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By Emma G. Roberts

Submitted in partial fulfillment of the requirements for Graduation *summa cum laude* and for Graduation with Honors from the Department of Psychological and Brain Sciences and for Graduation with Honors from the Department of Anthropology

University of Louisville

March, 2022

Abstract

Introduction: Minority stress theory posits that sexual and gender minority individuals (SGM) may be at higher risk for poor mental health outcomes due to unique social experiences of stigma and discrimination. Interoception (i.e., awareness of one's body and bodily sensations; Mehling et al., 2012) is a factor that has been linked to mental health broadly, however, SGM individuals may experience interoceptive awareness differently than cisgender and heterosexual individuals given experiences of stigma. In this paper, we aim to examine how two specific facets of interoceptive awareness (body listening and body trusting) relate to differences in mental health outcomes among SGM individuals and their cisgender/heterosexual (CH) counterparts. **Methods:** Undergraduate students (Total N = 952; CH n = 755; SGM n = 197) completed self-report measures of interoceptive awareness and mental health outcomes (i.e., eating disorder symptoms, depression, and anxiety). Results: MANOVA analyses with post-hoc univariate ANOVAs showed that relative to CH participants, SGM participants were significantly lower in not distracting (p < .05), self-regulation (p < .01), and body trusting (p < .05) .001). Body trusting (ps < 001), but not body listening (ps > .14) were associated with all mental health outcomes. SGM status moderated the relationship between body trust and depression/worry, but not ED symptoms. Additional MANOVA models showed differences in interoceptive awareness among sexual orientation and gender identity subgroups (ps > .001). **Discussion**: These findings are an important step in understanding how SGM individuals may have a distinctly unique experience of interoceptive awareness compared to CH individuals, however, further research is necessary to determine the mechanisms through which these differences may operate. Further understanding of this experience is essential to provide informed and inclusive care to those who identify as SGM.

Lay Summary

Sexual and gender minorities (SGM) are at high risk for mental health burdens due to unique social experiences of stigma and discrimination. One factor that has been linked to better mental health outcomes is interoceptive awareness. Interoceptive awareness is the awareness of one's body and bodily sensations. SGM individuals may experience interoceptive awareness differently than their cisgender and heterosexual counterparts due to the stigma that they are exposed to.

The current study aimed to analyze how interoceptive awareness, particularly body trust and body listening, impact mental health in SGM individuals. We found that SGM individuals were lower in not distracting, self-regulation, and body trusting. Body trust was significantly related to depression, worry, and eating disorder symptoms. Additionally, identifying as SGM moderated the relationship between body trust and depression/worry. These findings are an important step in understanding the differences between how SGM individuals experience their bodies and how cisgender and heterosexual individuals experience their bodies, and how that may impact their overall mental wellbeing.

Exploring Body Listening and Body Trust in Sexual and Gender Minorities

As Western society has grown more accepting of sexual and gender minority individuals (i.e., individuals who identify as lesbian, gay, bisexual, transgender, or any non-heterosexual and cisgender identity; SGM), researchers have begun to examine the queer experience more thoroughly (Mayer et al., 2008). SGM individuals are exposed to unique forms of stigma and discrimination that greatly affect their social experience. As such, SGM individuals are at increased risk for mental health burdens compared to their cisgender and heterosexual (CH) counterparts (Hatzenbuehler, 2009), and have been found to experience elevated levels of psychopathology (Moliero, 2018). In accordance with the Minority Stress Model (Hatzenbuehler, 2009), exposure to stigma, prejudice, and discrimination creates a highly stressful social environment, which in turn may contribute to the development of mental health issues including depressive disorders, anxiety disorders, and eating disorders (EDs; Hendricks & Testa, 2021).

A significant aspect of any individual's experience is how they feel living in their own body. When it comes to the lived experience of the body, SGM individuals tend to face a more complicated experience than CS individuals. Queer bodies are often stigmatized (Dwyer, 2009), and SGM individuals, particularly those who are transgender or gender-nonconforming, experience both social and personal stress regarding the perception and experience of their bodies (Hatzenbuehler, 2009; Langer, 2014). Transgender and gender-nonconforming individuals may experience stress when they are misgendered (i.e., referred to or perceived as a gender that does not align with their identity; Dolan et al., 2020), and such misgendering is associated with higher levels of psychological distress (McLemore, 2016). Studies also suggest that queer individuals have lower rates of body image satisfaction than CS individuals (McClain & Peebles, 2016). Alongside individualized negative body experiences, as a minority population, SGM individuals are additionally at risk of social dehumanization (i.e., treating individuals as not possessing the core features of human nature; Dover, 2016). Recent research has found that in Black individuals, another highly stigmatized minority group, social pain minimization and discriminatory experiences were associated with decreased levels of body trust (i.e., Mehling et al., 2012), as well as increased suicidal ideation (Kinkel-Ram et al., 2021). These findings suggest that social perception may influence how one experiences their body. Such stigma related stress may uniquely impact how SGM individuals experience factors that affect psychological health and bodily sensations (Hatzenbuehler, 2009; Kinkel-Ram et al., 2021).

One such factor that is generally associated with enhanced psychological wellbeing is interoceptive awareness (IA; Hanley et al., 2017). Interoceptive awareness involves conscious awareness of both the body's physiological state and the evaluative interpretation of those sensations (Mehling et al., 2012). There are multiple aspects of IA, each of which aids in producing complex mental health outcomes. As defined by Mehling et al. (2012), the creators of the Multidimensional Assessment of Interoceptive Awareness (MAIA), there are eight notably distinct factors of IA: *noticing*, *not distracting*, *not worrying*, *attention regulation*, *emotional awareness*, *self-regulation*, *body listening*, and *body trust*. While these aspects impact a multitude of psychological experiences, two that particularly impact the bodily experience are *body trust* and *body listening*. Mehling et al. (2012) defines *body trust* as "experiencing one's body as safe and trustworthy" (2012, p. 15). Similarly, *body listening* is defined as "actively listening to the body for insight" (Mehling et al., 2012, p. 15). Individuals with low body trust (who do not experience their bodies as safe and trustworthy) have been found to report higher levels of depression and ED symptoms (Brown et al., 2020; Dunne et al., 2021), as well as reporting lower levels of generalized wellbeing (Hanley et al., 2017). Research largely supports the idea that higher levels of IA, including body trust and body listening, lead to more positive psychosocial outcomes in generalized samples. However, these findings have not been independently analyzed in SGM individuals.

As queer studies are only recently included in scientific society (Lange et al., 2019), the gaps in the literature on this topic are wide, despite the importance and relevance of research on this population. Levels of IA, particularly levels of body trust, are significantly correlated with psychological wellbeing (Hanley et al., 2017), while SGM individuals report higher levels of psychological distress (Hatzenbuehler, 2009). SGM individuals are a growing segment of the population, with the latest demographics reporting that LGBT identification rose to 5.6% in the United States in 2020 (Jones, 2021). As such, understanding how SGM individuals experience factors that may impact their psychological wellbeing, such as levels of IA, is essential in order to further inclusive scientific work and to provide effective care for those who identify as SGM.

This study aimed to analyze the experience of body trust and body listening in SGM individuals. We aimed to accomplish this goal in several ways. First, we aimed to explore differences between SGM and CH individuals in facets of interoception (Aim [A] 1). We hypothesized that compared to CH individuals, SGM individuals will experience lower levels of body trust and body listening while accounting for variance in other IA facets (Hypothesis [H] 1a.) We also hypothesized that the two groups would not demonstrate any significant differences in other aspects of IA as measured by the MAIA (i.e., noticing, not-distracting, not-worrying, attention regulation, emotional awareness, self-regulation) (H1b).

Additionally, we intended to analyze the relationship between body trust, body listening, and mental health outcomes (i.e., depression, worry, and EDs; A2). We hypothesized that body

trust and body listening would be associated with all outcomes, such that lower levels of body trust and body listening would correlate with higher score in depression, worry, and ED symptoms (H2).

We also had two exploratory aims. We aimed to explore the differences in IA in different SGM subgroups (A3), by both sexual orientation (i.e., gay/lesbian, heterosexual, and bisexual/other) and gender identity (i.e., cisgender men, cisgender women, and transgender individuals). Given the sparse literature comparing within SGM groups (rather than between SGM and CH groups), this aim was exploratory in nature and without hypotheses. Our second exploratory aim was to examine whether SGM group membership serves as a moderator in the relationship between body trust and negative mental health outcomes (A4).

Method

Participants and Procedure

Participants were 952 undergraduate students (CH n = 755; SGM n = 197) who completed self-report measures for course credit at the University of Louisville. See Table 1 for sample demographics by group.

Measures

Depression

Depression was assessed using the Beck Depression Inventory-2 (BDI; Beck et al., 1996). The BDI is a self-report measure that assesses the presence of depressive symptoms. When prompted with a statement, participants are instructed to indicate how much this reflects how they have felt in the last two weeks using a Likert scale of 0 (I do not feel indicated emotion) to 3 (I feel indicated emotion all the time). The BDI-2 has been found to have good reliability and validity (Osman et al., 2007) and maintained excellent internal consistency ($\alpha = .91$.

Eating Disorders

Eating disorder symptoms were assessed using the EDE-Q. The Eating Disorder Examination Questionnaire (EDE-Q Version 6.0; Fairburn & Beglin, 1994). The EDE-Q is a 41item, self-report measure that assesses cognitions and behaviors related to disordered eating pathology over the last 28 days. Participants report how often they have engaged in a certain behavior over the past month on a scale of "No days" to "Every day". This measure yields five scores: Restraint, Eating Concern, Shape Concern, Weight Concern, and Global. The EDE-Q has shown good reliability and validity (Luce & Crowther, 1999). This study utilized the Global subscale, which maintained excellent internal consistency ($\alpha = .96$).

Interoceptive Awareness

Levels of interoceptive awareness were assessed using the Multidimensional Assessment of Interoceptive Awareness (MAIA; Mehling et al., 2012). The MAIA is a 32-item, self-report measure that assesses levels of interoceptive awareness. This measure yields eight subscales: Noticing, Not Distracting, Not Worrying, Attention Regulation, Emotional Awareness, Self-Regulation, Body Listening, and Body Trust. Participants are instructed to indicate how often each statement applies to them in day-to-day life using a Likert scale of 0 (Never) to 5 (Always). The MAIA has been shown to have acceptable levels of validity and reliability (Brown et al., 2017) and the individual subscales yielded good internal consistency ($\alpha = .74$ -.93).

Worry

Worry was assessed using the Penn State Worry Questionnaire (PSWQ; Meyer et al., 1990). The PSWQ is a 16-item self-report measure that assesses worry. Participants are asked to

rate how true a given statement is for themselves using a Likert scale of 1 (not at all typical to me) to 5 (very typical of me). The PSWQ has shown excellent reliability and validity (van Rijsoort et al., 1999) and maintained good internal consistency ($\alpha = .80$).

Data Analytic Plan

To examine differences in facets of IA among SGM and CH individuals (A1), we conducted multivariate analyses of variance (MANOVA), as well as to examine the intergroup differences in body trust in SGM. We conducted correlational analyses (Pearson's r) to examine the relationship between body trust, body listening, and mental health outcomes (i.e., worry, depression, and ED symptoms; A2). Regarding our exploratory aims, differences in IA facets among SGM subgroups (A3) we analyzed with two separate MANOVA models - one examining differences in IA among sexual orientation groups (i.e., lesbian/gay [n = 47], heterosexual [n =763], and bi+ individuals [n=142]) and one examining differences in IA among gender identity groups (i.e., cisgender men [n = 233], cisgender women [n = 695], and transgender individuals [n]= 23]). Finally, we conducted multivariate hierarchical linear regression to analyze SGM group membership as a moderator of the relationship between body trust and body listening (independent variables) and mental health outcomes (dependent variables; A4). Two pooled type-II MANOVA models (one for body listening and one for body trust) were first examined for overall significance across the dependent variables (i.e., ED symptoms, worry, and depression). Significant pooled models were followed-up by an examination of univariate multiple regression models for each dependent variable. All analyses were conducted using R.

Results

Differences in IA Between SGM and CH Individuals (A1)

Results of a one-way MANOVA indicated that there was a statistically significant difference between CH and SGM participants on the combined dependent variables, Pillai's trace = .05, F(8, 943) = 6.54, p < .001. Post-hoc ANOVAs showed that relative to CH participants, SGM participants were significantly lower in not distracting (p < .05), self-regulation (p < .01), and body trusting (p < .001). See Table 2 for mean and standard deviation on each facets by group (CH and SGM).

Correlations Between IA Facets and Mental Health Outcomes (A2)

Results of a correlation matrix determined that listening and trusting were significantly correlated, p < .001. Listening was not significantly correlated with any mental health outcomes (ps > .14). Trusting was significantly negatively correlated with all mental health outcomes, ps < .001, rs = -.34 to -.22. See Table 1 for correlation matrix.

Differences in IA Among SGM Subgroups (A3)

Results of a one-way MANOVA indicated that cisgender men, cisgender women, and trans individuals differed significantly on the combined dependent variables, Pillai's trace = .06, F(16, 1884) = 3.64, p < .001. Post-hoc ANOVAs and pairwise comparisons with Bonferroni correction for multiple comparisons demonstrated that noticing (p = .013), not worrying (p < .001), and body trusting (p < .001) differed significantly by gender. Cis men had significantly lower scores on noticing (p = .014) and higher scores on not worrying (p < .001) as compared to cis women but did not significantly differ from transgender individuals (p = .449) on those facets. Trans individuals and cis women did not differ significantly from one another on not noticing or not worrying (p > .05). Cis men scored significantly higher on body trust as compared to both cis women (p < .001) and trans individuals (p = .022). Trans individuals and

cis women did not differ significantly on body trust (p = .433). See Table 4 for mean and standard deviation on each facet by gender (cisgender men, cisgender women, transgender).

A one-way MANOVA indicated that the combined dependent variables differed significantly by sexual orientation (i.e., heterosexual, lesbian/gay, or bi+), Pillai's trace = .06, F(16, 1886) = 3.65, p < .001. Post-hoc ANOVAs also demonstrated that not distracting (p =.005) and body trusting (p < .001) differed significantly by sexual orientation. Pairwise comparisons with Bonferroni adjustment for multiple comparisons demonstrated that heterosexual individuals had higher scores on not distracting as compared to those in the bi+ group (p = .008), but that heterosexual individuals did not differ significantly from the lesbian/gay group on not distracting (p > .05). The lesbian/gay and bi+ groups did not differ significantly from one another on not distracting (p = .290). The heterosexual group had significantly higher scores on body trust as compared to both the lesbian/gay (p = .023) and bi+ (p < .001) groups. However, the bi+ and lesbian/gay groups did not differ significantly on body trust (p > .05). See Table 5 for mean and standard deviation on each facet by sexual orientation (heterosexual, lesbian/gay, bi+).

Moderation Analyses(A4)

Pooled type-II MANOVA results for the model examining SGM status as a moderator on body listening demonstrated that SGM status did not moderate the relationship between body listening and any of the mental health outcomes (p = .636). However, SGM status was significantly associated with pooled mental health outcomes (p < .001) and in univariate models testing for each dependent variable (ps < .001). Body listening was not significantly associated with mental health outcomes in the pooled model (p = .530) or in follow-up univariate models (ps > .633). Pooled type-II MANOVA results for the model examining SGM status as a moderator on body trust demonstrated that SGM status did moderate the relationship between body trust and pooled mental health outcomes (p = .007). Examination of follow-up univariate regression models suggest that SGM status moderates the relationship between body trust and depression (p= .001) and worry (p = .019), but not ED symptoms (p = .121). Additionally, SGM status and body trust were both significantly associated with pooled mental health outcomes (ps < .001) and across univariate models (ps < .006). See Table 6 for univariate hierarchical regression models.

Discussion

The present study aimed to examine the experience of interoceptive awareness in sexual and gender minority individuals and its relation to various mental health outcomes. SGM individuals face immense social discrimination which may impact how they experience and perceive their bodies (Hatzenbuehler, 2009), and thus how comfortable they are in their own skin. Interoceptive awareness has a significant impact on how one experiences one's body as well. Individuals with higher levels of generalized IA are shown to have more positive mental health outcomes (Price & Hooven 2018). Two notable aspects of IA that have demonstrated beneficial relationships with mental health outcomes are body listening ("actively listening to the body for insight") and body trust ("experiencing one's body as safe and trustworthy" (Mehling et al., 2012). We hypothesized that the stigma surrounding queer bodies may impact how SGM individuals relate to and connect with their bodies. Our hypotheses were that differences in IA among SGM individuals and CH individuals would be driven by differences in body trust and body listening, and that the groups would not demonstrate any significant difference in other aspects of IA.

Our first aim (A1) was to test differences between SGM and CH individuals on facets of IA. We hypothesized (H1a) that compared to CH individuals, SGM individuals would experience lower levels of body trust and body listening while accounting for variance in other IA facets. We also hypothesized (H1b) that CH and SGM individuals would not differ on the other IA facets measured by the MAIA. Findings showed that relative to CH, SGM participants were lower in not distracting, self-regulation, and body trust. While parts of our initial hypothesis were supported, some results were unexpected. As hypothesized, body trusting was significantly lower in SGM individuals as compared to be CH individuals. However, SGM individuals also reported significantly lower self-regulation and lower not distracting as compared to CH individuals, while there were no significant differences in body listening between groups. It has been theorized that distract behaviors such as motor fidgeting and focusing on outside tasks may be connected to social discomfort (Erath et al., 2007), which SGM individuals report in high numbers (Rivers et al., 2018). Additionally, while self-regulation may not directly connect to SGM identities, SGM individuals have been shown to have increased mental health burdens when compared to CH individuals (Kerridge et al., 2016). It has been suggested that those with mental health issues may have lower levels of self-regulation (Bakker et al., 2010). Thus, mental health may explain this connection rather than SGM group membership.

Additionally, we analyzed the relationships among IA facets and mental health outcomes (i.e., depression, worry, EDs; A2). We hypothesized (H2) that body trust would be associated with all outcomes, such that higher levels of body trust would correlate with lower scores in depression, worry, and ED symptoms. Aligned with hypotheses, we found that body trusting was significantly, negatively correlated with all mental health outcomes. This is consistent with past literature analyzing body trust (Browne et al., 2020; Dunne et al., 2021). However, counter to

hypotheses, body listening was not significantly correlated with any MH outcomes. These findings highlight a key difference between body listening and body trust. Both IA aspects involve awareness of one's body, but only body trust incorporates the acceptance and trust of one's body. This may suggest that a crucial factor behind these relationships may not be simply awareness, but rather the acceptance of one's experiences.

Multiple exploratory analyses were conducted during this study. First, we explored differences in body trust in SGM subgroups (i.e., heterosexual, gay/lesbian, bi+, and trans; A3). When including gender identity, we found that cisgender men, cisgender women, and trans individuals all differed in their experience of body trust, noticing, and not worrying (p < p.001). It is possible that cisgender women may score lower in noticing as a result of experiencing more visceral sensations than cisgender men. An example of this finding would be menstrual cramping, which many cisgender women experience and cope with frequently (Strine et al., 2005). Additionally, cisgender women scored higher in not worrying and lower in body trust. This aligns with how cisgender women's bodies are perceived; not only by others, but by themselves. Western culture places high expectations regarding appearance on cisgender women's bodies, particularly the "thin ideal" (Thompson & Stice, 2001), which emphasizes thinness as a direct correlate to attractiveness and success. Many women learn to consistently self-monitor their bodies and appearances, which can lead to self-objectification, a cognition that impacts how women notice and attend to their own physical perception (Frederickson & Roberts, 1997). This combination of both intrinsic and extrinsic pressure may result in cisgender women policing their bodies in a way that cisgender men do not, resulting in more worry and more discomfort in one's body.

When looking at differences in IA by sexual orientation, we found that heterosexual individuals, gay/lesbian individuals, and bi+ individuals demonstrated differences in not distracting and body trust. While differences with the heterosexual group were significant, gay/lesbian individuals and bi+ individuals did not differ significantly from each other on body trust and not distracting. These results suggest that queer individuals may have a relatively uniform experience regarding these factors and that specific group membership may not play a key role – rather, identifying as sexually diverse in any way may impact body trust and distract behaviors.

Our final exploratory aim was to investigate whether SGM group membership moderated the relationship between body trust/body listening and mental health outcomes (A4). SGM identity moderated the relationship between body trust and depression along with the relationship between body trust and worry but it did not moderate the relationship between body trust and EDs. Regardless of SGM group membership, body trust and EDs were negatively associated. SGM individuals may have a unique experience with body trust and depression/worry due to their SGM group membership, but the negative relationship of body trust and EDs remained significant regardless of group membership. This supports previous research on body trust and EDs, as body trust has been repeatedly found to negatively correlate with EDs in a variety of populations (Brown et al., 2020).

Strengths and Limitations

The current study has many notable strengths. The sample was relatively large, which allowed for adequate statistical power. Additionally, current literature on this subject is extremely limited and these findings represent a base upon which further research can be conducted. However, there were also significant limitations. All the data used in this study was obtained through self-report measures, which are inherently limited by self-report biases as they rely on the participant's honest and accurate endorsements (Donaldson & Grant-Vallone, 2002). This study was also cross-sectional, and as such had no way to incorporate temporal relationships into the analyses. Finally, while the overall sample was large, the SGM sample was relatively small. As such, the SGM subgroup analyses were likely underpowered.

Implications and Future Directions

The implications of these findings are manifold. Understanding the difference between the experiences of SGM individuals and CH individuals allows for more comprehensive care for those who identify as SGM. Additionally, being aware of how body trust impacts mental health outcomes such as depression, anxiety, and EDs provides a new framework through which to analyze SGM mental health by holding space for both their mental health symptoms and their individual identities. Specialized care for SGM individuals is rare, despite research showing that SGM individuals often have distinctly different experiences than CH individuals and understanding the mechanisms that underlie these differences is key to developing further awareness of these needs. Future research may continue to investigate the relationship between IA and SGM identity by analyzing these factors in more diverse samples.

Conclusion

The present study aimed to explore the experience of body trust and body listening in SGM individuals. Results support the idea that while SGM individuals experience lower levels of body trust than their CH counterparts, there is no significant difference in levels of body listening. Furthermore, results show that body trust is significantly, negatively correlated with numerous mental health outcomes. These findings are an important step in understanding how SGM individuals may have a distinctly unique experience compared to CH individuals, however, further research is necessary to determine the mechanisms through which these differences may operate.

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Table 1. Demographics chara	cteristics of study sample		
	Total sample $(n = 952)$	CH (<i>n</i> = 755)	SGM (<i>n</i> = 197)
	% (<i>n</i>)	% (<i>n</i>)	% (<i>n</i>)
Gender			
Cis man	24.47 (233)	25.96 (196)	18.78 (37)
Cis woman	73.00 (695)	75.04 (559)	69.04 (136)
Non-binary	1.68 (16)	-	8.12 (16)
Transgender man/woman	0.31 (3)	-	1.52 (3)
Other	0.52 (5)	-	2.54 (5)
Sexual orientation			
Lesbian or gay	4.93 (47)	-	23.86 (47)
Heterosexual	80.15 (763)	100 (755)	4.06 (8)
Bisexual	12.50 (119)	-	60.41 (119)
Other	2.42 (23)	-	11.68 (23)
Race/Ethnicity			
Non-Hispanic White	68.49 (652)	71.52 (504)	148
American Indian/Alaskan	0.32 (3)	0.40 (3)	0 (0)
Native			
Black/African American	13.34 (127)	13.64 (103)	12.18 (24)
South Asian/Indian	0.32 (3)	0.40 (3)	0 (0)
Asian/Pacific Islander	5.88 (53)	6.09 (46)	3.55 (7)
Hispanic White	5.38 (51)	5.43 (41)	5.08 (10)
Multiracial	4.83 (46)	5.03 (38)	4.06 (8)
Missing	1.16 (11)	1.46 (11)	0 (0)
Age M (SD)	19.19 (1.46)	19.18 (1.45)	19.24 (1.51)

Note. CH = cisgender and heterosexual group; SGM = sexual and gender minority group

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Table 2. Comparison of diffe	erences in facets of interoce	ptive awareness among cisgender and
heterosexual and sexual and	gender minority individuals	5.
	CH (<i>n</i> = 755)	SGM (<i>n</i> = 197)
	<i>M</i> (SD)	<i>M</i> (SD)
Noticing	2.78 (1.28)	2.89 (1.21)
Not distracting	2.34 (1.23)	2.12 (1.23)
Not worrying	2.73 (0.87)	2.60 (0.93)
Attention regulation	2.48 (1.09)	2.40 (1.06)
Emotional awareness	2.87 (1.24)	2.89 (1.27)
Self-regulation	2.54 (1.20)	2.29 (1.19)
Body listening	2.17 (1.28)	1.98 (1.32)
Body trusting	3.09 (1.39)	2.40 (1.46)

Note.CH = cisgender and heterosexual group; SGM = sexual and gender minority group

Table 3. Correlation plot of mental health outcomes, body trust, and body listening				
	2	3	4	5
1. Body trust	.50***	22***	34***	25***
2. Body listening	-	04	05	02
3. Worry	04	-	.55***	.36***
4. Depression	05	.55***	-	.47***
5. Eating disorder	02	.36***	.47***	-
symptoms				

Note. * = p < .05, ** = p < .01, *** = p < .001

Table 4. Comparison of differences in facets of interoceptive awareness by gender			
	Cisgender man	Cisgender woman	Transgender
	(<i>n</i> = 233)	(<i>n</i> = 695)	(n = 24)
	M (SD)	<i>M</i> (SD)	M (SD)
Noticing	2.60 (1.38)	2.88 (1.22)	2.70 (1.30)
Not distracting	2.32 (1.28)	2.30 (1.21)	2.04 (1.45)
Not worrying	2.92 (0.75)	2.63 (0.91)	2.64 (0.98)
Attention regulation	2.55 (1.13)	2.44 (1.06)	2.39 (1.21)
Emotional awareness	2.74 (1.27)	2.92 (1.24)	2.82 (1.35)
Self-regulation	2.58 (1.25)	2.46 (1.17)	2.45 (1.42)
Body listening	2.22 (1.33)	2.09 (1.28)	2.36 (1.45)
Body trusting	3.25 (1.42)	2.85 (1.42)	2.42 (1.17)

Table 5. Comparison of differences in facets of interoceptive awareness by sexual orientation			
	Heterosexual	Lesbian/gay	Bi+
	(<i>n</i> = 763)	(<i>n</i> = 47)	(<i>n</i> = 142)
	<i>M</i> (SD)	<i>M</i> (SD)	<i>M</i> (SD)
Noticing	2.78 (1.29)	2.76 (1.41)	2.97 (1.10)
Not distracting	2.35 (1.24)	2.35 (1.25)	2.12 (1.18)
Not worrying	2.73 (0.87)	2.76 (0.86)	2.43 (0.87)
Attention regulation	2.47 (1.09)	2.40 (1.24)	2.43 (0.99)
Emotional awareness	2.86 (1.25)	2.69 (1.51)	3.07 (1.12)
Self-regulation	2.54 (1.20)	2.37 (1.36)	2.28 (1.15)
Body listening	2.17 (1.29)	1.90 (1.46)	1.99 (1.20)
Body trusting	3.08 (1.39)	2.51 (1.15)	2.36 (1.49)

		$\frac{10 \text{ regression models by dependent variable.}}{b} SE t p$			
DV.	Estina disender symptoms	D	SE	l	p
	Eating disorder symptoms	0.21	0.02	6.04	< 001
1	Body trust	-0.21	0.03	-6.94	<.001
2	SGM status	0.42	0.11	3.90	<.001
2	Body trust	0.19	0.35	-5.38	<.001
	SGM status	0.37	0.11	3.35	<.001
	Body trust x SGM	-0.11	0.07	-1.55	.121
1	status	0.01	0.02	0.42	(71
1	Body listening	-0.01	0.03	-0.42	.671
	SGM Status	0.57	0.11	5.21	<.001
2	Body listening	-0.01	0.04	-0.20	.840
	SGM status	0.56	0.10	5.16	< .001
	Body listening x SGM	0.03	0.08	0.37	.712
	status				
	Depression	1		1	
1	Body trust	-2.08	0.22	-9.517	<.001
	SGM status	6.04	0.77	7.864	<.001
2	Body trust	-1.68	0.25	-6.80	<.001
	SGM status	5.32	0.79	6.72	<.001
	Body trust x SGM	-1.79	0.52	-3.45	<.001
	status				
1	Body listening	-0.19	0.25	-0.76	.446
	SGM Status	7.45	0.79	9.43	<.001
2	Body listening	-0.02	0.28	-0.07	.941
	SGM status	7.37	0.79	9.29	<.001
	Body listening x SGM	-0.77	0.60	-1.28	.200
	status				
DV:	Worry				
1	Body trust	-1.92	0.32	-5.94	<.001
	SGM status	3.98	1.14	3.51	<.001
2	Body trust	-1.51	0.37	-4.13	<.001
	SGM status	3.26	1.18	2.78	.006
	Body trust x SGM	-1.81	0.77	-2.34	.019
	status				
1	Body listening	-0.33	0.35	-0.94	.346
	SGM Status	5.26	1.14	4.63	<.001
2	Body listening	-0.19	0.40	-0.48	.633
	SGM status	5.19	1.14	4.55	<.001
	Body listening x SGM	-0.65	0.86	-0.76	.448
	status	0.00	0.00	0.7.0	1.1.0

Note. Regression models were first tested with pooled dependent variables to improve issues of multiple comparison