

Exploring the Impact of Internalized Stigma on Kink Group Identification in Individuals with
Kink-related Interests

by

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Abstract

Kink/BDSM involves both sexual and non-sexual exchange of sensation, control, and authority, with high levels of communication to facilitate ongoing negotiation and consent. In recent years, researchers have found that some BDSM acts were identified as aspects of ‘rough sex’ rather than kink/BDSM which may mean that vital aspects of kink/BDSM negotiation and consent frameworks are not being utilized. For kink-interested individuals, accessing community may be an essential protective factor that facilitates greater practice of safety and consent protocols, and decreases the impact of stigma and discrimination. Accessing community, however, may only be possible through the act of acknowledging one’s kink interest and forming kink identities. The current study investigated the role of internalized stigma in the relationship between kink/BDSM interests and in-group identification. We found that for those interested in more common, less extreme behaviours, such as, blindfolding and tying up, internalized stigma seemed to have a negative impact on one’s positive feelings toward in-group members, and salience and importance of identification with group members. In contrast, for those interested in choking, and strangulation, we saw that internalized stigma has a positive impact on one’s investment with other in-group members. These results indicate that the impact of internalized stigma on identification with in-group members is complex and may depend on the kink/BDSM interests one investigates. Future researchers should consider investigating the impact of internalized stigma on interest and identity, while including additional factors that may impact this relationship. Additionally, we should attempt to understand how all these factors impact pathways to community, access to essential safety information, and the potential benefits of social support.

Co-Authorship

This study was designed and conducted under the supervision of Dr. Meredith L. Chivers, Dr. Chivers advised on all data analyses, interpretation, and manuscript drafting.

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Chapter 1 Introduction

Exploring the Impact of Internalized Stigma on Kink Group Identification in Individuals with Kink-related Interests

In recent decades, the term “kink” has been used as an umbrella term to describe atypical, and often erotic, behaviours, communities, relationships, identities, and cultures (Vivid et al., 2020). Kink involves both sexual and non-sexual exchange of sensation, control, and authority, while maintaining high levels of communication to facilitate ongoing relational dynamics that include behavioural negotiation and consent (Goerlich, 2020). BDSM (i.e., bondage, discipline, dominance, submission, sadism, and masochism; e.g., impact play), fetishes (i.e., sexual arousal from items; e.g., latex), and role-play (e.g., animal play) are all examples of common sub-categories within kink (Rehor, 2015; Vivid et al., 2020). Within these sub-categories of kink, role-identities are often a major aspect of play, with many of these roles falling into the categories of dominant, submissive, and switch (e.g., Pohtenin, 2019; Rehor, 2015; Zambelli, 2017). It is important to note that the terms ‘kink’ and ‘BDSM’ are often used interchangeably or are used to describe similar groups of individuals (Vivid et al., 2020) – we will use both terms for the purposes of the current study.

Prevalence: The Rise in Practice

In the early 2000’s, Australian researchers conducted a study with a large nationally representative sample ($N = 19,307$) which found that around 1.8% of the population was engaging in BDSM (Richters et al., 2008). This research was conducted many years before the rise of erotic romance novels and the extreme popularity of E.L. James’s book trilogy, *Fifty Shades of Grey* (James, 2012), which included depictions of BDSM-related behaviours. The availability of BDSM pop-culture media (e.g., *Fifty Shades of Grey*, the films “*Secretary*” and

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“*A Dangerous Method*”), while increasing general exposure to kink-related behaviours and dynamics, has also contributed to a pathology narrative (i.e., stigma) which focuses on the idea that one only engages in kink behaviour if they have a pathological reason for engagement (e.g., abuse, trauma, PTSD, etc.; e.g., Crane, 2022; Hughes & Hammack, 2019). In addition to promotion of stigma-based narratives, the growing popularity of BDSM media has brought more of these behaviours into mainstream sexual practice (Martin, 2013) and even increased the sales of BDSM-related sex toys (Tripodi, 2017). In recent years, researchers such as, Herbenick et al. (2021) have found that some BDSM acts (i.e., slapping, scratching, punching, hair pulling, choking, biting, tying up, making someone have sex, and spanking) were often identified as aspects of ‘rough sex’ by a sample of U.S. undergraduate students – 38.8% said they liked rough sex ‘very much’ and an additional 45.9% said they liked it ‘somewhat’.

Engaging in these acts under the label of ‘rough sex’ rather than kink or BDSM may mean that vital aspects of kink and BDSM negotiation and consent frameworks are not being utilized (Williams et al., 2014). For example, Risk Aware Consensual Kink, or Safe, Sane, Consensual, are frameworks that highlight the importance of awareness and pre-negotiation as essential pieces of establishing consent and enabling on-going communication of limits and boundaries, before, during, and after engaging in kink/BDSM behaviours (Williams et al., 2014). Consent, communication, and negotiation are key elements that distinguish kink/BDSM practice from sexual, physical, and emotional abuse and violence (Graham et al., 2016). Lack of adequate consent, prior negotiation, use of safe words (e.g., a word used to stop an activity when a physical or emotional boundary is reached), and appropriate aftercare (i.e., post-activity acts that provide comfort and care to the receiver and giver) may lead to an array of negative outcomes

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(e.g., sexual assault, depression, physical or emotional injury; Herbenick et al., 2021; Williams et al., 2014).

Social support, however, has been shown to have protective benefits against many negative impacts on general well-being (e.g., Ozbay et al., 2007). The concept of social support as a protective factor for negative outcomes is not new but may be important when considering the increased practice of high-risk behaviours indicated by Herbenick et al., (2019; 2021; e.g., spanking, choking, etc.). Given that kink/BDSM are widely recognized to be based in experiential learning (e.g., engaging with community; e.g., Graham et al., 2016; Zambelli, 2017), accessing social supports (e.g., munches [i.e., social gathering of those interested in, or practicing kink/BDSM], parties, workshops, etc.) may not only be important for general wellbeing, but for acquiring knowledge of safety practices related to engaging in kink/BDSM.

Learning Through Community

Kink community plays a major role in learning, self-exploration, self-acceptance, identity pride, and dealing with the impacts of discrimination (Hughes & Hammack, 2019; Pohtinen, 2019). Experiential learning is an essential aspect of developing skills and safety measures when practicing kink/BDSM behaviour. BDSM community members often access community spaces and events for educational purposes (Graham et al., 2016), such as acquiring essential skills related to behaviour and power dynamics, learning about safety protocols in practice, and gaining knowledge about consent, roles, and community rules (Zambelli, 2017). These educational opportunities are often facilitated and instructed by established, experienced community members or partners. Access to community spaces also provides people with the opportunity to openly explore their existing interests and learn about a broader range of kink

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behaviour (Fanghanel, 2020; Hughes & Hammack, 2019; Pohtinen, 2019) while being in safe and supportive spaces (Vivid et al., 2020).

Beyond exploration of interests and behaviour, many researchers have discussed the use of kink/BDSM practice to explore one's sexual orientation, gender identity, and gender scripts and roles (e.g., Albury, 2015; Bauer, 2016; Sprott & Hadcock, 2018). Self-exploration and discovery are made possible because of the nuanced and dynamic nature of kink's consent and negotiation-based practices. For example, the challenging of gender roles may be housed within one negotiated scene (i.e., pre-negotiated kink/BDSM interactions; e.g., engaging in a role-play of dominance and submission) but this exploration does not necessarily continue outside of said scene (Hughes & Hammack, 2019; Pohtinen, 2019). Having pre-negotiated moments for exploration (e.g., scenes) means that kink/BDSM practicing individuals can experiment with behaviours that may not fully line up with their real-life experience or core identity, and therefore, protects them from outside ridicule or discrimination for their stigmatized behaviour while still allowing them to explore safely (Hébert & Weaver, 2015; Kalafatis-Russell, 2021). Having safe spaces to explore interests, and aspects of one's identity, may be an essential step in interest and identity acceptance (Hughes & Hammack, 2019).

Kink Identity Formation

Social identity theory proposes that people form their identity through the social groups that they identify with (Tajfel, 1978). Social identity is conceptualized by a group's norms and attributes, which influence the behaviour and emotions of those who identify with the group (Tajfel, 1978 via Scheepers & Ellemers, 2019). Abrams and Hogg (1988) proposed that engaging in self-categorization (i.e., categorizing oneself as belonging to group) and social comparison (i.e., self-comparison to ingroup and outgroup members) are mechanisms that contribute to the

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formation of social identity. In social identity theory, the act of social comparison (e.g., a bisexual comparing oneself to heterosexuals and other bisexuals to find similarities and differences to oneself) is a mechanism that leads one to form group identification (Leach et al., 2008) and solidify their social identity.

The process of identity formation may be more complicated for those with concealable stigmatized identities (i.e., identities that are discriminated against but may not be visible without disclosure; e.g., sexual orientation, mental illness, etc.). Those with stigmatized identities are at risk of discrimination from others if they are ‘out’ (i.e., open and public with their identity; Bry et al., 2017; Camacho et al., 2020; Quinn & Chaudoir, 2009). The experience of forming an identity associated with misconceptions, stereotypes, and prejudice (i.e., stigma) could be more complex as discrimination from others may act as a potential barrier which could impact one’s ability to seek relevant, and necessary, social supports. For most, being involved in, or interested in, kink/BDSM is something that is relatively easy to conceal in their daily lives. Researchers, however, have found that there are positive and negative consequences of concealing pieces of one’s identity (e.g., Bry et al., 2017; Le Forestier et al., 2022) – having adequate social support to explore one’s kinky interests and cope with the impact of stigma may be important.

Factors that Promote Social Support

Social support has been repeatedly shown to have positive impacts on many aspects of well-being (e.g., Le Forestier et al., 2022; Ozbay et al., 2007). Social support may be even more important for stigmatized minority groups because engagement with community allows access to others like them (Cortland et al., 2017; Craig & Richeson, 2017) which gives people a safe space to receive support and care. According to Bry et al. (2017), identity disclosure could result in a greater sense of support and belonging through community integration. Additionally, the level

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that one engages in identity disclosure (i.e., ‘outness’ or openness about one’s identity) has been found to change the amount, and impact, of negative and positive outcomes for someone with a stigmatized identity (e.g., LGBTQ+; Bry et al., 2017). As seen in mental health literature, once someone is able to self-label as having a mental illness, they are able to seek out relevant supports that have been shown to have major positive impacts on wellbeing (e.g., Corrigan et al., 2014; Horsfield et al., 2019). Additionally, engaging in high identity openness is related to experiencing higher levels of social support (Chang et al., 2021; Chaudoir & Fisher, 2010; Le Forestier et al., 2022). Weisz et al. (2016) also found that those who were “out” about their sexual orientation had greater well-being outcomes through having social supports. Support, however, was found to only be helpful if the individual with an LGBTQ+ identity engaged in high levels of outness, especially when it came to being ‘out’ to those closest to them (e.g., romantic partners, best friends, etc.). Additionally, having greater openness about one’s identity has been shown to increase an individual’s level of group identification. For example, someone who openly identifies as gay would have increased identification with those in the LGBTQ+ community, specifically other gay community members. This process of identification with in and out group members is a prime example of social identity theory (Tajfel, 1978), self-categorization, and social comparison (Abrams & Hogg, 1988) at work. It is important to note that identity openness may operate differently within the kink community, a certain level of identity secrecy (e.g., telling those in their main inner circles but not disclosing to everyone) has been shown to be a protective factor against discrimination for those with a kink identity or who are involved in a kink community (Hughes & Hammack, 2019; Pohtinen, 2019).

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Identity Factors that Hinder Social Support

While there may be many benefits to being open about one's identity, openness could also impact a person's ability to seek non-identity related support (e.g., friends, family, coworkers, etc.) by way of discrimination. Previous research has shown that greater openness about one's kink related lifestyles and identities (i.e., identity disclosure or openly discussing one's identity), while connected to an increase in social support from other kink-interested individuals, may also result in greater discrimination from out-group members (i.e., non-kink interested friends, family, coworkers, etc.; Bezreh et al., 2012). Discrimination toward a particular group or identity (e.g., mental illness, gender, kink interest, etc.) can often come from those who hold perceptions that are based in stereotypes, misconceptions, or general lack of understanding of said group (i.e., public stigma; Corrigan, 2004; Vogel et al., 2013). Discrimination from non-kink supports, when one discloses their concealable identity, can lead to negative psychological outcomes, such as anxiety, depression, and low self-esteem (Camacho et al., 2020; Quinn & Chaudoir, 2009). Discrimination resulting from stereotypes and misconceptions, often referred to as public stigma (Corrigan, 2004), may cause kink-interested individuals to learn these stigma-based narratives and incorporate them into their self-perceptions as they form their kink identity, resulting in what is termed as *internalized stigma* (Goffman, 1963). Internalized stigma may result in kink-interested individuals avoiding community groups or establishing kink-identities as a means of decreasing their experiences of discrimination from others.

In the 2SLGBTQIA+ community, or for those with mental illness, keeping their identity concealed may limit experiences of rejection from close social supports which would negatively impact well-being (Bry et al., 2017; Horsfield et al., 2019). Researchers have found that the mere

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anticipation of group discrimination can have adverse effects on well-being (e.g., Suppes et al., 2021). Anticipation of discrimination may cause someone to actively conceal their identity as a form of self-preservation. However, research has shown that keeping a stigmatized identity concealed is connected to poor health outcomes (e.g., Suppes et al., 2021), and avoidance of treatment options (e.g., Horsfield et al., 2019). Concealing a stigmatized identity means that one must constantly be engaging in hypervigilance (e.g., disclosure management) and concealment behaviours (e.g., lying, isolation, etc.) – a mental load that heightens stress on the individual. Hughes and Hammack (2019) found that many kink-identifying individuals had to engage in identity compartmentalization (i.e., concealing from those around them and society at large) or isolation (i.e., geographical, political, and internalized stigma) to manage discrimination and distress. The use of disclosure management (i.e., deciding when and with whom to disclose) can be equally exhausting, requiring constant situational and social appraisal to determine level of safety and the potential negative outcomes of disclosure (Bry et al., 2017; Suppes et al., 2021). Concealing a piece of one's identity may protect against the discrimination and ridicule from out-group members, but it also prevents access to in-group supports (Chaudoir & Fisher, 2010), results of which may also apply to the experiences of other stigmatized identities. Currently, there is very little research on how internalized stigma impacts identity formation in kink-interested individuals.

The Current Study

Previous research shows that many kink-practicing individuals access community as a means for emotional support, education, and skill building through engagement in community and experiential learning (Graham et al., 2017; Hughes & Hammack, 2019; Vivid et al., 2020). For kink-interested individuals, accessing community may be an essential protective factor that

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facilitates more positive self-perceptions and greater practice of safety and consent protocols. Accessing community, however, may only be possible through the act acknowledging one's kink interest and forming kink identities. As research into mental illness experiences shows (e.g., Horsfield et al., 2019; Vogel et al., 2013), if someone is unable to form an (kink) identity, or identify with existing (kink) group members, they may not be able to access (kink) community spaces and reap the benefits of this access – past research indicates that community access could act as a protective mechanism for negative mental and physical health outcomes (e.g., Ozbay et al., 2007). The pathways from interest to identity to community, and the mechanisms that facilitate or hinder these relationships, have yet to be investigated within individuals who are at varying stages of identity development, group identification, and behavioural practice.

Much of the previous research has focused on experienced kink practitioners (e.g., Hébert & Weaver, 2015; Vivid et al., 2020) but the current study aimed to validate a measure for assessing kink interests in a broader population of kink interested individuals. Additionally, we used social identity (Tajfel, 1978) and self-categorization theories (Abrams & Hogg, 1988) as a framework for kink identity formation, and informed by previous research focusing on LGBTQ+ identity formation (e.g., Bry et al., 2017), self-labeling with a mental-illness (e.g., Horsfield et al., 2019), and the impacts of having a concealable stigmatized identity (e.g., Camacho et al., 2020), we examined how internalized stigma may impact the development of kink group identification among those with kink-related interests (Weierstall & Giebel., 2017; Leach et al., 2008).

Research Question 1 (RQ1). Does the original 6-factor structure of the Sadomasochistic Checklist replicate when response options are altered to assess interest in kink rather than sexual

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arousal, and when kink-interested individuals are sampled instead of sampling solely from those with an active practice in kink?

Research Question 2 (RQ2). Does internalized stigma impact the relationship between kink interests and kink in-group identification?

H1. We hypothesized that Internalized Stigma would negatively moderate the relationship between kink interests and kink group identification; we predicted that internalized stigma would weaken the relationship between kink interests and group identification.

Chapter 2 Method

Participants

We recruited a total of 564 participants by advertising on several forums on Reddit.com, X (formerly known as Twitter), SAGE Lab website, and through various colleagues in the field. Our sample had an average age of 27.15 ($SD = 8.43$) with a range of 18 to 72 years of age. The present study's sample demographic characteristics can be found in Table 1.

Table 1
Demographic Characteristic of Study Sample

	<i>n</i>	%
Gender		
Woman	294	51.7
Man	216	38
Gender Expansive	52	9.3
Transgender Man	4	.7
Transgender Woman	2	.4
Sexual Identity		
Straight	256	45
Lesbian/Gay	54	9.5
Bisexual	158	27.8
Pansexual	31	5.4
Queer	24	4.2
Multiple Identities	23	4
Flexible/Questioning	11	2
Other Identities	7	1.3

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Race/Ethnicity			
	White	340	59.8
	Biracial/Mixed Race	58	10.2
	East-Asian	67	11.8
	South/South-East Asian	58	8.2
	Black	17	3
	West-Asian	15	2.5
	Indigenous/Native American	6	1.1
Relationship Status			
	Relationship/Married	291	61.2
	Single	151	26.5
	Dating	108	19
	Separated/Other	19	3.4
Relationship Style			
	Monogamy	378	66.4
	Non-Monogamy/Polyamory	81	14.2
	Open-Relationship	32	5.6
	Swinging	11	1.9
	Unsure/Other	67	11.8
Political Affiliation			
	Liberal	300	52.7
	Moderate	119	20.9
	Conservative	55	9.7
	Other	93	16.3
Education			
	Bachelor's/College or University	424	74.5
	Master's/PhD/MD	103	18.1
	Some Highschool/Diploma	32	5.6
Employment			
	Student	256	45
	Full-time	193	33.9
	Part-time/Self-Employed	83	14.6
	Retired/Not Employed	26	6.3
Kink Role-Identities ¹			
	Kinky/Kinkster	230	40.4
	Player/Practitioner	145	25.5
	Community Member	83	14.6
	Submissive/Bottom	286	50.3

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Switch/Vers	226	39.7
Dominant/Top	155	27.2

¹Participants could select as many role-identities they felt described them. Each *N* and percentage reflects the total number of individuals in the entire sample that holds this role-identity type.

Note.

Inclusion Criteria.

Participants were required to be at least 18 years of age, reside in North America, and be able to read English at a grade 12 level. Individuals who self-identified as having some level of interest in at least one of the listed kink-related behaviours (e.g., rough sex, etc.) were eligible to participate in the study. Participants did not need to be practicing these behaviours but needed to find one or more appealing – participants needed to have at least some level of kink-related interest (i.e., some level of interest in behaviours that are related to, or come from, kink) which was determined through an eligibility survey.

Procedures

Participants accessed the Queen’s Qualtrics link through advertisements which asked them to fill out an eligibility survey to determine whether they met eligibility criteria. If they were eligible to participate, they were redirected to the main survey (see Appendix A) where they were asked to consent to participating in the study. Participants then submitted their survey results and were redirected to a short debriefing form. In exchange for their time, participants were asked to provide their email to be entered into a draw where a prize of \$50 was provided once per week for a total number of 20 prize draws.

Chapter 3 Measures

Sadomasochism Checklist

The Sadomasochism Checklist is a 2-dimensional, 48 item measure that assesses prior experience with sadomasochistic behaviour and the associated pleasure gained (Weierstall &

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Giebel, 2017) – this measure was used to assess our independent variable, kink interest.

Participants indicated their level of prior engagement (i.e., not at all, masturbation/fantasy, tried out) and the level of sexual pleasure they gained from the behaviour (i.e., *not at all* to *extremely*) with response scale options of 0 to 4. Both the submission and dominance dimensions (i.e., one factor structures) were found to have good reliability ($\alpha = .96/.84$, respectively for submission/dominance). The scale's developers provided a further 6-factor break down for each of the following BDSM interests and behaviours; domination (e.g., verbal humiliation; $\alpha = .84/.90$), toys (e.g., use of plugs; $\alpha = .80/.74$), soft play (e.g., blind folding; $\alpha = .74/.84$), beatings (e.g., whipping; $\alpha = .78/.92$), breath (e.g., strangling/choking; $\alpha = .80/.78$), and bodily fluids (e.g., urination; $\alpha = .63/.60$) that were generally found to have adequate reliability.

We adapted this measure to assess all possible levels of experience (i.e., *not at all* to *regularly*). To measure interest in kink (i.e., attraction to BDSM behaviours), we used level of appeal to avoid invoking thoughts of sexual arousal but instead promote thoughts of finding the interest appealing in a sexual and/or non-sexual way. The use of the term 'appealing' was chosen to measure interest or preference in a behaviour without a direct connection to behavioural practice or sexual arousal. In addition, the removal of the word 'pleasure' acknowledges that not all kink/BDSM practices or interests are experienced as sexually arousing or involve sexual interactions (Goerlich, 2020).

Paraphilias Scale

The Paraphilias Scale (Seto et al., 2012) was included in the current study as a means of establishing convergent validity for the adapted Sadomasochistic Checklist (see above). The original scale is an 80-item questionnaire measuring level of arousal or repulsion and level of behavioural practice of 14 paraphilic activities (e.g., sadism, masochism, etc.). However, some

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interests and behaviours in this measure are non-consensual and/or illegal (e.g., pedophilia, zoophilia, exhibitionism), which are not consistent with the consensual nature of BDSM/kink. Given that BDSM/kink practices are rooted in negotiation and adequate consent (e.g., Williams et al., 2014), we only utilized only 2 of the 14 paraphilic interest types from this scale (i.e., sadism and masochism) as these 10 items were consistent with those seen in BDSM practice. Participants rated their level of arousal or repulsion on a scale of -3 (*very repulsive*) to $+3$ (*very arousing*) and their level of experience on a scale of 1 (*never*) to 5 (*once a week or more on average*) to all 10 items (Appendix C). Both the sadism ($\alpha = .84$) and masochism ($\alpha = .83$) subscales showed good reliability (Seto et al., 2012) and were also found to have good convergent validity when compared to physiological measures of sexual arousal (Chivers et al., 2014; Seto et al., 2012). Cronbach's alpha value for this scale can be found in Table 2.

In-group Identification

The In-group Identification measure is a 14-item measure that assess two dimensions of in-group identification, group-level self-investment (e.g., *I am glad to be Kink/BDSM interested person*; 10 items) and self-definition (e.g., *I am similar to the average Kink/BDSM interested person*; 4 items; Leach et al., 2008). Leach et al. (2008) consolidated multiple scales (e.g., Luhtanen & Crocker, 1992) that measured various aspects of self-identification and group membership to further investigate a person's identification with a group. The current study used the Leach et al. (2008) scale to measure in-group identification. The self-investment dimension (i.e., solidarity, satisfaction, and centrality) demonstrates the level at which individuals have positive views or feelings of their ingroup, as well as the salience and importance of one's membership of that group. Self-definition (individual self-stereotyping and in-group homogeneity) consists of 4-items and captures the level to which one perceives themselves as

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similar to the prototypical ingroup member. Participants indicated their level of agreement with each statement on a 7-point Likert-type scale (i.e., strongly disagree, disagree, disagree somewhat, neutral, agree somewhat, agree, and strongly agree) – each dimension was totalled separately with high scores indicating greater endorsement of that dimension of in-group identification. A factor analyses, and additional test-retest analyses, were conducted with Cronbach’s alpha values of .80 to .93 for all five components across three in-group identifications (i.e., University student, European, and Dutch) and multiple studies completed by Leach et al. (2008) – the measure shows good validity and reliability. The current study found that the self-investment dimension had good reliability, but the self-definition dimension did not (Table 2); 2 items from the self-definition dimension were not administered, which left the measure with only 12 items. Due to the fact that only 2 of the 4 items from self-definition were administered, a factor analysis for this measure with the current study’s data was not possible.

Internalized Stigma

Crane (2022) adapted the *Personal Feelings About Being a Lesbian* subscale from *The Lesbian Internalized Homophobia Scale* (Szymanski & Chung, 2002) to assess the personal experience of stigma related to kink/BDSM interest or identity. The adapted scale included eight items (e.g., “I hate myself for being attracted to BDSM practices”) that asked participants to rate their level of agreement on a 7-point Likert-type scale (i.e., strongly disagree to strongly agree). Items 2, 4, 5, and 7 were all positive statements, and therefore were reversed scored. All eight items are totalled and high scores on this measure indicated high levels of internalized stigma relating to kink/BDSM. To account for the broader umbrella of kink, we opted to add “kink” (e.g., I hate myself for being attracted to kink/BDSM practices) to all statements that used the term “BDSM”. Crane (2022) found that the adapted scale had acceptable internal reliability with

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a Cronbach's alpha of .79, which was consistent with the current study's findings (Table 2).

Scree plot indicated that 1 and/or 2 factor structure may be warranted, however, the parallel analysis indicated that a 1-factor structure was likely the best suited for the data. After further investigation into both a 2-factor and 1-factor structure, we found that the 2-factor structure was the result of items that, were and were not, reverse scored. As both factor structures showed acceptable fit for the data, we decided on a 1-factor structure as this best fit the theoretical understanding of internalized stigma.

Table 2
Descriptive Statistics and Pearson's R Correlations for Main Variables of Interest

Variable	M	SD	α	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Factor 1 (S)	16.66	6.57	.84	—												
2. Factor 2 (S)	9.12	4.60	.80	.55**	—											
3. Factor 3 (S)	9.99	4.22	.70	.53**	.53**	—										
4. Factor 4 (S)	15.48	4.38	.84	.61**	.50**	.53**	—									
5. Factor 5 (S)	8.55	4.07	.72	.57**	.62**	.50**	.38**	—								
6. Factor 1 (D)	18.78	8.58	.89	.14**	.04	.24*	.02	.06	—							
7. Factor 2 (D)	8.28	3.90	.72	.09	.13*	.27**	-.14**	.32**	.52**	—						
8. Factor 3 (D)	11.70	6.24	.85	.29**	.21**	.24**	.03	.38**	.69**	.59**	—					
9. Factor 4 (D)	12.96	5.17	.87	.09	.25**	.19**	-.12	.25**	.68**	.62**	.68**	—				
10. Stigma	17.55	6.94	.87	-.15**	-.02	-.05	-.14*	.01	-.12	.02	-.15**	-.05	—			
11. Investment	41.18	13.67	.93	.41**	.32**	.28**	.23**	.37**	.25**	.26**	.40**	.30**	-.48**	—		
12. Definition	6.52	2.63	.58	.28**	.22**	.18**	.15**	.22**	.14**	.20**	.25**	.23**	-.24**	.56**	—	
13. Masochism	4.08	6.63	.68	.56**	.57**	.68**	.68**	.37**	.18**	.13*	.17**	.09	-.14**	.25**	.16**	—
14. Sadism	3.24	6.55	.72	.27**	.21**	.24**	.14*	.17**	.77**	.43**	.63**	.61**	-.12*	.30**	.22**	.37**

* $p \leq .003$

** $p < .001$

Note. $N = 564$. A Bonferroni correction indicated the new level of significance to be $p < .003$. Results involving the self-definition measure should be interpreted with caution as 2 of the 4 items in this dimension were not included in data collection. (S) are factors on the Submission Dimension and (D) are factors on the Dominance Dimension of the Sadomasochistic Checklist. Score ranges for the Submission Dimension are, F1 (0 – 24), F2 (0 – 16), F5 (0 – 16), F4 (0 – 16), and F5 (0 – 20). Score ranges for the Dominance Dimension are, F1 (0 – 32), F2 (0 – 20), F3 (0 – 24), and F4 (0 – 16). Internalized Stigma (i.e., stigma) scores range 8 – 56. Self-Investment (i.e., Investment) 10 – 70 and Self-Definition (i.e., Definition) 2 to 14. Sadism and Masochism subscale scores ranged from -15 to 15.

Chapter 4 Results

Analyses

Data analyses were conducted in SPSS v28 and R Studio (RStudio Team, 2015). A series of descriptive statistics were calculated for study variables. Pearson's r correlations with a Bonferroni Correction were also calculated for all major variables (e.g., kink interest, in-group identification, etc.; Table 2). Factor analyses were conducted, and Cronbach's alpha values were reported for the Internalized Stigma measure (Crane, 2020) to ensure the measure's 1-factor structure was consistent with previous studies. Results involving the self-definition measure should be interpreted with caution as 2 of the 4 items in this dimension were not included in data collection due to a= error. For this reason, a confirmatory factor analysis was not possible for self-definition; Cronbach's alpha values still reported for each dimension.

Although the Sadomasochistic Checklist was originally subjected to a principal components analysis with an orthogonal rotation (i.e., varimax; Weierstall & Giebel., 2017), we opted to use the psych package (Revelle, 2024) to run a principal axis factor analysis with an oblique rotation (i.e., oblimin) as we believed this method was better suited to determine the factor structure of the measure given that the factors are highly correlated. We used parallel analyses and scree plots to determine factor structure of each dimension. A Tucker Lewis Index score of $>.90$ and an RMSEA index of $<.05$ was used to determine the fit index. Additionally, items needed to meet the loading criteria of $>.30$ or the item was eliminated. The convergent validity of this measure was established by analyzing the correlations between the factors found in the Sadomasochistic Checklist and two factors taken from the Paraphilias Scale (i.e., sadism and masochism; Seto et al., 2012; Table 2). We conducted four moderated regression analyses to investigate the connection between kink interests, internalized stigma, and our two dimensions of

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in-group identification. All predictor variables were centered around the grand mean to improve interpretability (i.e., a meaningful 0) of the results. We also probed the simple slopes of internalized stigma using the Johnson Neyman technique (i.e., interactions package; Long, 2019) to determine the associations between kink-interests and in-group identification at different levels of internalized stigma.

RQ1: Sadomasochistic Checklist Factor Structure and Validation

Submission Dimension Factor Structure

To determine the factor structure of the Submission Dimension we conducted a parallel analysis which indicated that a 5-factor solution would be best suited for this dimension of the Sadomasochistic checklist. We also investigated a 1, 2, 3, and 4 factor structure because the scree plot indicated these factor solutions may be warranted (Appendix C). We found that these solutions had poor model fit, many cross loadings, and did not fit a theoretical understanding of the items. Therefore, we chose a 5-factor solution to run an exploratory factor analysis with an oblique rotation (i.e., direct oblimin). We found that interfactor correlations ranged from .14 to .54 which indicated that an orthogonal rotation would not be warranted. The 5-factor solution was an acceptable fit for the data (TLI = .91, RMSEA = .057) and had at least 4 items loaded onto each factor. There were 3 items that loaded onto 2 factors, 2 of which loaded more substantially onto one factor over the other. Item 24 (i.e., Being made unconscious by your partner(s), e.g., by using a bag.) loaded somewhat more substantially onto factor 4 (i.e., Soft Play; .39) but made more sense theoretically on factor 3 (i.e., Breath Play) where it had a similar loading (i.e., .35). Item 3 (i.e., Receive rough or hard sexual intercourse with your partner(s)) loaded onto factor 3 (i.e., Breath Play) with a loading of .33 but after further investigation at a theoretical level we determined that this item did not align with this factor, and did not load onto

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any other factor. Therefore, item 3 was eliminated. The final 5-factor structure was made up of Pain/Impact Play (factor 1), Humiliation/Force (factor 2), Breath Play (factor 3), Soft Play (factor 4) and Extreme Play (factor 5). Pain/Impact Play included items that involved interest in having pain inflicted on the respondent and other behaviour interests that involved being hit with objects or hands. The Humiliation/Force factor encompassed items that detailed interest in submission, consensual forcefulness, and being humiliated by a partner. The Breath Play factor included items that described interest in having one's breath controlled by a partner. The Soft Play factor encompassed common sexual interests that have been previously described as 'rough sex' (blindfolding, tying up, etc.; Herbenick et al., 2019; 2021). Finally, Extreme Play included interest items that are generally more niche and have lower prevalence, such as, interest in urination, feces, and confinement. Factor loadings for this dimension can be found in Table 3.

Table 3

*Item Loadings from a Principal Axis Factor Analysis of the Sadomasochistic Checklist:
Submission Dimension*

Sadomasochistic Checklist Item	Factor loadings				
	1	2	3	4	5
Factor 1: Pain/Impact Play					
7. Getting whipped, paddled or flogged by your partner(s)	.73	.08	-.05	.13	.04
2. Being stimulated by your partner with light beatings	.63	.17	.16	.06	-.12
6. Getting clamps, weights, clips or other devices that cause pain used on your body	.62	.01	.01	.06	.30
4. Getting Spanked by your partner(s)	.50	.09	-.02	.33	-.12
5. Being tormented by your partner(s) using wax or branding	.46	.12	.17	-.08	.19
1. Being clawed, pinched or bitten by your partner(s)	.43	-.10	.34	-.02	-.02
Factor 2: Humiliation/Force					

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17. Being humiliated by your partner(s) together with others.	.05	.90	-.01	-.09	.00
18. Being displayed as subordinate to others by your partner(s).	.06	.71	-.04	.09	.04
13. Being verbally humiliated by your partner(s)	.06	.50	.15	.15	.01
16. Being forced by your partner(s) to please them against your will.	-.13	.35	.26	.27	.15
Factor 3: Breath Play					
22. Getting your breath controlled by your partner(s), e.g., by face sitting, smothering, or toys.)	-.05	-.01	.67	.07	.13
23. Being strangled/choked or suffocated by your partner(s).	.18	-.02	.64	.14	-.11
19. Being forced by your partner(s) to swallow their genital secretions.	-.15	.25	.39	.21	.10
24. Being made unconscious by your partner(s), e.g., by using a bag.	.10	.11	.35	.39	-.12
Factor 4: Soft Play					
11. Having the submissive role in bondage and discipline role play.	.02	.09	-.01	.80	-.03
14. Getting tied up by your partner with chains, ropes, belts, etc. for total devotion.	.12	-.07	.04	.77	.05
12. Being blindfolded by your partner(s).	.03	-.11	.10	.64	.04
10. Receiving commands from your partner(s) on how to please them.	-.01	.09	.12	.58	-.07
Factor 5: Extreme Play					
21. Being forced by your partner(s) to ingest feces or vomit.	.00	.02	.11	-.06	.54
8. Having your partner genitals tortured by your partner(s).	.33	.01	-.01	.08	.48
15. Getting placed by your partner(s) into a cage or cellar for confinement of the submissive.	-.01	.31	-.11	.28	.46
20. Having your partner urinate on you.	.02	.14	.21	-.14	.40
9. Getting plugs, or other toys put into your body that cause pain.	.26	.20	.03	.08	.36

Dominance Dimension Factor Structure

To determine the factor structure of the Dominance Dimension we conducted a parallel analysis which indicated that a 6-factor solution would be the best suited structure for this dimension of the Sadomasochistic checklist. We also examined the scree plot which indicated that 1, 2, 3 and 4 factor solutions may also be warranted (Appendix D). When investigating these factor solutions further, we found that all solutions besides the 4-factor solution had poor model fit. We ran a principal axis factor analysis with an oblique rotation (i.e., direct oblimin) for the 6-factor solution. The 6-factor solution was a good fit for the data, however, two factors had only two items loading substantially. Additionally, Item 3 (i.e., Receive rough or hard sexual intercourse with your partner(s)) did not load substantially onto any factor (factor loadings $<.30$). Another issue with the 6-factor structure was that 3 items loaded onto 2 factors, and only one of these items loaded onto one factor more substantially. Given these issues with the 6-factor structure, we also investigated the 4- and 5-factor solutions. The 5-factor solution was an acceptable fit for the data, however, factor 3 had only a single item (spanking your partner) which also cross loaded onto factor 1. Additionally, Item 3 did not load substantially onto any factor and 3 items cross-loaded onto two factors. For these reasons, the 5-factor solution was rejected in favour of the 4-factor solution.

The 4-factor solution showed acceptable model fit. Interfactor correlations ranged from .25 to .57, which indicated that an oblique rotation was optimal. We found that four items cross loaded onto two factors. Three of these items cross loaded substantially more on one factor than another and were more interpretable on these factors. Item 23 (i.e., strangling or suffocating your partner(s)) cross loaded onto both factor 1 and factor 2, but this item was more interpretable on factor 2 where it loaded slightly lower than on factor 1, but still loaded substantially. Our 4-

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factor structure was made up of Rough Sex (factor 1), Extreme Play (factor 2), Pain/Impact Play (factor 3), and Humiliation/Force (factor 4). These dominance factors described the items very similarly to the submission factors, except from the point of view of being the inflictor (dominant) rather than the receiver (submissive). The main difference between the Submission and Dominance dimensions was that there was no Breath Play factor in the Dominance Dimension as these items loaded into Rough Sex and Extreme Play. Factor structure and item loadings can be found in Table 4.

Table 4

*Item Loadings for a Principal Axis Factor Analysis of the Sadomasochistic Checklist:
Dominance Dimension*

Sadomasochistic Checklist Items	Factor loadings			
	1	2	3	4
Factor 1: Rough Sex				
11. Having the dominant role in bondage and discipline role play	.73	-.02	.04	.18
14. Tying up your partner(s) with chains, ropes, belts, etc. for total devotion	.69	.03	.20	-.01
12. Blindfolding your partner(s)	.65	-.01	.15	-.06
10. Giving your partner(s) commands how to please you	.65	-.06	.02	.12
4. Spanking your partner(s)	.46	-.08	.27	.22
22. Controlling your partners' breath e.g., by face sitting, smothering or toys.	.44	.33	.15	-.03
3. Having rough or hard sexual intercourse with your partner(s)	.42	-.08	-.10	.11
2. Stimulating your partner(s) with light beatings	.40	.02	.32	.14
1. Clawing, pinching, or biting your partner(s)	.37	.11	.27	-.18
Factor 2: Extreme Play				
24. Making your partner(s) become unconscious, e.g., by using a bag	-.02	.80	.01	.02
20. Urinating on your partner(s)	.06	.79	-.01	.02
21. Forcing your partner(s) to ingest feces or vomit	-.20	.56	.14	.12

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23. Strangling or suffocating your partner(s)	.51	.43	-.07	.04
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Factor 3: Pain/Impact Play

6. Using clamps, weights, clips, or other devices that cause pain on your partner(s)	.06	-.02	.83	.00
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7. Whipping, paddling, or flogging your partner(s)	.14	-.06	.76	.07
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5. Torment your partner(s) using wax or branding	.08	.16	.69	-.13
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9. Putting plugs or other toys into your partners' bodies that cause pain to them	-.10	.10	.57	.26
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8. Torturing the genitals of your partner(s)	-.03	.05	.57	.20
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Factor 4: Humiliation/Force

18. Display your partner(s) to others as submissive	.12	-.06	.09	.66
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17. Humiliating your partner(s) with other	-.06	.10	.11	.65
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16. Forcing your partner to please you against their will	.22	.10	-.01	.52
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19. Forcing your partner(s) to swallow your genital secretions	.31	.12	-.01	.46
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13. Verbally humiliating your partner(s)	.33	.13	.04	.43
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15. Placing your partner(s) into a cage or cellar for confinement of the submissive	-.04	.20	.26	.40
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Validity and Reliability

The factors of the Submissive Dimension were found to have good convergent validity with the Masochism Subscale with correlation coefficients ranging from .37 to .68 (Table 2). There was good convergent validity between all factors of the Dominance Dimension of the Sadomasochistic Checklist and the Paraphilias Sadism Subscale with correlation coefficients ranging from .43 to .77 (Table 2). We were unable to replicate the original factor structure of Weierstall and Giebel (2017) wherein both dimensions had a 6-factor structure. The original researchers utilized a principal components analysis to identify their scale's structure while the current study opted to utilize a principal axis factor analysis as it was deemed better suited for the scale's purpose. This lack of replication could also be related to the fact that we sampled for

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a broader group of individuals with a focus on recruiting those interested in sadomasochistic behaviours, but not necessarily practicing them. The original study sampled from sadomasochistic communities and other kink-specific recruitment platforms. This may mean that the original factor structure is only relevant for a kink/BDSM experienced sample and does not work reliably for those with more general interest in kink/BDSM-related behaviours. Regardless of the factor structure found in the current study, all submission factors showed good or acceptable reliability with Cronbach's alpha ranging from .70 to .84. The dominance factors also showed good or acceptable reliability with an alpha range of .72 to .89 (Table 2).

RQ2: Kink/BDSM Interests, Internalized Stigma, and Ingroup Identification*Self-Investment*

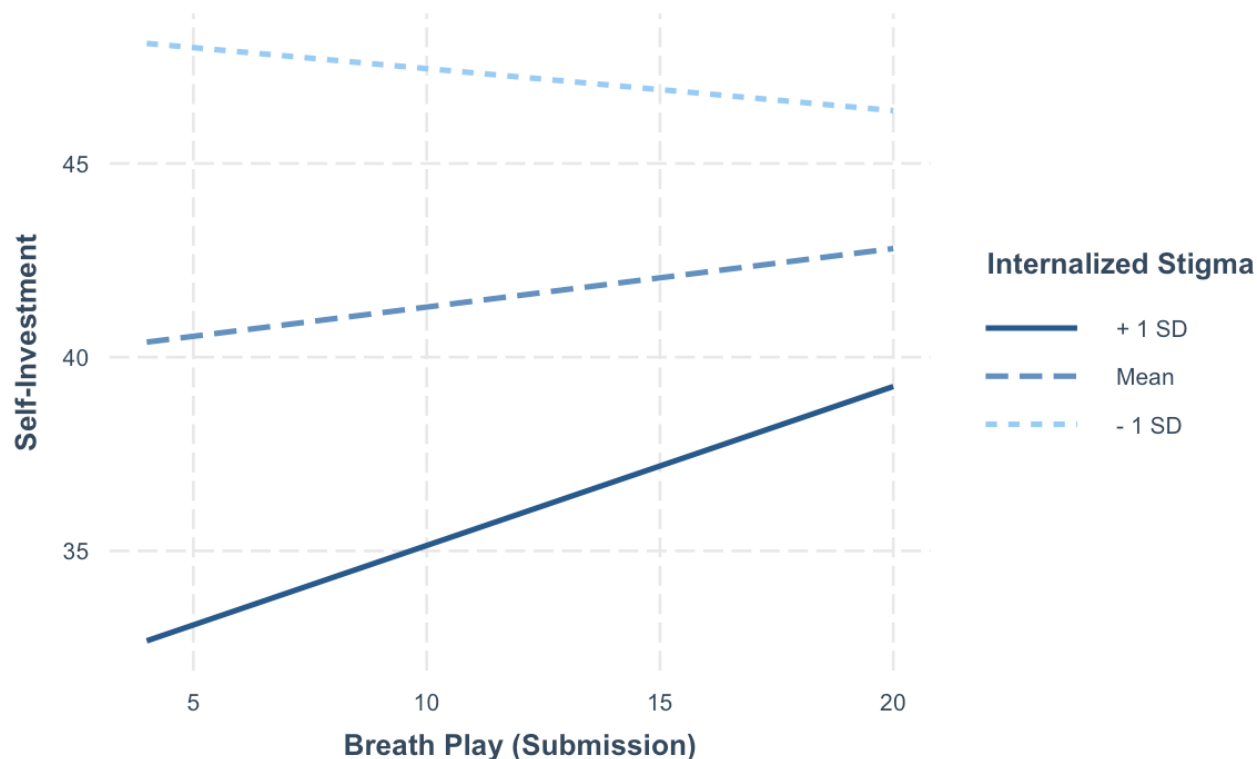
Submission. We conducted a moderated regression to investigate the impact of internalized stigma on the relationship between submission-based kink/BDSM interests and ingroup self-investment (Table 5). The Submission model, which included all 5 submission factors, internalized stigma, and self-investment, was statistically significant, $F(11, 550) = 36.4$, $p < .001$, $R^2 = .41$. We found that internalized stigma moderated the relationship between Breath Play interest and self-investment. To probe this two-way interaction, we used the Johnson-Neyman technique, and the pick-a-point approach to examine the simple slopes of Breath Play 1 SD above and below and at the centred internalized stigma mean (Figure 1). At higher internalized stigma (1 SD above the mean), greater Breath Play interest was related to higher self-investment, $b = .41$, $t(550) = 2.21$, $p = .03$. Based on the Johnson-Neyman results (Figure 1), the simple Breath Play interest slopes were statistically significant at internalized stigma scores of ≥ 21.86 (e.g., uncentered score is provided to increase interpretability). Breath Play was not significantly related to self-investment at lower, $b = -.11$, $t(550) = -.57$, $p = .57$, and mean

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internalized stigma, $b = .15$, $t(550) = 1.08$, $p = .28$. Indeed, the relationship was not significant at internalized stigma scores ≤ 17.55 (e.g., uncentered score is provided to increase interpretability).

Figure 1

Simple Slopes of the Conditional Effects of Breath Play (Submission) Interest on Self-Investment



Note. The figure was created using uncentered values to improve interpretability.

Additionally, we found that effect of Soft Play on self-investment was moderated by internalized stigma (Figure 2). However, at lower and moderate internalized stigma scores (or all scores ≤ 20.19), greater Soft Play interest was significantly related to lower self-investment, $b < -.42$, $ts(550) < -3.03$, $ps < .001$. At higher internalized stigma, Soft Play interest was not significantly related to self-investment, $b = -.07$, $t(550) = -.37$, $p = .72$, and at all internalized stigma scores ≥ 24.49 . Internalized stigma did not moderate the effects of Pain/Impact Play and

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Extreme Play, but both significantly and positively related to self-investment at average levels of internalized stigma.

Table 5

Moderated Regression Results of Associations Between Submission Kink/BDSM Interests, Internalized Stigma, and Ingroup Self-Investment

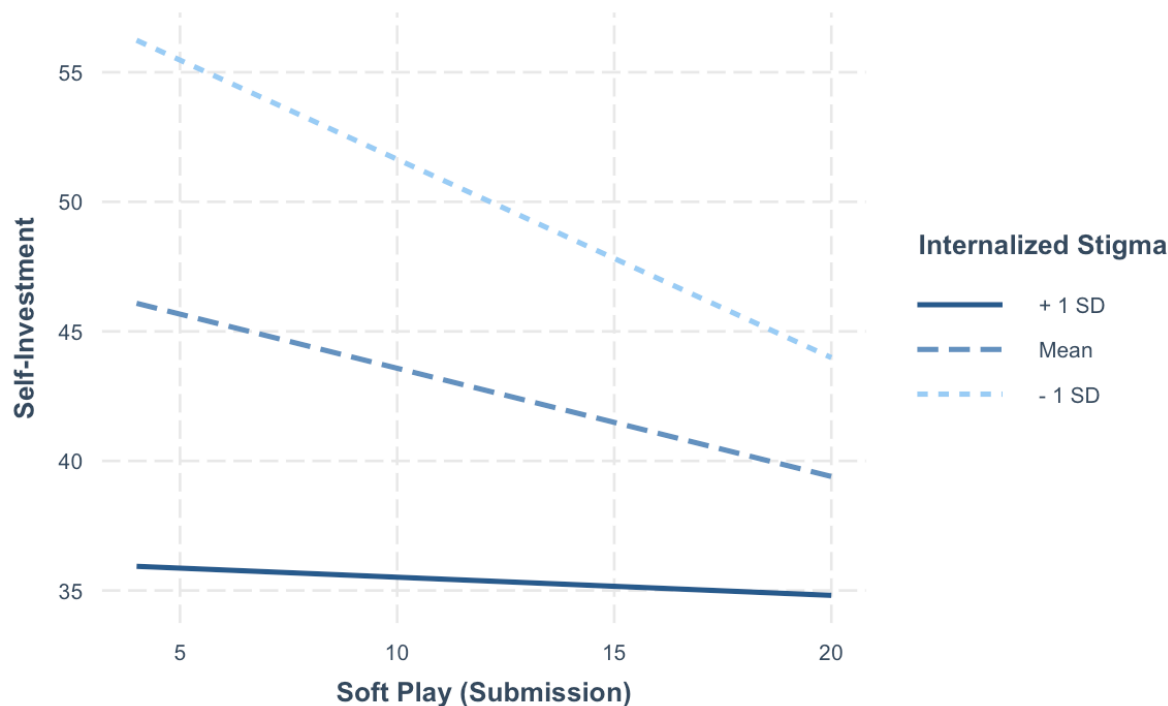
Variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI
(Intercept)	41.29	.45	91.17	<.001	[40.41, 42.18]
Pain/Impact Play	.45	.10	4.44	<.001	[.25, .65]
Humiliation/Force	.25	.14	1.89	.06	[-.01, .53]
Breath Play	.15	.14	1.08	.28	[-.12, .43]
Soft Play	-.42	.14	-3.03	.003	[-.68, -.15]
Extreme Play	.77	.15	5.03	<.001	[.47, 1.07]
Internalized Stigma	-.89	.07	-13.30	<.001	[-1.02, -.76]
Pain/Impact x Stigma	-.01	.01	-.98	.33	[-.05, .01]
Humiliation x Stigma	-.005	.02	-.29	.78	[-.04, .03]
Breath Play x Stigma	.04	.02	2.07	.04	[.002, .07]
Soft Play x Stigma	.05	.02	2.49	.01	[.01, .09]
Extreme Play x Stigma	-.03	.02	-1.43	.15	[-.06, .01]

Note. Stigma = Internalized Stigma

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Figure 2

Simple Slopes of the Conditional Effects of Soft Play (Submission) Interest on Self-Investment



Note. This figure was created using uncentered values to improve interpretability.

Dominance. We conducted a moderated regression for the Dominance model, which included all 4 dominance factors, internalized stigma, and self-investment; the model was statistically significant, $F(9, 552) = 34.21, p < .001, R^2 = .35$. (See Table 6). We found no significant two-way interactions for any of our dominance dimension interest types and internalized stigma. We did find simple effects of Rough Sex, Extreme Play, Pain/Impact Play, and Humiliation/Force on self-investment when internalized stigma was average. These kink/BDSM interests did not differ at different levels of internalized stigma.

Table 6

Moderated Regression Results of Associations Between Dominance Kink/BDSM Interests, Internalized Stigma, and Ingroup Self-Investment

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Variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI
(Intercept)	41.07	.47	86.60	<.001	[40.14, 42]
Rough Sex	-.18	.07	-2.51	.01	[-.32, -.04]
Extreme Play	.49	.22	2.22	.03	[.06, .92]
Pain/Impact Play	.66	.13	5.08	<.001	[.40, .91]
Humiliation/Force	.25	.12	2.10	.04	[.02, .48]
Internalized Stigma	-.89	.07	-12.80	<.001	[-1.03, -.75]
Rough Sex x Stigma	.01	.01	1.37	.17	[-.006, .03]
Extreme Play x Stigma	.04	.03	1.47	.14	[-.01, .09]
Pain/Impact Play x Stigma	-.02	.02	-1.01	.31	[-.05, .02]
Humiliation/Force x Stigma	-.03	.02	-1.57	.12	[-.06, .006]

Note. Stigma = Internalized Stigma

Self-Definition

Submission. We conducted a moderated regression for the submission interest types, internalized stigma, and self-definition. The Submission model was statistically significant, $F(11, 550) = 7.75, p < .001, R^2 = .12$. We found no significant two-way interactions in this model.

Pain/Impact Play was the only kink/BDSM interest that showed a simple effect on self-definition when internalized stigma was average. Results of these analyses can be found in Table 7.

Table 7

Moderated Regression Results of Associations Between Submission Interests, Internalized Stigma, and Ingroup Self-Definition

Variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI
(Intercept)	6.53	.11	61.33	<.001	[6.32, 6.74]
Pain/Impact Play	.07	.02	2.94	.003	[.02, .12]

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Humiliation/Force	.06	.03	1.79	.07	[-.006, .12]
Breath Play	.009	.03	.29	.77	[-.05, .07]
Soft Play	-.05	.03	-1.46	.14	[-.11, .02]
Extreme Play	.05	.04	1.39	.17	[-.02, .12]
Internalized Stigma	-.09	.02	-5.55	<.001	[.001, .12]
Pain/Impact x Stigma	.004	.003	1.10	.27	[-.003, .01]
Humiliation x Stigma	.002	.005	.46	.64	[-.007, .01]
Breath Play x Stigma	.004	.004	.98	.33	[-.06, .01]
Soft Play x Stigma	-.005	.005	-1.20	.23	[-.01, .004]
Extreme Play x Stigma	-.003	.004	-.77	.44	[-.01, .005]

Note. Stigma = Internalized Stigma

Dominance. We conducted a moderated regressions for all 4 dominance interest types, internalized stigma, and self-definition. The Dominance model was statistically significant, $F(9, 552) = 9.60, p < .001, R^2 = .12$ (See Table 8). We found that internalized stigma moderated the relationship between Extreme Play interest and self-definition. To probe this two-way interaction, we used the Johnson-Neyman technique (Figure 3), and the pick-a-point approach to examine the simple slopes of Extreme Play 1 SD above and below and at the centred internalized stigma mean. At higher internalized stigma (1 SD above the mean), greater Extreme Play interest was related to higher self-investment, $b = .16, t(550) = 2.59, p = .01$. Based on the Johnson-Neyman results, the simple Extreme Play interest slopes were statistically significant at internalized stigma scores of ≥ 19.66 (e.g., uncentered score is provided to increase interpretability). Extreme Play was not significantly related to self-investment at lower, $b = -.02, t(550) = -.26, p = .79$, and mean internalized stigma, $b = .07, t(550) = 1.45, p = .15$. The

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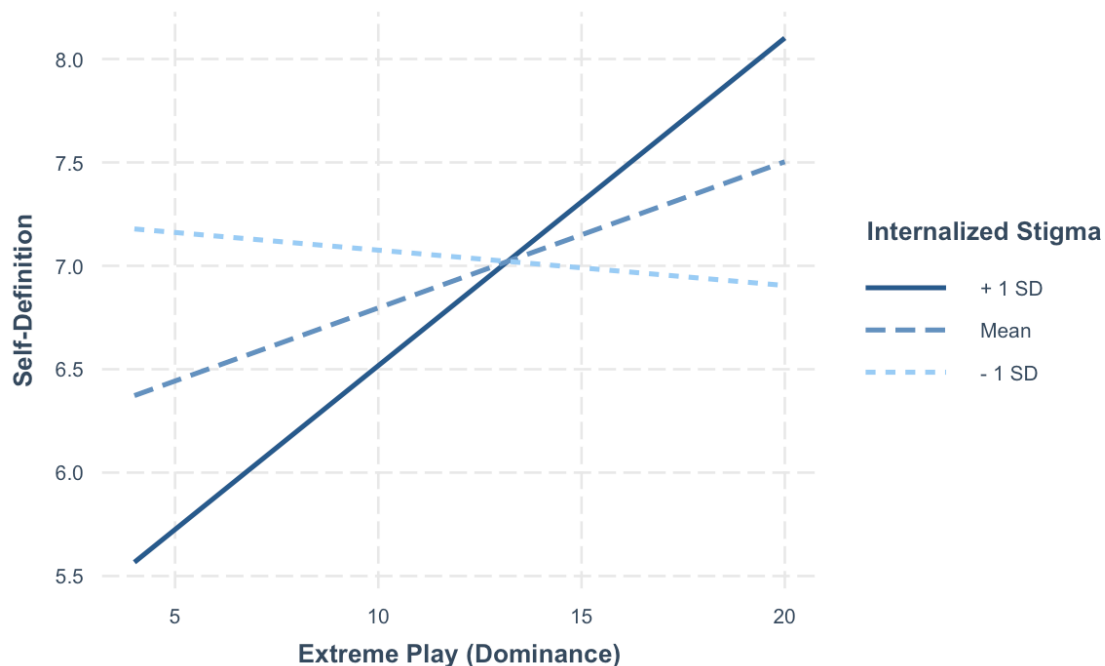
relationship was not significant at internalized stigma scores ≤ 17.56 (e.g., uncentered score is provided to increase interpretability).

Table 8

Moderated Regression Results of Associations Between Dominance Interests, Internalized Stigma, and Ingroup Self-Definition

Variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI
(Intercept)	6.51	.11	61.58	<.001	[6.30, 6.72]
Rough Sex	-.04	.02	-2.61	.01	[-.07, -.01]
Extreme Play	.07	.05	1.45	.15	[-.03, .17]
Pain/Impact Play	.06	.03	2.19	.03	[.007, .12]
Humiliation/Force	.07	.03	2.78	.006	[.02, .12]
Internalized Stigma	-.09	.02	-5.88	<.001	[-.12, -.06]
Rough Sex x Stigma	.002	.002	.96	.34	[-.002, .007]
Extreme Play x Stigma	.01	.006	2.19	.03	[.001, .02]
Pain/Impact Play x Stigma	-.001	.004	-.34	.73	[-.009, .006]
Humiliation/Force x Stigma	-.005	.004	-1.40	.16	[-.01, .002]

Note. Stigma = Internalized Stigma

Figure 3*Simple Slopes of the Conditional Effects of Extreme Play Interest on Self-Definition*

Note. This figure was created using uncentered values to improve interpretability.

Chapter 5 Discussion

Many researchers have found that ‘rough sex’ behaviours are growing increasingly more common amongst young adults, but this is not necessarily the same for safety information (e.g., Herbenick et al., 2021; 2023). Behaviours like choking, spanking, slapping, and tying someone up have traditionally been associated with kink/BDSM practice, but in recent years, behaviours like these have been removed from this context and made their way in the mainstream sexual practice. Many people may not want to associate themselves with the kink/BDSM label (Herbenick et al., 2021) given the history of discrimination and stigma this group has experienced (Crane, 2022; Hughes & Hammack, 2019; Martin, 2013). Engaging in these acts under the label of ‘rough sex’ rather than kink/BDSM may help us understand why many researchers are uncovering an array of negative outcomes (e.g., sexual assault, depression,

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physical or emotional injury) in those who engage in these behaviours as a sexual norm without adequate education on safety and consent (Herbenick et al., 2019; 2021; 2023; Oslon, 2012).

For people who practice kink/BDSM, the kink community plays a major role in education around these behaviours (Hughes & Hammack, 2019; Pohtinen, 2019). With the use of experiential learning one can develop skills and understand safety measures and consent needed to engage in these acts (Graham et al., 2016; Zambelli, 2017). However, accessing community may only be possible through the act of acknowledging one's kink interest, forming kink identities, and understanding the impact that stigma may have on this acknowledgement. Using social identity (Tajfel, 1978) and self-categorization theories (Abrams & Hogg, 1988) the current study investigated the relationship between kink/BDSM interests, and kink/BDSM self-investment and self-definition, and the impact that internalized stigma has on this relationship. To investigate this relationship, we recruited individuals with interest in behaviours traditionally categorized as kink/BDSM, and measured their kink/BDSM internalized stigma to understand how different kink/BDSM interests are related to two dimensions of in-group identification – self-investment and self-definition – and how internalized stigma may moderate these relationships. Our results indicated that only some kink/BDSM interests were moderated by internalized stigma as they relate to in-group identification.

Kink/BDSM Interest

To define and measure kink/BDSM interests, we utilized a previously validated scale (Weierstall & Giebel, 2017) and identified 5 Submission factors (Pain/Impact Play, Breath Play, Humiliation/Force, Soft Play, and Extreme Play) and 4 Dominance factors (Rough Sex, Extreme Play, Pain/Impact Play, and Humiliation/Force), covering a wide range of kink/BDSM interests. We did not replicate the original factor structure of Weierstall and Giebel (2017) wherein both

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dimensions (submission and dominance) had a 6-factor structure, however, our factor structure showed good fit for our sample and included factors that were relevant to our research questions. Specifically, The Breath Play and Soft Play factors were a good representation of what Herbenick et al. (2021; 2023) have defined as ‘rough sex’ because they encompassed behaviours like choking, strangulation, blindfolding, and tying someone up. This allowed us to investigate interest in rough sex behaviours, and other BDSM-related interests. Last, our measure showed good convergent validity with an established measure of interests in Sadism and Masochism – all 5-factors on the Submission dimension were highly correlated with the Masochism subscale and all 4-factors on the Dominance dimension were highly correlated with the Sadism subscales.

In-group Identification

In-group identification captures one’s self-identification with a particular group and perceived group membership. Using our 5 submission and 4 dominance factors to represent a broad range of kink/BDSM interests, we examined the relationship between these interests and two factors associated with ingroup identification, self-investment and self-definition. Further, we examined the role of internalized stigma in moderating the relationship between interests and in-group identification. Below we discuss our findings for each of the factors utilized to assess two facets of in-group identification. This measure was used because social identity theory proposes that people form pieces of their identity through the social groups that they identify with (Tajfel, 1978) and social identity is based on a group’s norms and attributes, which influence the behaviour and emotions of those who identify with the group (Tajfel, 1978 via Scheepers & Ellemers, 2019). In-group identification allowed us to assess participants’ social identity without asking them to provide an explicit identity label.

Self-investment

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Self-investment measures the positive views or feelings of ingroup members, as well as the salience and importance of one's membership of that group. We investigated the relationship between kink/BDSM interests and self-investment, and the role of internalized stigma in this relationship. Using self-investment as a measure of in-group identification allowed us to investigate the extent to which people have positive views or feelings of kink/BDSM group members, as well as the salience and importance of one's membership of that group. Assessing self-investment with in-group allows us to use what social identity theory (Tajfel, 1978) tells us about how people form identity, to better understand the experiences of those with various kink/BDSM interests.

When we investigated the impact of internalized stigma on the relationship between the 5 submission interests and self-investment, we found that internalized stigma moderated the relationship between Breath Play and Soft Play interests and self-investment. The fact that the strength of these relationships were moderated by internalized stigma was quite interesting because Soft play behaviours, and some Breath play behaviours, were ones that could often be considered mainstream in sexual practice (Herbenick et al., 2021; 2023). When we investigated the impact of internalized stigma on Breath Play further, we found that at higher internalized stigma, higher Breath Play interest related to higher self-investment. Higher internalized stigma strengthened the relationship between higher Breath Play interest and higher self-investment. This finding is quite surprising because it may suggest that experiencing higher internalized stigma impacts one's interest as it relates to their self-identification and that there may be a threshold of internalized stigma one must experience in order to encounter this relationship. This threshold may be that once someone reaches higher than average internalized stigma, their interest and self-identification is strengthened. Our findings may be related to the idea that

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experience of stigma may promote seeking out, or identifying with, others like you to receive support or feel less alone (e.g., Cortland et al., 2017; Craig & Richeson, 2017). The current study, however, did not measure whether internalized stigma facilitates higher self-investment or participant motivations for higher self-investment. Future research should consider looking into internalized stigma as a possible factor that may promote ingroup identification and accessing identity related communities.

The impact of internalized stigma on the relationship between Soft Play and self-investment was different than Breath Play in that, at moderate to lower internalized stigma, greater Soft Play interest was related to lower self-investment. Unlike Breath Play, however, higher internalized stigma did not impact the relationship between Soft Play interest and self-investment. The fact that moderate to lower internalized stigma strengthens the negative relationship between higher interest in common rough sex behaviours (i.e., Soft Play) and lower self-investment may indicate that lower levels of internalized stigma are needed to negatively impact this relationship. While the current study's findings shed light on the interesting impact of internalized stigma, we do not have further data to explain why higher internalized stigma did not impact the relationship between higher Soft Play interest and lower self-investment as well. We do, however, speculate that this outcome may be related to the idea that stigma could be experienced differently by those with an unestablished identity. Future researchers should consider looking at this relationship to better understand the impact of stigma. It is clear from our results that internalized stigma does impact the relationship between submission kink/BDSM interests and self-investment but only for some submission kink/BDSM interests, namely Breath Play and Soft Play interests.

Self-Definition

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Self-definition encompasses the degree to which someone defines their identity as aligned with a particular community. When looking at self-definition, we found that internalized stigma moderated the relationship between Extreme Play (Dominance) and self-definition. We found that higher internalized stigma impacted the relationship between higher Extreme Play interest and greater self-definition. This finding was similar to our previous finding for the impact of internalized stigma on Breath Play (Submission) and self-investment. These behaviours of interest encompassed in Extreme Play are far less common than those found in Rough Sex which would likely mean that they are practiced by far more experienced kink/BDSM practitioners, as found in previous research (Holvoet et al., 2017). Additionally, these experienced individuals are probably more likely to already have a kink/BDSM identity and/or be involved in kink communities. While the current study did not investigate these additional factors, future researchers should consider factoring in these additional variables as they may help highlight differences in self-definition.

As previously mentioned, future researchers should also consider our findings when attempting to investigate internalized stigma, as experiencing higher internalized stigma may be related to motivations to seek out like minded individuals to feel less alone or abnormal (e.g., Cortland et al., 2017; Craig & Richeson, 2017). Additionally, fact that very few relationships were moderated by internalized stigma were found may be related to the fact that only 2 (or 4) items were administered for the self-definition dimension of the in-group identification measure. It is possible that these two items were not successful in capturing the relationships between kink interest, internalized stigma, and self-definition. While our results give some compelling insight into the impact of internalized stigma on the relationship between

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kink/BDSM interests and ingroup identification there are many limitations of this study and future directions to consider.

Limitations

The area of kink/BDSM is still a relatively new area of study in comparison to other areas of sexuality and psychology; many questions have yet to be answered. While we have contributed to the growing body of research by investigating the impact of internalized stigma on the relationship between kink/BDSM interests and group identification, the current study has several limitations relating to the sample, our measure of kink/BDSM interests, and a cross-sectional design. First, while online sampling provides researchers with access to a broader population, our sample is still not representative of the broader population. Additionally, because we focused on those with interest in kink/BDSM behaviours but not necessarily a formed identity, we may not be representing the variability of BDSM/kink interest of the general population with our sample. Additionally, sex research recruitment is inherently biased because those who are not comfortable speaking to their sexuality will be less likely to participate in related studies. This biased sampling could mean that we were unable to capture the experiences of those individuals who are interested in these kink/BDSM behaviours, but identify with kink/BDSM the least, and have the least amount of safety information available to them due to their desire not to discuss these interests. It is difficult to know what participants are experiencing through this online survey as we are only able to capture a few factors that we believe are related. Research into this area is still relatively new and may warrant further investigation with the use of in-depth interviews to allow researchers to capture further detail on participant experiences.

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We used the Sadosochistic checklist to generate BDSM/kink interest types but were unable to replicate the original factor structure by Weierstall and Giebel (2017). Our lack of replication is likely related to the fact that we sampled for a broader group of individuals with interest in kink/BDSM type behaviours, who were not necessarily practicing them. We also removed mention of kink/BDSM as a label to attract a broader sample of those interested in relevant behaviours, but who may not associate themselves with this label. In contrast, the original study sampled from sadosochistic communities and other kink-specific recruitment platforms. This may mean that the original 6-factor structure may only be relevant for a kink/BDSM experienced and identifying sample and does not reliably apply to a more general kink/BDSM interest-based sample. Additionally, the chosen factor analysis methods of the original researchers may not have properly represented the data given that their factors were highly correlated and required appropriate analyses that could account for this fact.

Our study was a cross-sectional design which did not allow us to make any cause and effect claims about internalized stigma. Our cross-sectional design also means that we cannot be sure of the directionality of the relationships we are interested in and can only theorize the direction of these relationships based off the findings of previous research. Also, only two items (of four) were collected for the self-definition dimension of the ingroup identity measure and, due to this error, the self-definition results may not should be interpreted with caution. Furthermore, scope of this project does not allow us to further investigate gender, sexuality, identity labels or conduct additional profile-based analyses on participant interests and potential differences in internalized stigma and identification across interests. Given these limitations, there are many future directions to consider.

Future Directions

While the current study sheds light on a broader sample of kink/BDSM-interested individuals, future work should also investigate a more diverse range of kink/BDSM identity and behavioural engagement. For example, the current literature on kink and well-being is weighted toward people who self-identify as members of the kink community, or label their behaviours as “kink”, because researchers use kink identities (e.g., dom/sub) or kink terminologies (e.g., BDSM) to recruit participants. Focusing on those with well-established role-identities, or individuals who self-identify as practitioners, allows researchers to primarily reach those with a mean of 10 to 20 years of experience with BDSM (i.e., ascertainment bias; e.g., Vivid et al., 2020; Walker & Kuperberg, 2022). These samples reflect people with high levels of behavioural engagement, self-identification, and community involvement. Differences in behaviour, identity, and involvement with kink community could impact research outcomes as findings will not include the variability in internalized stigma, distress, education, skill, and wellbeing for a variety kink-orientated individuals (i.e., kink interest) and could potentially miss key risk factors within these unsampled groups.

Future researchers should also consider further investigating the impact of having communities and accessible safety information for those with different levels of kink/BDSM interest and identity. Previous research has indicated that having a safe space to explore interests and aspects of one’s identity may be an essential step in interest and identity acceptance (Hughes & Hammack, 2019). Researchers often discuss themes of freedom to explore, authenticity of self, and open self-expression as positive benefits of having social supports, and community, related to kink and BDSM interest (e.g., Hughes & Hammack, 2019; Vivid et al., 2020). Accessing relevant communities allows new kink practitioners to cultivate connections with like-

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mindful individuals which, in turn, lessen their feelings of loneliness and increase their self-acceptance and authenticity (Hughes & Hammack, 2019; Pohtinen, 2019; Vivid et al., 2020) effectively combating the impacts of stigma. Our data indicated that, in some circumstances, internalizing stigma might promote seeking out others like you as a means of receiving support or feel less alone (Cortland et al., 2017; Craig & Richeson, 2017). We did not, however, directly measure one's involvement with related social supports or communities which means we cannot know if seeking like-minded social support is a motivation related to internalized stigma.

It is also possible that the types of stigma-based perceptions one holds are different for those who are still in the process of forming an identity and exploring their interests versus those for experienced practitioners with established role-identities. We would speculate that those who are still in the process of identity formation and interest exploration would likely hold perceptions in line with public stigma (i.e., narratives of a group based in misconceptions and stereotypes often held by out-group members; Corrigan, 2004) because they may not label themselves as a kink/BDSM practitioner. Those who are established kink practitioners, however, may experience self-stigma (i.e., internalized stigma), as seen in previous mental health research (Vogel et al., 2013) because they have learned the public stigma narratives about their identity and may have applied them to their self-perceptions. Interestingly, mental health research would say that the only difference between these types of stigmas may be that public stigma remains external from one's self-perceptions while one does not hold the stigmatized identity (i.e., outgroup) but can become internalized as self-stigma if one holds the stigmatized identity (i.e., ingroup). Future researchers should consider using previous mental health research as a framework for understanding the impact of stigma (both before and after internalization) on identity formation. Additionally, researchers should directly assess the motivations, and the

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barriers for seeking social support with a particular focus on stigma, while also including other factors that may influence social support seeking, such as, identity concealment, distress, and need for belonging.

Conclusions

The current study investigated the role of internalized stigma in the relationship between kink/BDSM interests and in-group identification to better understand how stigma may impact one's development of kink/BDSM identity when interested in kink/BDSM. Our results showed that scales assessing kink/BDSM interest may not work the same way for kink/BDSM populations as they do for a broader interest-based population. We found that for those interested in more common, less extreme behaviours, such as, blindfolding, tying up, etc., internalized stigma seemed to have a negative impact on one's positive feelings toward in-group members, and salience and importance of identification with group members. In contrast, for those with interest in choking, strangulation, etc. we saw that internalized stigma may have a positive impact on one's investment with other in-group members. These results tell us that the impact of internalized stigma on one's identification with in-group kink community members may depend on the type of kink/BDSM interests one holds. Future researchers should consider further investigating the impact of internalized stigma on interest and identity, while also investigating other factors that may impact this relationship. It is also imperative that we attempt to understand how all these factors impact pathways to community and essential safety information.

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Appendix A

Ethics Approval



Queen's University General Research Ethics Board (GREB)

GREB Initial Ethics Clearance

January 29, 2024

Dr. Chivers
Department of Psychology
Queen's University

TRAQ #: 6040310

Study Title: "Factors that impact in-group identification for individuals with similar sexual and non-sexual interests"

Date Ethics Clearance Issued: January 29, 2024

Ethics Clearance Expiry Date: January 29, 2025

Dear Dr. Chivers:

The General Research Ethics Board (GREB), by means of a delegated board review, has cleared your proposal entitled "Factors that impact in-group identification for individuals with similar sexual and non-sexual interests" for ethical compliance with the Tri-Council Guidelines (TCPS 2) and Queen's ethics policies. In accordance with the Tri-Council Guidelines (Article 6.14) and Standard Operating Procedures (405), your project has been cleared for one year.

Renewals: An annual renewal event form or a study closure event form must be submitted annually as per the TCPS 2 Article 6.14. As a courtesy, the Office of Research Ethics Compliance may send reminders 30 days in advance of the ethics clearance expiry date. All lapses in ethics clearance will be documented on the annual renewal clearance letter. A Suspension letter may be issued for lapses in ethics clearances, with subsequent termination and closure of the ethics file for lapses greater than 10 business days.

Completion/Termination: The GREB must be notified of the completion or termination of this study through the submission of a study closure event form in TRAQ. This should be submitted at the time of completion; there is no need to wait until the annual renewal due date.

Amendments: No deviation from, or changes to the protocol, informed consent form and conduct of study should be initiated without prior written clearance or an appropriate amendment event from the GREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the study. For example, you must report changes to the level of risk, applicant characteristics, and implementation of new procedures. To submit an amendment form, access the application by at <http://www.queensu.ca/traq/signon.html>; click on "Events;" under "Create New Event" click on "General Research Ethics Board Request for the Amendment of Approved Studies." Once submitted, these changes will automatically be sent to the Ethics Coordinator, GREB, at University Research Services for further review and clearance by GREB or the Chair, GREB.

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Adverse Events: You are reminded of your obligation to advise the GREB of any adverse event(s) that occur during this one-year period (access this form at <http://www.queensu.ca/traq/signon.html>; click on "Events;" under "Create New Event" click on "General Research Ethics Board Adverse Event Form"). An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Sincerely,



Chair, General Research Ethics Board (GREB)
Associate Professor and Distinguished Faculty Fellow of Marketing
Master of Digital Product Management
Smith School of Business
Queen's University
chair.GREB@queensu.ca

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become unconscious, e.g., by using a bag										
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Note. Participants are given the following prompt: In the following you find a list of different behavioural preferences. Please indicate for every item 1) the level of experience you have with the behaviour 2) how appealing the behaviour is to you.

Table B2

Paraphilias Scale

	Very Repulsive (-3)	Somewhat Repulsive (-2)	Mildly Repulsive (-1)	Indifferent (0)	Mildly Arousing (+1)	Somewhat Arousing (+2)	Very Arousing (+3)
You are being spanked, beaten, or whipped by someone							
You are controlling or dominating someone							
You are tying or handcuffing someone							
You are spanking, beating, or whipping someone							
You are verbally humiliating someone							
You are having your breathing restricted during sexual activity							
You are restricting someone's breathing during sexual activity							
You are having someone verbally humiliate you							
You are being controlled or dominated							

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You are being tied or handcuffed							
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Note. Participants are given the following prompt: Please rate how sexually arousing or sexually repulsive you currently find each of the following activities, whether you have tried it or not, using the scale shown below.

Table B3*In-group Identification*

	Strongly disagree (1)	Disagree (2)	Disagree somewhat (3)	Neutral (4)	Agree Somewhat (5)	Agree (6)	Strongly Agree (7)
I feel a bond with Kink/BDSM interested people (SI)							
I feel solidarity with Kink/BDSM interested people (SI)							
I feel committed to Kink/BDSM interested community (SI)							
I am glad to be a Kink/BDSM interested person (SI)							
I think that Kink/BDSM interested people have a lot to be proud of (SI)							
It is pleasant to be a Kink/BDSM oriented person (SI)							
Being a Kink/BDSM oriented person gives me a good feeling (SI)							
I often think about the fact that I am a Kink/BDSM oriented person (SI)							
The fact that I am Kink/BDSM oriented person is an important part of my identity. (SI)							
Being a Kink/BDSM oriented individual is							

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an important part of how I see myself. (SI)							
I have a lot in common with the average Kink/BDSM oriented person (SD)							
Kink/BDSM oriented people are very similar to each other. (SD)							

Table B4

Internalized Stigma

	Strongly disagree (1)	Disagree (2)	Disagree somewhat (3)	Agree Somewhat (5)	Agree (6)	Strongly Agree (7)
I hate myself for being interested in kink/BDSM-related practices						
I am proud to be interested in kink/BDSM-related behaviours						
I feel bad for acting on my kink/BDSM-related interest						
As someone interested in kink/BDSM-related behaviours, I am loveable and deserving of respect						
I feel comfortable being interested in kink/BDSM						
If I could change my sexuality and not have interest in kink/BDSM, I would						
I don't feel disappointment in myself for being interested in kink/BDSM						
Being interested in kink/BDSM make my future look bleak and hopeless.						

Note. Participants are given the following prompt: Below are some statements with which you may or may not agree. Using the key listed below, rate the responses that most closely reflects your feelings about each statement with regard to your kink/BDSM interest.

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Appendix C

Demographic Questions

1. How old are you (round) in years?
2. What is your gender? _____
3. What is your racial/ethnic identity? _____
4. What is your sexual orientation? _____
5. What is your relationship status?
 - Single
 - Dating
 - In a relationship/Partnered
 - Married/Common Law
 - Separated/Divorced
 - Other (please specify) _____
6. What is your relationship style of practice?
 - Polyamory
 - Open relationship
 - Polyfidelity
 - Ethical non-monogamy/consensual non-monogamy
 - Swinging
 - Monogamy
 - Not sure, I'm still exploring
 - If none of these terms apply, how would you describe yourself? _____
7. What is your political affiliation?

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- Conservative
- Liberal
- Moderate
- Other (please specify) _____

8. What religion do you belong to or identify yourself most with?

- _____

9. What is your level of education?

- Some high school
- High school diploma or equivalent
- Some college or university
- College, technical school, or equivalent degree
- Bachelor's degree
- Master's degree
- Doctoral degree
- Medical degree
- Other (please specify): _____

10. What is your employment status?

- Self-employed
- Part-time employment
- Full-time employment
- Student (year of study) _____
- Retired
- Not Employed

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11. Are you interested in kink/BDSM-related behaviours or practices?

- Yes
- No
- Undecided, I'm still exploring.
- Unsure

12. Do you practice kink/BDSM-related behaviours and activities?

- I don't practice them, even in private
- I practice these behaviours with my partner(s) in private (e.g., home, hotel, etc.)
- I practice this in public groups settings (e.g., BDSM clubs, swingers groups, etc.)
- I practice kink behaviours both in private and in public group settings
- I practice kink as part of a 24/7 dynamic

13. Select all that apply to your practice of kink/BDSM behaviours and activities:

- It is always sexual or erotic in nature
- It is never sexual or erotic
- It is both sexual/erotic and not sexual/erotic
- None of these explain my kink practice (please describe:)

14. I see myself as a (select all that apply):

- Kinkster/Kinky
- Kink/BDSM player/practitioner
- Kink community member
- Fetishist
- Dominant/Master/Mistress/Top (or any other role under this category)
- Submissive/Slave/Bottom (or any other role under this category)
- Switch/Vers

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- Sadist
- Masochist
- Caretaker (e.g., Big/Daddy/Mommy)
- Little/Age regressor (i.e., nurtured by caretaker; e.g., little girl/boy, etc.)
- Pet (e.g., Pup/Kitten)
- Owner (e.g., pup play)
- Rigger
- Rope bunny
- Brat
- Brat Tamer
- Voyeur
- Exhibitionist
- Furry
- Leather community member
- Let us know any other roles/identities you have that we may have missed (please specify:)

15. How important are these roles-identities (indicated in the previous question to your identity as a whole?

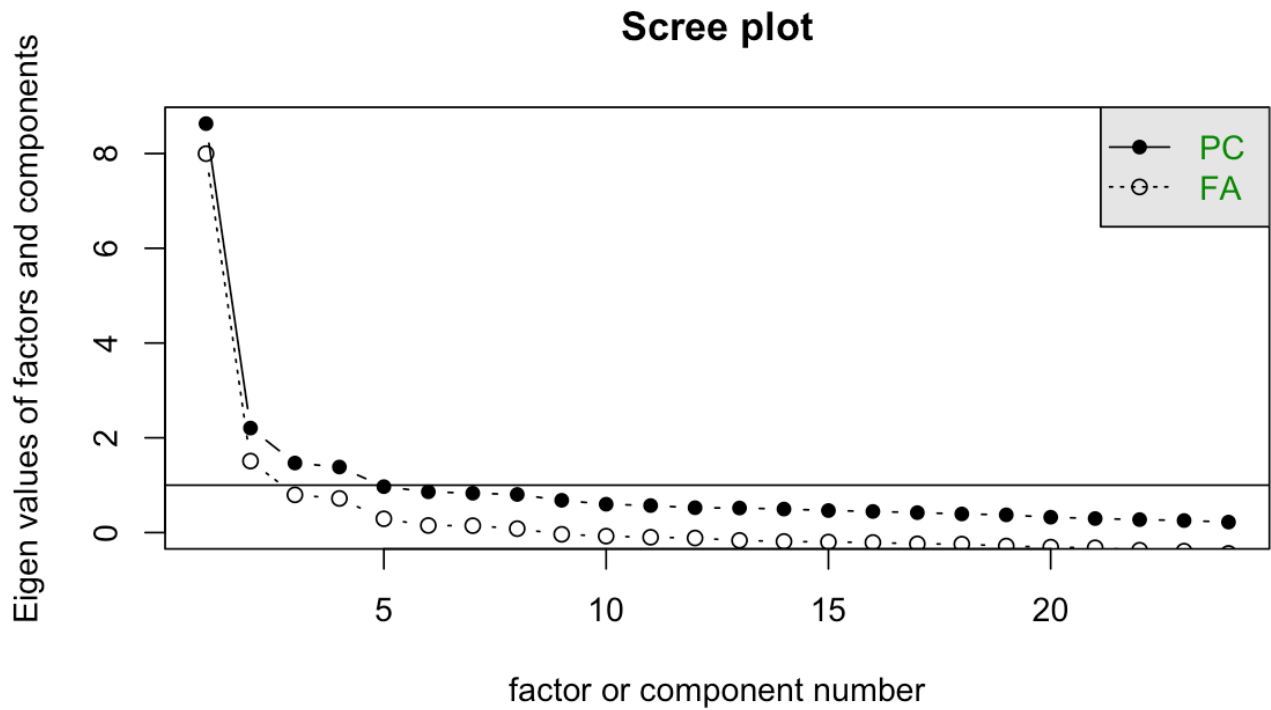
Not at all important (0)	Somewhat important (1)	Important (2)	Very important (3)	Essential to who I am as a whole (4)

Appendix D

Supplementary PAF Scree Plot: Submission Dimension

Figure D1

Scree Plot from a Principal Axis Factor Analysis for the Submission Dimension of the Sadomasochistic Checklist



Appendix E

Supplementary PAF Scree Plot: Dominance Dimension

Figure E1

Scree Plot from a Principal Axis Factor Analysis for the Dominance Dimension of the Sadomasochistic Checklist

