distributed, non-parametric tests were used to analyze the results. Due to the specificity of the sample, power analysis was not attempted. Although reliable, non-parametric tests are not as robust as parametric tests, and hence conclusions drawn must be viewed with caution. Future studies can consider recruiting a large number of participants from diverse demographic groups to enhance the strength of analysis and the conclusions drawn.

6. Conclusions and recommendations

Borderline personality disorder (BPD) among men is an under-researched topic and under-recognized condition in India. Regardless of sexual orientation, male patients should be screened

for BPD if they present with dysfunctional behaviors, externalizing behaviors, impulsivity, or substance abuse at the time of initial consultation. MSI-BPD and BSL-23 can both be used to screen men for BPD symptoms regardless of their sexual orientation, age, or education level. As clinical psychologists often operate from the position of scientist-practitioners, BPD screening tools need to be research-friendly and clinically relevant. A shorter tool lends itself easily to translation, has fewer chances of cultural ambiguity, and motivates researchers to take up BPD-related research among under-represented populations. MSI-BPD and BSL-23 fill existing lacunae in terms of short, self-administered questionnaires with single clinical cut-off scores. Researchers need to seek relevant copyright permissions from the authors of MSI-BPD before using it in studies. BSL-23, on the other hand, can be freely used for both clinical and research purposes.

Although neither MSI-BPD nor BSL-23 was associated with sexual orientation concealment, age, or education level in this study, it is necessary to replicate this study on larger samples, and ensure that other minority stressors such as external stigma, expectations of discrimination, and internalized homophobia are accounted for during BPD assessment and treatment. In addition, as India is a multi-lingual and diverse country, there is a need to translate tools like MSI-BPD and BSL-23 into different languages such as Kannada, Tamil, Malayalam, *etc*. It is also essential to validate the English version of both the tools as English remains the most widely spoken language across the country, especially among professionals. It is important to note that clinical psychology and psychiatry courses are offered only in English across India. However, to ensure cultural compatibility, it is necessary to translate tools like MSI-BPD and BSL-23 into vernacular languages.

Bisexual men seem to conceal their sexual orientation more than homosexual men. This may either be helpful or stress-inducing depending on individual circumstances. Hence, therapists must consider the unique circumstances of each individual, whether gay or bisexual, before addressing minority stressors such as sexual orientation concealment during later stages of therapy. When sexual orientation is not revealed, one must neither prod nor make assumptions. However, a supportive and safe therapeutic atmosphere must be created that feels inclusive to men regardless of their sexual orientation. Further, if men reveal their sexual orientation to be either homosexual or bisexual during the initial few sessions, the effect of different minority stressors on one's psychological well-being must be considered. Treatment approaches can focus on strengthening emotion regulation and mentalizing strategies before attempting to address self-acceptance issues in the context of homosexuality and bisexuality. Strengthening emotion regulation and mentalization skills help men regardless of their sexual orientation to cope with symptoms associated with BPD. It is also essential to identify which minority stressors are most associated with emotion regulation issues among gay and bisexual men, as emotion dysregulation is a hallmark of BPD symptomatology [92].

AVAILABILITY OF DATA AND MATERIALS

The data presented in this study are available on reasonable request from the corresponding author.

AUTHOR CONTRIBUTIONS

JC—contributed toward study design, data collection, data analysis, manuscript writing, and submission. DCS—contributed toward study design, manuscript writing, and data analysis. LH—helped in data collection, manuscript writing and analysis. JC—performed the research as part of his doctoral study under the guidance of DCS and LH. All the three authors contributed to the editorial changes in the manuscript. All authors read and approved the final manuscript.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This study was conducted in compliance and approval of the ethical committee of AIBHAS, Amity University Uttar Pradesh, NOIDA (approval number/date: Doctoral Research Committee (DRC) meeting, 07 January 2022. Synopsis approval by the PhD Department, Amity University Uttar Pradesh, NOIDA, on the 12 January 2022). Participants were informed of the purpose of the research and the procedures it entailed. Informed consent forms were signed by the participants electronically before responding to the questionnaires. All participants were assured that their data and identity would be kept confidential and anonymous respectively.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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