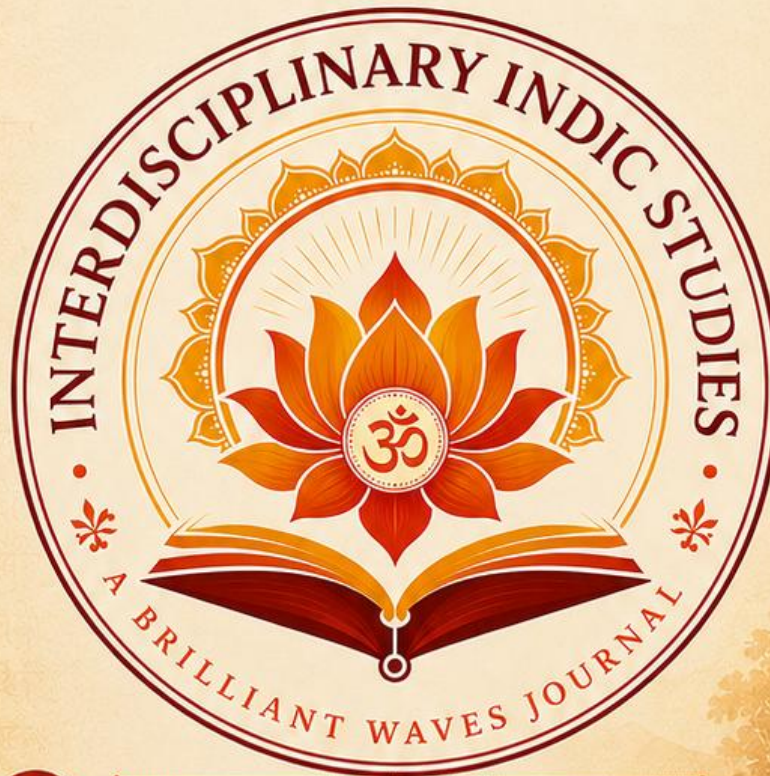


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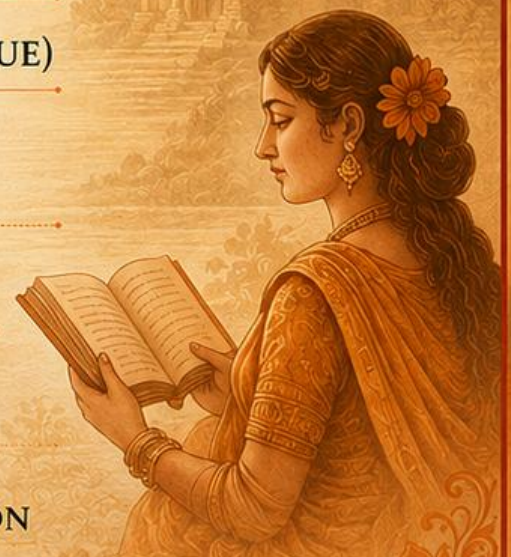
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Bullying, Body Image and Susceptibility for Eating Disorders among LGBTQIA Community: A Correlational Study

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Abstract

This study explores the correlations between bullying, body image, and eating disorders in the LGBTQIA community with a sample of 30 individuals. It found a positive correlation between bullying and eating disorders ($r = 0.33$), but not statistically significant ($p = 0.7492$). Similarly, bullying correlated positively with body image ($r = 0.30$), also not significant ($p = 0.107$). In contrast, a significant negative correlation was found between eating disorders and body image ($r = -0.13$, $p = 0.049$), indicating that individuals with severe eating disorders often have negative body image perceptions. The findings highlight the need for further research with larger samples to better understand these relationships.

Key Words: *LGBTQA psychological well-being, Body dissatisfaction, Eating pathology, Sexual minority vulnerability, Internalised stigma, Gender identity and body image, bullying induced eating disorder, mental health*

Introduction

Body image is a complex psychological concept that refers to how people see, think, and feel about their physical appearance. It is shaped by various environmental, social, and cultural factors, including family dynamics, peer relationships, and media representation. Research indicates that adolescence is a critical period when young people are

especially susceptible to adopting idealized body standards promoted by social and mass media (Dohnt & Tiggemann, 2006; Levine & Murnen, 2009).

A key theme in this area is the "internalization of the thin ideal." This refers to how much individuals accept cultural standards of

appearance as their own. In Western cultures, thinness is primarily idealized for women, while muscularity and height are valued for men. When people do not meet these standards, they often experience body shame and dissatisfaction, which can lower self-esteem and lead to psychological distress (Grabe, Ward & Hyde, 2008). Groesz, Levine, and Murnen (2002) conducted a meta-analysis of 25 studies and found that exposure to thin-ideal media images significantly reduced body satisfaction in women.

For LGBTQA individuals, body image issues can manifest in unique and often more intense ways. Research shows that gay and bisexual men are more likely than heterosexual men to adopt appearance ideals focused on muscularity and leanness, resulting in higher rates of body dissatisfaction (Watson et al., 2017). Transgender individuals often experience significant distress related to their bodies because of a mismatch between their biological sex and gender identity, with body dissatisfaction reported to be particularly high before gender-affirming treatment (Austin et al., 2004). Moreover, minority stress, which includes discrimination, harassment, and

internalized stigma, has been linked to poor body image and lower self-esteem in the LGBTQA community (Diemer et al., 2015).

Bullying consists of repeated verbal, physical, or social aggression directed at peers, characterized by an uneven power dynamic (Olweus, 1993). It includes behaviours like name-calling, physical violence, social exclusion, and online harassment. Salmivalli and other researchers (1996, 1998) identified six roles within bullying dynamics, highlighting the group-based nature of this behaviour and how peer reinforcement helps sustain it. Involvement in bullying whether as a victim, perpetrator, or bully-victim can lead to various negative psychological effects. Victims often report high levels of depression, anxiety, loneliness, and suicidal thoughts, along with lower self-esteem and difficulties forming friendships (Arseneault et al., 2010).

Nansel et al. (2001) found, in a nationally representative study of youth in the United States, that both bullies and victims showed significant social and emotional impairments compared to peers who were not involved. A crucial point for this study is the established

connection between bullying and body image dissatisfaction. Teasing about appearance, including comments on weight and body shape, is strongly linked to body dissatisfaction, restrictive eating, and the onset of disordered eating behaviours (Menzel et al., 2010). Neumark-Sztainer et al. (2002) demonstrated that weight-related teasing significantly predicted body dissatisfaction and unhealthy weight control behaviours in adolescents, underscoring the dangers of appearance-focused bullying. LGBTQA individuals face a higher risk of bullying due to their sexual orientation or gender identity. Research consistently shows that sexual and gender minority youth experience more peer victimization than their heterosexual, cisgender peers (Dunbar et al., 2017). This increased exposure to bullying, combined with the psychological stress associated with minority stress, makes LGBTQA individuals particularly vulnerable to negative body image and related mental health issues.

Eating disorders, such as anorexia nervosa (AN), bulimia nervosa (BN), and binge-eating disorder (BED), are severe mental health issues defined by abnormal eating behaviours

and distorted body image. Among all psychiatric conditions, eating disorders have the highest mortality rate, which represents a significant public health concern (DSM-5, American Psychiatric Association, 2013). AN affects about 1% of adolescents and young adults, while BN affects around 3%. Many others engage in subclinical disordered eating behaviours. Traditionally, research on eating disorders has focused on heterosexual, cisgender women. However, emerging evidence suggests that sexual and gender minority individuals are at a much higher risk.

A nationally representative study in the United States found that sexual minority adults were two to four times more likely to receive a DSM-5 eating disorder diagnosis than their cisgender heterosexual peers (Calzo et al., 2017). Gay and bisexual adolescent boys have reported higher rates of purging, binge eating, and dietary restriction by age 14 compared to heterosexual boys (Calzo, Austin & Micali, 2018). The connection between bullying and eating disorders is becoming increasingly recognized in research. Many studies indicate that individuals with eating disorders often report experiencing bullying and teasing,

especially regarding their appearance (Fairburn et al., 1998; Karwautz et al., 2011). Experiences of bullying can lead to eating disorders through various pathways: they cause emotional distress, create social isolation and submissiveness, and increase body dissatisfaction, all of which are known risk factors for disordered eating (Jacobi et al., 2004; Stice, 2016).

Furthermore, Baker, Ferszt, and Breines (2019) found that negative body image, often resulting from bullying, is closely linked to disordered eating and suicidality, particularly among LGBTQA individuals. Feeling connected to the community within the LGBTQA population has been identified as a protective factor against eating disorders. This connection suggests that social support and affirmation of identity may help reduce the negative effects of victimization (NEDA, 2018). However, significant gaps remain in understanding the specific interactions between bullying, body image, and eating disorder risk in this population. This study aims to address that gap by examining the relationships between these three factors in a sample of 30 LGBTQA individuals.

Literature Review

The connection between bullying, body image, and eating disorders has been studied in depth, especially regarding how these issues specifically impact individuals in the LGBTQA community. Understanding these three concepts together reveals a complicated and harmful cycle of psychological damage that deserves close attention. Starting with body image, it is well-recognized that social pressures, especially those from peers and the media, play a key role in how people view their own bodies. Dohnt and Tiggemann (2006) provided important early evidence showing that peer and media influences on body image and dieting awareness can be seen in girls as young as five to eight years old.

Their research showed that the desire to be thin can start before adolescence, suggesting that the risk of body dissatisfaction begins long before it is clinically noticeable. Following this, Groesz, Levine, and Murnen (2002) conducted a meta-analysis of 25 experimental studies and confirmed that exposure to thin-ideal media images consistently lowered body satisfaction among

women. Together, these findings indicate a widespread cultural environment that normalizes unrealistic body standards, which encourages unhealthy thoughts about one's appearance. What matters for this study is how these pressures are even stronger within the LGBTQA community. Watson et al. (2017) found that sexual minority men are particularly vulnerable to objectification and pressures related to appearance.

Body image concerns in this group are influenced by internalized ideals of muscularity and leanness, which are prevalent in gay male culture. Diemer et al. (2015) expanded on this by showing that minority stress factors, such as discrimination, stigma, and internalized homophobia, significantly increase the risk of eating disorders in LGBTQ+ adults. This suggests that the body image challenges faced by LGBTQA individuals are not just reflections of cultural influences but are made worse by the specific psychological burdens of being part of a marginalized group. Jones et al. (2019) further supported this idea, showing that sexual minority women experience higher levels of body dissatisfaction and eating issues than

their heterosexual counterparts, highlighting that this increased vulnerability spans across genders within the community.

When looking at the role of bullying, research consistently reveals that being victimized by peers significantly raises the risk of various negative psychological outcomes. Nansel et al. (2001) conducted a landmark study of youth in the United States and found that both bullies and victims suffer from significant psychosocial issues, including problems with relationships and managing emotions. Arseneault et al. (2010) further showed that being bullied is linked to long-term mental health issues, reinforcing the idea that bullying effects last well beyond the immediate experience. Copeland et al. (2013) added an important aspect by showing that those who play both roles- bully and victim- face a heightened risk of mental illness and suicidal behaviour. Kim and Leventhal (2008) similarly found that involvement in bullying, in any role, predicts future mental health issues, and Winsper et al. (2012) specifically connected the victim status of bullies to an increased risk of engaging in disordered eating later on.

The link from bullying to disordered eating is not always straightforward. The literature offers several explanations. Reijntjes et al. (2010) argued that emotional problems stemming from bullying experiences, especially internalizing symptoms like anxiety and depression, act as mediators in the development and persistence of eating disorders. This idea was supported by Jacobi et al. (2004), who suggested that emotional dysregulation resulting from bullying could lead to eating disorders by interrupting normal development during adolescence. Menzel et al. (2010) highlighted the specific impact of teasing about appearance, showing that teasing about body shape or weight is directly related to body dissatisfaction, dietary restriction, and bulimic behaviors. Neumark-Sztainer et al. (2002) provided further evidence, demonstrating that weight-related teasing predicts unhealthy weight control behaviours in adolescents, placing the body as a key vulnerability point in bullying scenarios. Stice's (2016) dual-pathway model provides a helpful framework for understanding how these elements come together.

The model suggests that internalizing a thin ideal leads to body dissatisfaction, which then generates negative feelings and dietary restriction, both of which serve as direct pathways to disordered eating. This model is particularly relevant in the context of LGBTQA, where internalizing appearance ideals is heightened by community-specific pressures, and where body dissatisfaction is further driven by experiences of discrimination and bullying. The McKnight Investigators (2003) offered early longitudinal support for this model, showing that perceived media pressure predicted the onset of eating disorders over three years, confirming that cultural exposure may not only correlate with but also contribute to the development of eating issues.

When specifically examining eating disorders within the LGBTQA population, the evidence is both troubling and consistent. Calzo, Austin, and Micali (2018) found that gay and bisexual adolescent boys in the United Kingdom displayed significantly higher rates of purging, binge eating, and body dissatisfaction compared to heterosexual boys by age 14, with these issues continuing into age 16. Von Schell et al. (2018) reported that gay college men in

the United States had higher scores on the Eating Disorder Examination Questionnaire, with significant rates of dietary restraint and excessive exercise. Bell, Reiger, and Hirsch (2019) pointed out the psychological complexity here, finding that among gay men, depression, perceived stigma related to sexual orientation, and low self-compassion all predicted a positive eating disorder screen.

Collectively, these findings indicate that the risk of eating disorders in LGBTQA individuals arises not only from body image issues but is also tightly linked to broader experiences of stigma, social rejection, and psychological distress. An important counterpoint in this literature comes from the National Eating Disorders Association (NEDA, 2018), which found that having a stronger connection to the LGBTQ+ community serves as a protective factor against current eating disorders. This implies

that while the LGBTQA community can create shared vulnerabilities, it can also be a source of strength and support. Baker, Ferszt, and Breines (2019) similarly found that negative body image and disordered eating in LGBTQA individuals are strongly connected to suicidal behaviour, stressing the need for targeted mental health support for this group. In reviewing this literature, a clear pattern emerges: bullying, body dissatisfaction, and eating disorders do not function separately but interact dynamically, with each element reinforcing the others. For LGBTQA individuals, these interactions are intensified by minority stress, stigma, and pressures related to identity. This study aims to contribute to this growing field by examining the relationships between these three variables within an LGBTQA sample to add to the evidence that can guide targeted and culturally sensitive interventions.

Rationale of the Study

Most past studies offer useful insights but miss key pieces, this gap shapes why new work is needed now. Research into eating disorders long centred only on straight, cisgender

women, even though risks run higher among LGBTQ+ people. By age 14, gay and bi teen boys show far more bingeing, purging, and distress about bodies, according to Calzo,

Austin, and Micali in 2018. Earlier, Calzo and team noted queer adults face double or triple the odds of an official DSM-5 diagnosis compared to straight counterparts. Seen together, these facts tilt attention toward inclusion not sidelining queer lives - as central in future inquiry. Another missing piece involves how bullying connects to eating problems.

Research by Menzel and others in 2010, along with work from Neumark-Sztainer's team two years earlier, showed that being teased about looks or weight can lead to negative body views and unhealthy eating habits. Still, most of those results came from groups made up largely of straight, cisgender people. Since LGBTQA youth often experience far more harassment because of who they are, the way bullying affects their eating patterns might look different - possibly deeper, sharper. So far, no study has put this exact link to the test using only data from LGBTQA participants. That absence stands out when you scan what we actually know.

It still sits split apart, this talk about bodies in LGBTQA groups. Even though we've seen

proof of deeper distress over appearance in gay and bi men (Watson et al., 2017), those who are trans (Austin et al., 2004), and queer women too (Jones et al., 2019), none of it lines up clearly with teasing or disordered eating - three things happening at once. Stress from being pushed aside the kind that comes from slurs, silence, or even self-hatred - has shown to sharpen body worries and raise chances of eating problems (Diemer et al., 2015). But somehow, nobody has mapped how taunting, looks related pain, and food struggles bump into each other inside one set of queer lives. It matters now more than ever.

Eating disorders claim more lives than any other mental health issue, data shows clearly. Baker, Ferszt, and Breines saw how poor self-image and harmful eating habits hit hard among queer people, often tied to thoughts of ending life. Still, help built just for them barely exists. One reason sits right at the root too little solid proof guides such efforts. Connection within groups lowers risk, NEDA pointed out back then. Belonging seems to soften blows from being mistreated when someone owns who they are. But none of that

protection works well if we do not see exactly where it fits into the bigger picture.

Since most studies ignore LGBTQA people when looking at eating problems, what happens after someone faces bullying often goes unchecked in this group. Body image usually gets treated like an extra issue instead of part of a bigger picture. Help for these

challenges lacks solid backing tailored to their experiences. That makes this work matter today. A small look into how teasing, self-perception, and disordered eating connect unfolds through thirty participants who identify as LGBTQA. The findings could shape support strategies built around real insight rather than guesswork.

Aim of the Study

The study aimed to understand if bullying links strongly to higher chances of eating problems in LGBTQA people. Instead of just assuming, it explores how being bullied might tie to poor views about one's body in this group. Another point looks at whether feeling

bad about appearance connects clearly to risks for disordered eating, where worse self-image means stronger signs of unhealthy habits around food. These pieces fit together, showing how each part relates across bullying, body thoughts, and eating struggles.

Hypothesis

Null Hypothesis (H_0): There is no significant correlation between bullying, body image, and susceptibility to eating disorders among individuals in the LGBTQA community. Any observed association between these variables

is attributable to chance or other unrelated factors, and does not reflect a meaningful or systematic relationship.

Alternative Hypothesis (H_1): LGBTQA individuals who have experienced bullying on account of their sexual orientation or gender identity are more likely to report negative

body image and greater susceptibility to eating disorders compared to those who have not experienced such victimisation. Furthermore, it is predicted that a positive correlation will be

Members of the LGBTQA community often face more teasing and social harm than others - data shows it clearly (Dunbar et al., 2017). Eating struggles show up more often in these groups when compared to people who are straight or cisgender; recent studies back this again and again (Calzo et al., 2017). Yet what's missing is real evidence on how name-calling, looks-based stress, and disordered eating connect specifically among only queer

observed between the severity of bullying and the degree of body image dissatisfaction, and between body image dissatisfaction and eating disorder risk, within this population.

and trans youth. Instead of just guessing, this project checks whether those links actually exist by measuring patterns across responses, seeing if numbers rise together or stay apart. Depending on what turns up, beliefs about these ties could shift. Results might help shape mental health tools better suited to queer lives while offering clues for deeper study down the line.

Research Methodology

Sampling Characteristics

The study comprised a total of 30 participants, all of whom identified as members of the LGBTQA community. The sample was drawn from individuals accessible through social

media platforms, LGBTQA support groups, and online forums. The demographic composition of the sample reflected diversity across sexual orientation and gender identity, as detailed below:

Identity	Number of Participants
Gay	11
Bisexual	8

Lesbian	7
Transgender	4
Total	30

Table 1: Description of Participants

Sampling Technique

A non-probability sampling approach was adopted for this study, combining convenience sampling and snowball sampling techniques. Convenience sampling was employed given the practical accessibility of LGBTQA individuals through online platforms and community support groups. Snowball sampling was additionally utilised, wherein initial participants were encouraged to refer

other eligible individuals within their networks, thereby facilitating recruitment within a population that may otherwise be difficult to access due to privacy concerns and the sensitive nature of the subject matter. Participants were recruited via social media, LGBTQA support groups, and online forums, and were invited to complete an online self-reported questionnaire.

Inclusion Criteria

Participants were included in the study if they met the following criteria:

- Self-identified as a member of the LGBTQA community (lesbian, gay, bisexual, transgender, queer, or asexual).
- Were aged 18 years or above at the time of participation.
- Were willing to voluntarily participate and provide informed consent.
- Had sufficient proficiency in English to comprehend and complete the online questionnaire.
- Had access to the internet and were able to complete an online survey.

Exclusion Criteria

Participants were excluded from the study if they met any of the following criteria:

- Did not identify as a member of the LGBTQA community.
- Were below the age of 18 years.
- Were unable or unwilling to provide informed consent.
- Had insufficient English proficiency to complete the questionnaire accurately.
- Were currently receiving inpatient treatment for an eating disorder, as this may have confounded self-reported responses.
- Submitted incomplete questionnaire responses that

rendered their data unusable for analysis.

Research Design

This study adopted a cross-sectional research design to investigate the correlations among bullying victimisation, body image perception, and susceptibility to eating disorders within the LGBTQA community. A cross-sectional approach was selected because it permits the simultaneous collection of data at a single point in time across a defined sample, enabling the assessment of prevalence and inter-variable relationships without the time and resource demands of a longitudinal study. The figure below maps the full seven-step research process.

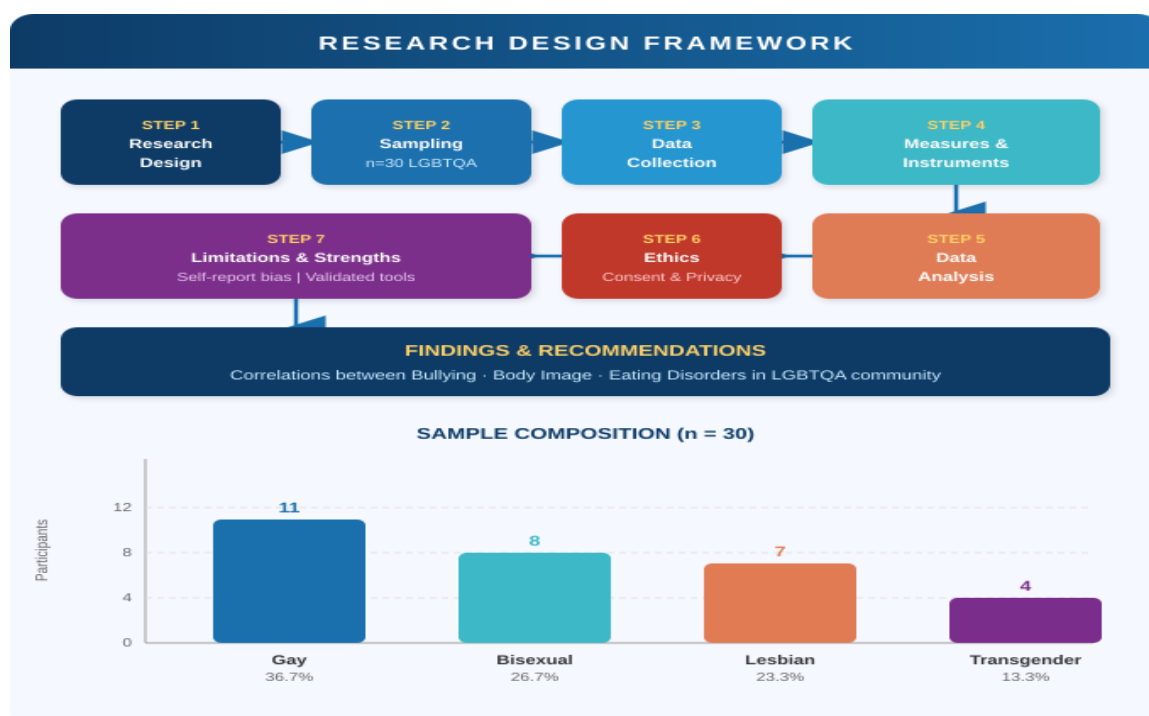


Figure 1- Seven-Step Research Design Framework and Sample Composition (n = 30)

A cross-sectional, quantitative design was employed. This design is well-suited to examining the prevalence and correlational patterns among multiple psychological variables within a marginalised population at a single point in time.

A non-probability approach combining convenience and snowball sampling was used to recruit 30 LGBTQA-identifying individuals through social media, online LGBTQA support groups, and community forums. The sample comprised 11 gay (36.7%), 8 bisexual (26.7%), 7 lesbian (23.3%), and 4 transgender

(13.3%) participants, reflecting diversity across sexual orientation and gender identity.

An online self-reported questionnaire was administered via Google Forms and distributed using QR code technology across multiple digital platforms. Full details are provided in the Data Collection section below.

Three internationally validated psychometric instruments were used, one for each focal variable: the Eating Disorder Examination Questionnaire (EDE-Q 6.0) for eating disorder susceptibility, the Olweus Bully/Victim Questionnaire (OBVQ) for bullying victimisation, and the 19-item Body Image

Questionnaire (BIQ-19) for body image perception.

Data were analysed using descriptive statistics (frequencies, means, standard deviations) to summarise participant characteristics, and inferential statistics — including Pearson's correlation coefficient to test the hypotheses and determine the strength and significance of relationships between the three variables.

All participants provided informed consent prior to participation. Anonymity and confidentiality were maintained throughout, with no personally identifiable information

Method of Data Collection

Data were collected through an online self-administered questionnaire hosted on Google Forms a freely accessible, widely used digital survey platform and distributed through two complementary methods:

- Google Forms Link: Distributed via email, Facebook, WhatsApp, Messenger, and other social media accounts. Participants accessed the survey through a link embedded in targeted posts on a dedicated

collected or stored. Participation was entirely voluntary, with the right to withdraw at any time without consequence.

The study's limitations include reliance on self-reported data, which introduces the possibility of response bias, and a modest sample size of 30 participants that may restrict generalisability. Key strengths include the use of three validated psychometric tools, purposive inclusion of an underrepresented population, and a cost-effective, accessible online methodology appropriate for LGBTQA community research.

research Facebook page or through direct messages (Barnes et al., 2020). Social media was leveraged as a means of building community connections and facilitating information sharing (Glazier & Topping, 2012). This approach proved especially practical given restrictions on in-person mobility during and after the COVID-19 pandemic.

- QR Code: The Google Forms survey link was additionally embedded within a QR code and distributed via email and social media. Participants could scan the QR code using the camera of any Android or iOS mobile device to instantly retrieve the questionnaire (Pandya & Galiyawala, 2014). QR codes were selected for their fast readability, broad mobile compatibility, and ability to efficiently convey URLs to users in an increasingly mobile-internet-enabled world.

Tools Used for Data Collection

Three standardised instruments were administered to measure each of the study's focal variables:

Instrument	Variable Measured	Description
EDE-Q 6.0	Eating Disorder Susceptibility	28-item questionnaire measuring eating disorder psychopathology across 4 subscales
Olweus OBVQ	Bullying Victimization	Assesses frequency and type of bullying experience as victim or perpetrator
BIQ-19	Body Image Perception	19-item scale assessing satisfaction and distress related to physical appearance

Table 2: Standardised Instruments and Variables Measured

Reliability and Validity of Instruments

The psychometric integrity of each instrument is supported by well-established reliability and validity evidence. The table and figure below summarise the key scores:

RELIABILITY & VALIDITY SUMMARY			
Instrument	Cronbach's α	Test-retest / ICC	Validity
EDE-Q 6.0	$\alpha = 0.93$	ICC = 0.87	Content + Construct
Olweus OBVQ	$\alpha = 0.85$	$r = 0.80$	Criterion + Construct
BIQ-19	$\alpha = 0.89$	$r = 0.82$	Convergent + Discriminant

Figure 2: Reliability and Validity Summary Across All Three Instruments

Instrument	Reliability	Test-retest / ICC	Validity
EDE-Q 6.0	Cronbach's $\alpha = 0.93$; excellent internal consistency across all four subscales (Fairburn & Beglin, 1994)	ICC = 0.87; strong test-retest reliability over a two-week interval	Content validity established by clinical expert panel; convergent validity confirmed with EDI-2
Olweus OBVQ	Cronbach's $\alpha = 0.85$; good internal consistency across bullying and victimisation subscales (Olweus, 1996)	Test-retest $r = 0.80$ over five-month interval; stability confirmed in longitudinal samples	Criterion validity demonstrated against teacher ratings and peer nominations; construct validity supported
BIQ-19	Cronbach's $\alpha = 0.89$; high internal consistency across body satisfaction and dissatisfaction items	Test-retest $r = 0.82$ over three-week interval; stable across repeated administrations	Convergent validity confirmed with Body Shape Questionnaire; discriminant validity established across clinical and non-clinical samples

Table 3- Detailed Reliability and Validity Evidence for Each Instrument

Data Analysis

This study employed a quantitative correlational research design to explore the relationships between bullying, eating disorder susceptibility, and body image among members of the LGBTQA community. The analysis was conducted on a sample of $N = 30$ participants. All statistical computations were carried out manually using the Pearson product-moment correlation formula to ensure transparency and methodological rigour.

Analytical Tools and Statistical Methods:

Pearson's Product-Moment Correlation (r)

The primary statistical technique applied was Pearson's product-moment correlation coefficient (r). The calculations were hand scored. This parametric method was selected because all three variables — bullying, eating disorder susceptibility, and body image — were measured on continuous numerical scales, and the study sought to quantify the direction and strength of linear relationships between pairs of variables.

The formula applied was:

$$r = \Sigma xy / \sqrt{(\Sigma x^2 \times \Sigma y^2)}$$

where x and y represent the deviations of each score from their respective means ($x = X - \bar{x}$ and $y = Y - \bar{Y}$). Pearson's r ranges from -1 (perfect negative correlation) to $+1$ (perfect positive correlation), with 0 indicating no linear relationship.

Descriptive Statistics

Prior to computing correlations, descriptive statistics were calculated for each variable. The arithmetic mean ($\bar{x} = \Sigma X / N$) was computed as the measure of central tendency, and standard deviation (SD) was used to indicate variability within each variable's distribution. These descriptive values contextualise the correlation findings and are presented in the summary table below.

Significance Testing

Each computed r value was evaluated for statistical significance at the 0.05 level of significance ($\alpha = 0.05$). The corresponding p -values were interpreted against this threshold: a p -value below 0.05 was taken to indicate a

statistically significant relationship, while a p-value above 0.05 suggested the observed correlation could be attributable to chance.

Statistical Findings

Three Pearson correlation analyses were conducted, each examining a pair of the three study variables. For each pair, deviations from the mean (x , y), squared deviations (x^2 , y^2), and cross-products (xy) were computed individually across all 30 data points before summing to derive the correlation coefficient.

Correlation between Bullying and Eating Disorder

Table 4: Computational Data for Pearson's r - Bullying (X) and Eating Disorder Susceptibility (Y)

X (Bullying)	Y (Eating Disorder)	x	y	x^2	y^2	xy
29	58	-8.16	2.5	66.58	6.25	-20.4
40	43	2.84	-12.5	8.065	156.25	-35.5
45	60	7.84	4.5	61.46	20.25	35.28
50	69	12.84	13.5	164.86	182.25	173.34
32	57	-5.16	1.5	26.62	2.25	-7.74
31	63	-6.16	7.5	37.94	5.25	-46.20
33	41	-4.16	-14.5	17.30	210.25	60.32
38	46	0.84	-9.5	0.70	90.25	-7.98



X (Bullying)	Y (Eating Disorder)	x	y	x ²	y ²	xy
28	42	-9.16	-13.5	83.90	182.25	123.66
42	61	4.84	5.5	23.42	30.25	26.62
47	68	9.84	12.5	96.82	156.25	123
27	51	-10.16	-4.5	103.22	20.25	45.72
43	44	5.84	-11.5	34.10	132.25	-67.16
39	56	1.84	0.5	3.38	0.25	0.92
30	65	-7.16	9.5	51.26	90.25	-68.08
37	67	-0.16	11.5	0.02	132.25	-1.84
48	62	10.84	6.5	117.50	42.25	70.46
29	55	-8.16	-0.5	66.58	0.25	4.08
46	54	8.84	-1.5	78.14	2.25	-13.26
34	45	-3.16	-10.5	9.98	110.25	33.18
44	52	6.84	-3.5	46.78	12.25	-23.94
36	64	-1.16	8.5	1.34	72.25	-9.86
50	70	12.84	14.5	164.86	210.25	186.18



X (Bullying)	Y (Eating Disorder)	x	y	x ²	y ²	xy
27	59	-10.16	3.5	103.22	12.25	-35.56
41	49	3.84	-6.5	14.74	42.25	-24.96
49	50	11.84	-5.5	140.18	30.25	-65.12
35	66	-2.16	10.5	4.66	110.25	-22.68
30	47	-7.16	-8.5	51.26	72.25	60.86
28	48	-9.16	-7.5	83.90	56.25	68.7
27	53	-10.16	-2.5	103.22	6.25	25.4
1115	1665	0.2	0	1465.04	2247.5	587.44

$$\bar{x} \text{ (Bullying)} = \Sigma X / N = 1115 / 30 = 37.16$$

$$\bar{Y} \text{ (Eating Disorder)} = \Sigma Y / N = 1665 / 30 = 55.5$$

$$r = \Sigma xy / \sqrt{(\Sigma x^2 \times \Sigma y^2)} = 587.44 / \sqrt{(1465.04 \times 2247.5)} = 587.44 / 1814.57 = 0.33$$

Correlation between Bullying and Body Image

Table 5: Computational Data for Pearson's r — Bullying (X) and Body Image (Y)

X (Bullying)	Y (Body Image)	x	y	x ²	y ²	xy



X (Bullying)	Y (Body Image)	x	y	x^2	y^2	xy
29	57	-8.16	9.9	66.58	98.01	80.784
40	42	2.84	-5.1	8.065	26.01	14..484
45	49	7.84	1.9	61.46	3.61	14.896
50	35	12.84	-12.1	164.86	146.41	-155.364
32	56	-5.16	8.9	26.62	79.21	-45.924
31	44	-6.16	-3.1	37.94	9.61	19.096
33	50	-4.16	2.9	17.30	8.41	-12.064
38	38	0.84	9.1	0.70	82.81	76.44
28	58	-9.16	10.9	83.90	118.81	99.844
42	46	4.84	-1.1	23.42	1.21	-5.324
47	53	9.84	5.9	96.82	34.81	58.056
27	39	-10.16	-8.1	103.22	65.61	82.296
43	48	5.84	0.9	34.10	0.81	5.256
39	36	1.84	-11.1	3.38	123.21	-20.424
30	55	-7.16	7.9	51.26	62.41	-56.564





X (Bullying)	Y (Body Image)	x	y	x ²	y ²	xy
37	41	-0.16	-6.1	0.02	37.21	0.976
48	52	10.84	4.9	117.50	24.01	53.116
29	45	-8.16	-2.1	66.58	4.41	17.136
46	59	8.84	11.9	78.14	141.61	105.196
34	47	-3.16	-0.1	9.98	0.01	0.316
44	55	6.84	7.9	46.78	62.41	54.036
36	38	-1.16	-9.1	1.34	82.81	10.556
50	41	12.84	-6.1	164.86	37.21	-78.324
27	52	-10.16	4.9	103.22	24.01	-49.784
41	48	3.84	0.9	14.74	0.81	3.456
49	58	11.84	10.9	140.18	118.81	129.056
35	36	-2.16	-11.1	4.66	123.21	23.976
30	45	-7.16	-2.1	51.26	4.41	15.036
28	51	-9.16	3.9	83.90	15.21	-35.724
27	39	-10.16	-8.1	103.22	65.61	82.296



X (Bullying)	Y (Body Image)	x	y	x ²	y ²	xy
1115	1413	0.2	18.2	1465.04	1602.7	472.324

$$\bar{x} \text{ (Bullying)} = \Sigma X / N = 1115 / 30 = 37.16$$

$$\bar{Y} \text{ (Body Image)} = \Sigma Y / N = 1413 / 30 = 47.1$$

$$r = \Sigma xy / \sqrt{(\Sigma x^2 \times \Sigma y^2)} = 472.324 / \sqrt{(1465.04 \times 1602.7)} = 472.324 / 1532.32 = 0.30$$

Correlation between Eating Disorder and Body Image

Table 6: Computational Data for Pearson's r — Eating Disorder (X) and Body Image (Y)

X (Eating Disorder)	Y (Body Image)	x	y	x ²	y ²	xy
58	57	2.5	9.9	6.25	98.01	24.75
43	42	-12.5	-5.1	156.25	26.01	63.75
60	49	4.5	1.9	20.25	3.61	8.55
69	35	13.5	-12.1	182.25	146.41	-163.35
57	56	1.5	8.9	2.25	79.21	13.35
63	44	7.5	-3.1	5.25	9.61	-23.25
41	50	-14.5	2.9	210.25	8.41	-42.05



X (Eating Disorder)	Y (Body Image)	x	y	x ²	y ²	xy
46	38	-9.5	9.1	90.25	82.81	-86.45
42	58	-13.5	10.9	182.25	118.81	147.15
61	46	5.5	-1.1	30.25	1.21	-6.05
68	53	12.5	5.9	156.25	34.81	73.75
51	39	-4.5	-8.1	20.25	65.61	36.45
44	48	-11.5	0.9	132.25	0.81	-10.35
56	36	0.5	-11.1	0.25	123.21	-5.55
65	55	9.5	7.9	90.25	62.41	75.05
67	41	11.5	-6.1	132.25	37.21	-70.15
62	52	6.5	4.9	42.25	24.01	31.85
55	45	-0.5	-2.1	0.25	4.41	1.05
54	59	-1.5	11.9	2.25	141.61	-17.85
45	47	-10.5	-0.1	110.25	0.01	1.05
52	55	-3.5	7.9	12.25	62.41	-27.65
64	38	8.5	-9.1	72.25	82.81	-77.35
70	41	14.5	-6.1	210.25	37.21	-88.45



X (Eating Disorder)	Y (Body Image)	x	y	x ²	y ²	xy
59	52	3.5	4.9	12.25	24.01	17.15
49	48	-6.5	0.9	42.25	0.81	-5.85
50	58	-5.5	10.9	30.25	118.81	-59.95
66	36	10.5	-11.1	110.25	123.21	-116.55
47	45	-8.5	-2.1	72.25	4.41	17.85
48	51	-7.5	3.9	56.25	15.21	29.25
53	39	-2.5	-8.1	6.25	65.61	20.25
1665	1413	0	18.2	2247.5	1602.7	-239.6

$$\bar{x} \text{ (Eating Disorder)} = \Sigma X / N = 1665 / 30 = 55.5$$

$$\bar{Y} \text{ (Body Image)} = \Sigma Y / N = 1413 / 30 = 47.1$$

$$r = \Sigma xy / \sqrt{(\Sigma x^2 \times \Sigma y^2)} = -239.6 / \sqrt{(2247.5 \times 1602.7)} = -239.6 / 1897.91 = -0.13$$

Summary of Correlation Results and Significance

Table 7: Summary of Descriptive Statistics and Pearson Correlation Results (N = 30)

Variable 1	Mean 1	SD 1	Variable 2	Mean 2	SD 2	r Value	p Value ($\alpha=0.05$)

Variable 1	Mean 1	SD 1	Variable 2	Mean 2	SD 2	r Value	p Value ($\alpha=0.05$)
Bullying	37.16	7.80	Eating Disorder	55.5	8.80	0.33	0.7492
Bullying	37.16	7.80	Body Image	47.1	7.43	0.30	0.107
Eating Disorder	55.5	8.80	Body Image	47.1	7.43	-0.13	0.049*

* Statistically significant at $\alpha = 0.05$ ($p < 0.05$)

Assessment of Statistical Significance

Bullying and Eating Disorder ($r = 0.33$, $p = 0.7492$): The p-value of 0.7492 greatly exceeds $\alpha = 0.05$. The positive correlation is not statistically significant; the observed relationship is likely attributable to chance given the sample size.

Bullying and Body Image ($r = 0.30$, $p = 0.107$): The p-value of 0.107 also exceeds $\alpha =$

0.05. Although a positive trend is present, the result is not statistically significant.

Eating Disorder and Body Image ($r = -0.13$, $p = 0.049$): The p-value of 0.049 falls below $\alpha = 0.05$, making this the only statistically significant finding in the study. The negative correlation indicates a weak inverse relationship between eating disorder susceptibility and body image.

relationships between the variables of interest. By understanding these connections, we can gain valuable insights into the potential impact of bullying on body image and the susceptibility for eating disorders among individuals within the LGBTQA community.

The dissertation examined the relationships between bullying, body image, and

Discussion

This study aimed to investigate the correlations between bullying, body image, and susceptibility for eating disorders within the LGBTQA community. The research utilised a correlational design, employing Pearson's correlation method to examine the

susceptibility for eating disorders within the LGBTQA community. The study included a sample size of 30 participants, and the findings revealed correlations between these variables. This interpretation will provide an analysis of the results, taking into account the correlation coefficients and their significance levels.

The first correlation examined was between bullying and eating disorders. The correlation coefficient of 0.33 suggests a positive relationship between these variables within the LGBTQA community. However, the significance level of 0.7492 indicates that this relationship is not statistically significant at the 0.05 level. In other words, the observed correlation could be due to chance, and there is insufficient evidence to conclude that there is a meaningful association between bullying and eating disorders in this sample.

The second correlation explored the relationship between bullying and body image. The correlation coefficient of 0.30 suggests a positive association between these variables. However, the significance level of 0.107 exceeds the predetermined threshold of 0.05. Therefore, similar to the previous correlation, the results do not provide enough evidence to

conclude that there is a significant relationship between bullying and body image within the LGBTQA community in this study.

The third correlation investigated was between eating disorders and body image. The negative correlation coefficient of -0.13 implies a weak inverse relationship between these variables. Furthermore, the significance level of 0.049 falls below the predetermined threshold of 0.05, indicating that the relationship between eating disorders and body image in the LGBTQA community is statistically significant. However, it is important to note that the correlation coefficient suggests a relatively weak association.

In summary, based on the findings of this correlational study, it can be concluded that there is no significant relationship between bullying and eating disorders, nor between bullying and body image within the LGBTQA community in this particular sample. However, a significant but weak inverse relationship was observed between eating disorders and body image. It is crucial to interpret these results within the context of the study's limitations, such as the small sample size, which may restrict the generalisability of the findings.

Additionally, other factors not accounted for in this study might contribute to the complex relationships between bullying, body image, and eating disorders within the LGBTQA community.

Future research should aim to replicate these findings with larger and more diverse samples to strengthen the generalisability of the results. Furthermore, exploring additional variables

that might influence these relationships, such as social support or internalised stigma, could provide a more comprehensive understanding of the factors contributing to the susceptibility for eating disorders within the LGBTQA community.

Conclusion

A closer look at patterns among thirty individuals from the LGBTQA group reveals links between experiences of bullying, views about physical appearance, whereas signs pointing toward eating disorder risks begin to show. Instead of broad claims, numbers pulled using Pearson's method suggest connections that quietly build across each factor studied here. Looking closer, the link between bullying and risk for eating disorders ($r = 0.33$, $p = 0.7492$), along with how bullying ties to body perception ($r = 0.30$, $p = 0.107$), didn't stand out clearly when checked against standard thresholds. Although numbers hint at a slight upward pattern people facing more bullying sometimes showing higher

vulnerability to disordered eating or feeling worse about their appearance the data lacks strength to say these links aren't just random here. Still worth noting: failing to confirm connections doesn't mean they don't exist. More probably, the study lacked enough participants to spot real patterns reliably. With a bigger group, future work might uncover clear ties that slipped past detection this time. One clear result stood out when looking at how eating disorder vulnerability tied to views about physical appearance ($r = -0.13$, $p = 0.049$). Not surprisingly, people who feel more at risk for such conditions often see their bodies in harsher ways. Even if the connection appears slight, spotting it matters - especially

among those in the LGBTQA group, where added pressures like bias, prejudice, and social exclusion pile up. Seeing oneself negatively has long shown up in studies as something that can spark or worsen unhealthy eating patterns. Because this pattern shows even faintly here, it fits into broader findings pointing toward care that respects identity and responds directly to emotional strain in these communities. Looking back, these results add to growing work on emotional risks faced by LGBTQA people. Because of that, paying attention to how they see their bodies matters when building programs to prevent or treat eating problems in this group. It turns out, strong proof is still missing about just how much bullying leads to poor body views or unhealthy eating habits here. Even so, one thing becomes clear - deeper studies are needed, ones built better and with enough participants. Though it has weak spots, the project shows why digging further into the inner lives of LGBTQA folks makes sense. What stands out most? Support systems must recognize who they are, respect their identities, without judgment.

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Limitations

While this study provides preliminary insights into the relationships between bullying, body image, and eating disorder susceptibility among LGBTQA individuals, several significant limitations must be acknowledged when interpreting the findings. These limitations span issues of sample size and composition, methodological design, measurement validity, and analytical scope.

The most prominent limitation of this study is its small sample of only 30 participants. A sample of this size substantially restricts the statistical power of the analyses conducted. Statistical power refers to the probability of detecting a true effect if one exists; with insufficient sample sizes, this probability is markedly diminished, making it harder to identify significant effects even when genuine associations are present. This increases the risk of a Type II error that is, failing to reject the null hypothesis when it is in fact false. It is

therefore plausible that the two non-significant correlations observed in this study (bullying and eating disorders; bullying and body image) reflect this limitation rather than a true absence of association between these variables.

Smaller sample sizes are associated with wider confidence intervals around estimated effect sizes, meaning the precision of the observed correlation coefficients is reduced. Greater uncertainty about the true population parameters makes it difficult to draw definitive conclusions or to determine whether the obtained effect sizes are representative of the broader LGBTQA population. In this study, the imprecision introduced by the small sample renders the correlation coefficients particularly those approaching but not reaching statistical significance difficult to interpret with confidence.

The small and compositionally narrow sample significantly restricts the generalisability of the findings. The participants represented only gay, lesbian, bisexual, and transgender individuals, leaving out a substantial portion of

the broader LGBTQA community, including those who identify as queer, questioning, asexual, intersex, non-binary, or gender-fluid. Each of these sub-groups faces distinct social pressures, forms of stigma, and psychological stressors that may produce meaningfully different patterns of association between bullying, body image, and eating disorder susceptibility. The absence of these identities from the sample introduces sampling bias and limits the external validity of the findings, making it inappropriate to generalise the results to the LGBTQA population as a whole.

With a limited sample, the results are more vulnerable to the distorting influence of various biases. Sampling bias arising from the non-random or convenience-based selection of participants may mean that those who participated differ in important ways from those who did not, introducing systematic error into the findings. Selection bias and the potential influence of unmeasured confounding variables, such as internalised stigma, social support networks, socioeconomic status, and co-morbid mental health conditions, can have a more substantial

impact on outcomes when the sample is small. These factors can compromise the internal validity of the study, making it difficult to attribute observed patterns solely to the variables under investigation.

The correlational and cross-sectional nature of this study means that all data were collected at a single point in time. Consequently, it is not possible to determine the direction of causality between variables. It remains unclear, for instance, whether experiences of bullying lead to poorer body image and greater susceptibility to eating disorders, or whether pre-existing body dissatisfaction and psychological vulnerability make individuals more susceptible to bullying. Longitudinal research designs, which track participants over an extended period, would be far better suited to examining these temporal and causal dynamics.

A small sample size may not adequately capture the complexity and nuance of relationships among variables. Important interactions and moderating effects such as

how the relationship between bullying and eating disorders may differ by gender identity, sexual orientation, or age may remain undetected due to insufficient data. Furthermore, the limited sample makes it statistically unfeasible to divide participants into meaningful subgroups for further analysis. This prevents researchers from exploring potential variations in findings across different LGBTQA sub-populations, thereby constraining the comprehensiveness of the conclusions that can be drawn.

The data were collected through self-report measures, which are inherently susceptible to social desirability bias the tendency for participants to provide responses they perceive as more socially acceptable rather than entirely accurate ones. This is especially relevant in research addressing sensitive topics such as bullying victimisation, body image dissatisfaction, and disordered eating, where stigma may lead to under-reporting. Additionally, the study does not explicitly confirm the use of standardised, validated psychometric instruments for all variables.

Without verified reliability and construct

validity, the accuracy and consistency of the measurements used remain uncertain.

The study does not provide detailed demographic information about participants, such as age range, ethnicity, geographic location, or socioeconomic background. This absence of contextual data limits the ability to assess the representativeness of the sample or to explore whether findings differ meaningfully across demographic subgroups. Age, in particular, is likely to be a significant moderator younger LGBTQA individuals may be especially vulnerable to bullying-related psychological harm yet such variations cannot be explored within the current dataset.

In summary, the limitations outlined above collectively caution against drawing strong or generalisable conclusions from this study's findings. Future research should seek to address these constraints through the use of larger and more demographically diverse samples that fully represent the breadth of LGBTQA identities, the adoption of longitudinal or experimental designs capable of establishing causality, the employment of validated psychometric instruments, and the statistical control of key confounding variables. Such methodological improvements would substantially strengthen the reliability, validity, and generalisability of research into this important area.

Implications

The findings of this study, though preliminary and bounded by methodological limitations, carry meaningful implications across several domains- including clinical practice, public health policy, educational settings, and the broader social environment of the LGBTQA community. Even where correlations did not

reach statistical significance, the directional trends observed, combined with the one significant finding linking eating disorder susceptibility and body image, offer important signals for practitioners, policymakers, and researchers alike.

The statistically significant inverse relationship identified between eating disorder susceptibility and body image ($r = -0.13$, $p = 0.049$) reinforces the established clinical understanding that body dissatisfaction is a critical psychological precursor to disordered eating. Within the LGBTQA community, this finding carries particular weight. Mental health practitioners working with LGBTQA clients should be attentive to body image concerns as an early indicator of eating disorder risk, incorporating body image assessment into routine screening protocols for this population.

Therapeutic approaches such as Cognitive Behavioural Therapy (CBT), Acceptance and Commitment Therapy (ACT), and body-neutral or body-positive interventions have demonstrated effectiveness in addressing body dissatisfaction. However, for LGBTQA clients, these approaches must be adapted to account for the unique role that minority stress, internalised stigma, and identity-related pressures play in shaping body image. Affirming, identity-sensitive therapeutic frameworks are essential to ensure that clients feel safe exploring these deeply personal and often stigmatised experiences.

While the correlations between bullying and both eating disorders ($r = 0.33$) and body image ($r = 0.30$) did not reach statistical significance in this study, their positive directional trends are consistent with a wider body of literature documenting the harmful psychological consequences of bullying for LGBTQA individuals. Clinicians should not dismiss bullying history as clinically irrelevant in the absence of statistically definitive findings. Instead, a thorough psychosocial history — including assessment of past and present bullying experiences, particularly identity-based harassment — should be a standard component of mental health evaluations for LGBTQA clients presenting with body image concerns or disordered eating.

Given the positive trends observed between bullying and psychological harm in this study, educational institutions have a clear responsibility to implement and rigorously enforce inclusive, LGBTQA-affirming anti-bullying policies. Bullying within school

environments whether verbal, physical, social, or cyberbullying can have long-lasting psychological consequences, particularly for young LGBTQA individuals who may already be navigating the challenges of identity formation in hostile or unsupportive environments. Schools should move beyond generic anti-bullying frameworks to develop policies that explicitly address identity-based harassment related to sexual orientation, gender identity, and gender expression.

Educational programmes that promote mental health literacy including an understanding of body image, eating disorders, and the psychological effects of bullying should be embedded within school curricula in an LGBTQA-inclusive manner. Students should be taught to recognise early signs of psychological distress in themselves and their peers, fostering a culture of peer support and early help-seeking. LGBTQA-inclusive sex and relationships education that normalises diverse identities can also play a protective role by reducing the stigma and isolation that contribute to the psychological vulnerabilities observed in this study.

This study adds to the evidence base supporting the need for dedicated, accessible, and culturally competent mental health services for LGBTQA individuals. Eating disorders are among the most clinically severe mental health conditions, carrying high rates of morbidity and mortality, yet they remain under-identified and under-treated within LGBTQA populations. Public health strategies should prioritise the development and funding of LGBTQA-affirming eating disorder services, ensuring that individuals from across the full spectrum of sexual and gender identities can access appropriate care without fear of discrimination or misunderstanding.

The psychological vulnerabilities evidenced in this study are, in significant part, products of the social environment rather than intrinsic characteristics of LGBTQA individuals. Broader policy interventions that reduce systemic discrimination, promote legal protections for LGBTQA individuals, and foster inclusive social environments have the potential to mitigate minority stress and its

downstream psychological effects. Policymakers should view mental health outcomes for LGBTQA individuals not merely as a clinical issue but as a direct consequence of social and structural inequality, and should legislate accordingly.

One of the most consistent protective factors identified in the literature on LGBTQA mental health is the presence of strong social support networks and a sense of community belonging. While this variable was not directly measured in the current study, its absence as a control variable represents a notable limitation and simultaneously highlights an important implication: community organisations, support groups, and LGBTQA-affirming spaces have a vital protective function. Investment in LGBTQA community infrastructure — including peer support groups, community centres, and online safe spaces can meaningfully reduce feelings of isolation that exacerbate body image concerns and eating disorder risk.

Challenging Harmful Body Ideals Within and Beyond the LGBTQA Community

Body image dissatisfaction does not arise in a vacuum; it is shaped by the internalisation of social and cultural ideals about how bodies should look. Within the LGBTQA community, specific sub-cultural body norms — including muscularity ideals in gay male communities, and thinness ideals that transcend gender — can compound the effects of broader societal beauty standards. Campaigns that promote body diversity, challenge narrow ideals of attractiveness, and affirm the full range of body types across LGBTQA identities are needed both within community media and in mainstream cultural representations.

Recommendation

Based on the findings, limitations, and implications of this study, the following recommendations are proposed to guide future research in this area. These recommendations are directed at improving the methodological rigour, representational breadth, and practical

relevance of research on bullying, body image, and eating disorders within the LGBTQA community.

Increase Sample Size and Statistical Power

Future studies should aim to recruit substantially larger samples to ensure adequate statistical power. A power analysis conducted prior to data collection using effect sizes estimated from existing literature would allow researchers to determine the minimum sample size required to detect effects of the expected magnitude at a predetermined significance level. Larger samples would also reduce the risk of Type II errors, narrow confidence intervals around effect size estimates, and improve the precision and reliability of the findings. A sample of at least 100 to 200 participants would represent a meaningful improvement over the current study.

To address the inherent limitation of cross-sectional correlational research in establishing causal direction, future studies should employ longitudinal designs that track participants

over time. By measuring bullying experiences, body image, and eating disorder susceptibility at multiple time points, researchers would be better positioned to determine whether bullying precedes and predicts declines in body image and increases in disordered eating, or whether the reverse or reciprocal patterns hold. Longitudinal data would also allow for the examination of how these relationships evolve across different life stages.

Future research should employ well-validated, standardised psychometric tools with established reliability and construct validity. For eating disorder susceptibility, instruments such as the Eating Attitudes Test (EAT-26) or the Eating Disorder Examination Questionnaire (EDE-Q) are widely used and validated. For body image, the Body Shape Questionnaire (BSQ) or the Multidimensional Body-Self Relations Questionnaire (MBSRQ) offer robust measurement. For bullying, the Revised Olweus Bully/Victim Questionnaire or similar validated tools should be employed. The use of such instruments would ensure greater comparability across studies and improve the construct validity of the findings.

Future research should incorporate statistical controls for key confounding variables identified in the existing literature, including internalised homophobia or transphobia, perceived social support, socioeconomic status, mental health co-morbidities (particularly depression and anxiety), and the nature, frequency, and duration of bullying experiences. Techniques such as multiple regression analysis, structural equation modelling (SEM), or hierarchical linear modelling would allow researchers to examine the unique contribution of each variable to the outcomes of interest while holding confounders constant.

Future studies should make a deliberate effort to recruit participants from across the full breadth of LGBTQA identities, including but not limited to queer, questioning, asexual, intersex, non-binary, gender-fluid, and pansexual individuals. Given the distinct social experiences and psychological stressors associated with different identities, studies that capture this diversity will produce more

nuanced and ecologically valid findings. Targeted recruitment strategies, partnerships with LGBTQA community organisations, and the use of online platforms that reach diverse LGBTQA sub-communities can facilitate broader and more inclusive sampling.

Samples should be designed to capture demographic diversity across age, ethnicity, geographic location, cultural background, and socioeconomic status. Such diversity is essential for understanding how these intersecting social identities moderate the relationships between bullying, body image, and eating disorders. Research that centres the voices and experiences of LGBTQA individuals from marginalised ethnic, cultural, or socioeconomic backgrounds is particularly needed, as these individuals face compounded layers of minority stress that existing research has yet to adequately address.

Future research should move beyond simple bivariate correlations to examine the mediating and moderating roles of variables such as internalised stigma, resilience, self-esteem,

and social support in the relationships between bullying, body image, and eating disorders. For instance, social support may moderate the relationship between bullying and eating disorder susceptibility, such that individuals with strong support networks are buffered against the psychological harms of bullying. Identifying such moderators has direct implications for the design of targeted interventions.

The complexity of the psychological and social experiences captured in this study is not fully amenable to quantitative measurement alone. Future research would benefit from the integration of qualitative methods — such as in-depth interviews or focus groups — to explore participants' lived experiences of bullying, body image, and eating disorder symptoms within the context of their LGBTQA identity. A mixed-methods design would enrich the understanding of the mechanisms and meanings behind the statistical associations observed, producing findings that are both statistically robust and humanly resonant.

With a larger sample, researchers should conduct sub-group analyses to examine whether the relationships between bullying, body image, and eating disorders differ across LGBTQA identity sub-groups, age groups, genders, and cultural backgrounds. Such analyses would reveal whether the findings of studies like the current one mask important within-group heterogeneity and would allow for the development of more precisely targeted interventions for the sub-populations most at risk.



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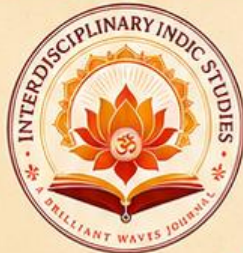
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