NoBODY Left Behind: Examining Body Image in Nonbinary Individuals

By

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Abstract

Despite progress in understanding body image's complexity and gender diversity, existing research often overlooks or inadequately addresses the experiences of nonbinary individuals. Traditional body image measurement and research studies typically fail to accommodate nonbinary identities at all, let alone in nonpathological contexts, thereby excluding a significant segment of the population from meaningful participation, and therefore inclusion and advancement of research or practice. This dissertation seeks to bridge this gap by exploring the connection between gender and body image through two studies.

In Study 1, I present a validation of the Androgynous Body Dissatisfaction Scale (ABDS). The purpose of this study was to improve upon existing binary gendered measures of body dissatisfaction by creating one depicting androgynous figures with the goal of expanding its use to include gender-nonconforming individuals. I collected data from 200 nonbinary participants through Prolific. I used descriptive and correlational analyses to examine the scale's psychometric properties and associations to other relevant psychosocial constructs. The validity evidence collected in support of the ABDS suggests that it not only works similarly to previous scales and is related to relevant psychosocial variables with similar magnitude as has been reported in the literature, but that nonbinary individuals feel it better represents their gender identity and prefer to use it over a gendered body dissatisfaction scale.

In Study 2, I used a qualitative descriptive design to describe nonbinary students' experiences of body image at post-secondary school. This study explored how body image is experienced in the school context from interviews with five nonbinary students. The purpose was to gain a better understanding of their personal accounts given that body image has been found to be an important influence on cisgender students' grades, academic motivation, and classroom

emotions. An inductive thematic analysis revealed a meaningful link between nonbinary gender identity and body image as was highlighted through three overarching themes: how participants' construct their body image, how they feel their body image, and how their body image impacts them at school. By centering nonbinary voices and experiences in both studies, this research aims to contribute to a more inclusive and nuanced understanding of body image that respects and affirms diverse gender identities.

These studies prioritized nonbinary individuals without pathology or comparison and showed that important quantitative and qualitative gains can be made by doing so. In conclusion, this dissertation not only advances empirical knowledge but also contributes to social change by shifting the common pathologizing discourse and promoting gender inclusivity in relation to the study and practice of body image. Noteworthy implications for research, practice, and theory are discussed.

Preface

This thesis is an original work by Devon Chazan. The research projects, of this dissertation, is based on, received research ethics approval from the University of Alberta Research Ethics Board, Validation of the Androgynous Body Dissatisfaction Scale, Study ID Pro00126321, March 3, 2023 and Nonbinary Students' Experiences of Body Image at Post-secondary School, Study ID Pro00131528, July 20, 2023.

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Chapter 1: General Introduction

Body image has long been a subject of fascination and concern across cultures and epochs. The historical narratives surrounding body image reflect deep-seated societal norms, often intertwining physical appearance with social status, health, and personal worth. From ancient Greece's glorification of the athletic body to the Renaissance's celebration of full figures, perceptions of the ideal body have evolved alongside cultural and historical contexts (Grogan, 2021). However, these perceptions have rarely been benign. Body image during the 19th and 20th centuries imposed rigid standards rooted in the medical model, pathologizing deviations from the norm. This approach, focusing on norms derived from a narrow conception of health and beauty, perpetuated harmful stereotypes, and contributed to the marginalization of individuals whose bodies did not conform (Rumsey & Harcourt, 2004).

Central to discussions of body image is its inherently gendered nature. Traditional frameworks dichotomized body image within a male-female binary, tethered to anatomical sex and societal expectations. However, contemporary understandings of gender have transcended these binary confines, recognizing gender as a multifaceted spectrum encompassing diverse identities (Ali, 2023). The evolving discourse on gender challenges the outdated notion that body image must conform to rigid, sex-based rules. As gender diversity becomes increasingly acknowledged and affirmed, so too must our understanding of how individuals perceive and experience their bodies. Nonbinary individuals, who identify outside the traditional male-female dichotomy, present a critical lens through which to expand our conceptualizations of body image.

Despite progress in understanding body image's complexity and gender diversity, existing research often overlooks or inadequately addresses the experiences of nonbinary individuals. For instance, with nonbinary individuals research has typically been studied in the context of pathology such as gender dysphoria and disordered eating. Traditional body image measurement and research studies typically fail to accommodate nonbinary identities at all let alone in nonpathological contexts, thereby excluding a significant segment of the population from meaningful participation, and therefore inclusion and advancement of research or practice. This dissertation seeks to bridge this gap by exploring the connection between gender and body image through two studies.

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be an important influence on cisgender students' grades, academic motivation, and classroom emotions. An inductive thematic analysis revealed a meaningful link between nonbinary gender identity and body image as was highlighted through three overarching themes: how participants' construct their body image, how they feel their body image, and how their body image impacts them at school. By centering nonbinary voices and experiences in both studies, this research aims to contribute to a more inclusive and nuanced understanding of body image that respects and affirms diverse gender identities.

While Study 1 focuses on developing a more inclusive tool for assessing body dissatisfaction in nonbinary individuals, Study 2 delves into the lived experiences that such tools aim to capture. Together, these studies reflect a dual approach: advancing measurement while also amplifying the voices behind the data. This integration of quantitative validation and qualitative exploration deepens our understanding of how body image concerns intersect with gender identity, highlighting both the importance of appropriate assessment tools and the complex realities of navigating body image as a nonbinary individual. Through these complementary studies, this research ultimately seeks to push beyond binary frameworks, offering both a practical solution for measurement and a nuanced view of body image experiences in a traditionally underrepresented group and in an integral setting.

This dissertation consists of four parts. First, in this General Introductory Chapter, I begin by providing a brief overview of the gendered aspects of body image. I do not provide a fulsome review of the literature, however, because more of that content is presented in the discrete studies. Instead, I explore how the applications of queer theory (Jagose, 1996) can underpin my research. I also discuss the broad ethical considerations that I carefully thought-out before commencing the research. Second, the two empirical studies are presented as stand-alone

manuscripts in Chapters 2 and 3. Third, I conclude the dissertation with Chapter 4 in which I return to queer theory and provide a more fulsome discussion related to the results across the two studies, delineate implications for research, practice, and theory, and share personal and professional learnings from this work.

Gendered Body Image

The construct of body image is multi-dimensional and, therefore, cannot be operationalized with one single definition or measurement tool. Body image is a subjective and dynamic concept. Based on my broad reading of the literature, body image seems to cover attitudinal, perceptual, and behavioural components. The attitudinal component refers to individuals' thoughts and feelings related to the mental picture they hold of their bodies. The perceptual component encompasses how the physicality of the body is viewed, in terms of body size, shape, and specific appearance-focused perceptions. The behavioural component is guided by individuals' body image attitudes and perceptions and refers to the appearance-related actions intended to monitor and correct perceived flaws as well as to avoid distressing situations. Although both clinicians and researchers have noted the way body image can vary across time and contexts, the large majority of measures view the construct as a stable trait (Cash et al., 2002).

Body image is a complex and socially constructed phenomenon that intersects deeply with gender identity. Traditionally, body image has been framed within a binary understanding of gender, predominantly centered around male and female categories based on biological sex. However, as societal understanding of gender has evolved to recognize a spectrum of identities

beyond the binary, it becomes apparent that traditional norms around body image no longer adequately reflect the diversity of gender experiences.

Body image is socially constructed in the sense that it is influenced by cultural norms, media representations, and social interactions. These factors shape individuals' perceptions of their own bodies and what is considered desirable or acceptable within a given society (Cash & Smolak, 2011). Historically, body image ideals have been heavily influenced by gender norms, reinforcing certain physical attributes as masculine or feminine. For instance, muscularity has traditionally been associated with masculinity, while thinness has been idealized for femininity (Fredrickson & Roberts, 1997). There is evidence that children as young as three-years-old already have internalized the Eurocentric thin ideal wherein fat bodies are perceived negatively and slender bodies are preferred (Tantangelo et al., 2016; Tremblay et al., 2011). For instance, researchers have found children ages 3-5 to associate negative adjectives (e.g., mean, stupid, ugly) with big-bodied figures and positive ones (e.g., nice, smart, cute) with small-bodied figures (Spiel et al., 2012; Worobey & Worobey, 2014). Not only do young children hold these attitudes about others' bodies, but there is also evidence that their evaluations of their own bodies are relatedly impacted. In their review of 16 studies, Tantangelo and colleagues (2016) found that between 20%-70% of children under the age of six demonstrated body dissatisfaction.

In recent years, however, there has been a growing recognition that gender identity is not limited to a binary understanding but encompasses a spectrum of identities, including nonbinary, genderqueer, and genderfluid individuals (Budge et al., 2013). These identities challenge the rigid dichotomy of male and female and highlight the diverse ways people experience and express their gender. Given this evolving understanding of gender, the traditional standards around body image are increasingly being questioned. If gender itself is no longer confined to

strict male-female categories based on biological sex, then why should body image ideals and overall discourse remain constrained within these outdated norms? Researchers have been slowly beginning to address this question. However, as is seen in the research I review next, much of this work has been pathologizing and somewhat detached from the daily experiences of nonbinary individuals.

Review of Empirical Research

Individuals with clinically recognized gender dysphoria are highly distressed by the appearance of their bodies (Bandini et al., 2013). The discrepancy between physical characteristics and gender identities contributes to the body dissatisfaction experienced by gender diverse adults who may have unwanted primary (e.g., genitalia) and secondary (e.g., increased body hair, widening hips) sexual characteristics. The development of secondary characteristics has been found to have the greatest influence on overall wellbeing for gender nonconforming individuals (Jones et al., 2016). Adolescence is the period during which bodies develop these secondary sexual characteristics and is therefore the most common time in which gender dysphoria occurs. The incongruity has been related to psychological difficulties such as, mood disorders, self-harm behaviours, eating disorders, and suicidality (Peterson et al., 2017).

Researchers have noted that people who have been diagnosed with gender dysphoria are more likely to avoid looking in the mirror on a regular basis, to experience sexual discomfort, to feel more insecure, and to engage in disordered eating behaviours (Holmberg et al., 2019; Jones et al., 2016). Individuals experiencing gender dysphoria, particularly adolescents, are reported to have lower levels of perceived attractiveness and self-confidence than their peers (Becker et al., 2018). For gender nonconforming individuals assigned a male sex at birth, the genitalia and body hair have been described as key features that they choose to dissociate with as these quite

saliently misalign with their gender identities. For those assigned a female sex at birth, it is the softer facial features and breast development that bring about this sense of dissociation (van de Grift et al., 2016). Those who have not undergone gender-affirming surgery or therapy report the highest levels of body dissatisfaction (Bandini et al., 2013). It is not uncommon for gender diverse individuals to alter their physical appearance in an effort to align with their gender identity/reduce distressed feelings. Some alterations include chest binding, wearing makeup, tucking in genitalia, padding one's hips, or wearing a phallic prosthetic.

Gender diverse individuals who experience body dissatisfaction are at higher risk of developing disordered eating. These behaviours emerge as an effort to obtain a body that is more consistent with their gender identity or to mask those associated with their sex assigned at birth. Nearly half of the gender diverse adolescents in Watson and colleagues' (2017) study reported previous binge eating, restricting, or purging behaviours. To mask misaligned body features such as 'womanly' curves or breast size, food restrictions are used to achieve a thin appearance. The practice of restricting has also been found to prevent a person's period cycle from occurring. Binge eating behaviours are used in efforts to develop curves or breast size or to conceal these more defined body shapes associated with femininity.

Researchers have found transgender women to report higher levels of body dissatisfaction, show greater risk for disordered eating habits, and display more body checking behaviours than do cisgender men, cisgender women, and transgender men alike (Becker et al., 2016; Vocks et al., 2009). There is empirical support that gender-affirming therapy can reduce the experiences of body dissatisfaction and eating disorder symptomology. This can include the social transition as a woman, hormone therapy (i.e., taking estrogen, progestin, and androgen blockers) and gender confirmation surgery (Testa et al., 2017; Vocks et al., 2009). Greater

societal acceptance and the attraction of desired partners has been linked to the development of traditionally associated feminine body features for many transgender women (Holmberg et al., 2019).

Compared to cisgender men and cisgender women, transgender men also experience significantly higher levels of body dissatisfaction, disordered eating behaviours, and body checking (Becker et al., 2016; Vocks et al., 2009). A study by Feusner and colleagues (2016) found that transgender men experienced disgust at the sight of their own bodies. Higher ratings were given by the same participants when presented with altered images of their bodies that aligned more closely with their gender identity (i.e., more masculine passing). High levels of body dissatisfaction among transgender men are associated with heightened risky sexual behaviours and increased suicidality (ideations, attempts, and fatalities) (Holmberg et al., 2019; Peterson et al., 2017).

Research indicates that nonbinary individuals, who do not exclusively identify as man or woman, often face challenges in finding body image representations that resonate with their identity (Hennagan et al., 2013). Moreover, the social construction of body image intersects with various forms of oppression and discrimination, including sexism, transphobia, and fatphobia (Calogero & Thompson, 2010). These intersecting systems of oppression reinforce narrow ideals of beauty and perpetuate stigma against bodies that do not conform to mainstream norms.

In part through advocacy and awareness, research related to nonbinary individuals more broadly has started to gain traction in recent years. However, in this process nonbinary individuals are often grouped with transgender individuals in studies, which can obscure the distinct experiences and needs specific to nonbinary people. Nonbinary people have unique experiences that differ from those of binary transgender individuals. Studies show that nonbinary

individuals face mental health challenges, such as higher rates of anxiety, depression, and suicidal thoughts, which are compounded by societal misunderstanding and lack of acceptance (Fiani, 2018). Additionally, accessing appropriate healthcare is often challenging due to medical systems being structured around binary sex models, leading to inadequate or inappropriate care (Sen et al., 2007). While there has been some progress in social and legal recognition of nonbinary identities, such as nonbinary gender markers on official documents, this recognition is not yet widespread (Elias & Saffran, 2020). Significant strides are still needed to ensure nonbinary voices are adequately represented in school related research.

To address these issues, there is a growing call within research and advocacy communities to expand the concept of body image to be more inclusive of diverse gender identities. As society's understanding of gender evolves to embrace diversity, it is imperative that the work around body image also evolves. This evolution should include dismantling gendered body image norms and methodologies that reinforce binary stereotypes and exclude binary participants by creating space for a more inclusive and affirming representation of diverse gender identities.

Conceptual Framework

In identifying a conceptual framework to bring together my thinking of my research with nonbinary individuals, I sought something that both encompasses diverse perspectives, particularly those often marginalized, and challenges existing norms and systems of oppression. I chose queer theory to do so (Jagose, 1996) as it aligns with my goals of making body image research and practice more gender inclusive. Queer theory is a framework that challenges societal norms surrounding gender and sexuality. It seeks to uncover the social and power dynamics embedded in everyday experiences. Using queer theory to understand their work,

researchers can explore topics beyond the conventional binaries of gender and sexuality, critiquing the assumptions that heterosexuality and cisgender identities are the norm. The roots of queer theory can be traced back to the work of philosopher Foucault in the 1970s (2003), who posited that gender and sexual identities are not inherently biological but are shaped by societal constructs and cultural perceptions. However, the term queer theory itself only gained academic recognition in the 1990s, due to scholars such as de Laurentis (1991) and Butler and Trouble (1990). Next, I critically reflect on how the tenants of queer theory relate to my doctoral research.

Positionality

In the context of queer theory, researchers are encouraged to engage in reflective practices concerning their own biases and positionality (Meyer & Millesen, 2022). Queer theory, with its focus on challenging normative structures and questioning societal assumptions about gender and sexuality, necessitates a deep awareness of how a researcher's personal background, identities, and experiences can influence their work. This critical self-examination allows researchers to recognize the ways in which their own social identities shape their perspectives, interactions with participants, and interpretations of data. Acknowledging positionality not only helps in identifying potential biases but also ensures that the research process and outcomes remain as authentic as possible. Applying such critical examination to myself, my research on nonbinary individuals' body image is informed by both personal reflections and professional experiences. As a cisgender woman using she/her pronouns, I am conscious of the societal privileges associated with conforming to traditional gender norms, while also committed to advancing inclusivity for nonbinary individuals. Personally, I have wrestled with internalizing societal ideals surrounding thinness, actively striving to reject these standards. Having grown up

during a time when gender nonconforming identities were less understood, I observed peers who faced significant social challenges due to their identities.

At its core, my ontological stance recognizes the complexity inherent in the phenomena I investigate—nonbinary individuals' body image. I acknowledge that these experiences extend beyond quantification and measurement, as emphasized in positivism perspectives. Rather, they are also profoundly shaped by subjective perceptions, cultural contexts, and social interactions, as highlighted in qualitative research approaches (Creswell, 2013; Lincoln & Guba, 1985). Embracing this dual ontological perspective, my research endeavors to create space for non-binary individuals in both traditional quantitative research paradigms that must be modified even as they persist and in qualitative descriptive designs that allow for insights from participants' voices.

Epistemologically, my approach aligns with Creswell's (2013) emphasis on empirical evidence and systematic inquiry through quantitative methods, seeking to establish objective knowledge regarding constructs such as body dissatisfaction and the correlates of body image among nonbinary individuals. Through rigorous statistical analysis and the use of empirically validated measurement tools, I aim to derive findings that are reliable and generalizable, thereby contributing to the empirical foundation of the body image research area (Creswell, 2013). Concurrently, I value the interpretive understanding provided by qualitative methods. These methods enable me to delve into the meanings, experiences, and contextual nuances that shape individuals' perceptions of body image, thereby uncovering deeper insights into the lived experiences and subjective dimensions of body image among diverse gender identities. My acceptance and use of both quantitative and qualitative methodologies, informed by both ontological and epistemological considerations, seeks to create space for non-binary people in

both quantitative rigor and qualitative depth, ultimately contributing to more inclusion and an increased understanding of body image within nonbinary communities.

This stance and perspectives have been deeply influenced by my professional experiences. Particularly, in my work in hospitals within eating disorder programs I witnessed firsthand the critical importance of objective measurement tools in understanding and addressing severe body image disturbances that profoundly impact both mental and physical health outcomes. The ability to collect empirical data was instrumental in supporting treatment interventions and measuring progress effectively. Concurrently, my extensive community work—such as leading groups with teenagers, collaborating in school settings, and engaging in community mental health initiatives—exposed me to a diverse array of individuals with intersecting identities and varied life experiences. These interactions underscored the limitations of relying solely on quantitative measures to comprehend the complex nuances of individuals' lived realities. It became evident that non-binary people must have full access to participation, meaning making, and support through both approaches. I believe that a comprehensive understanding of body image and its impacts necessitates embracing qualitative insights that capture the richness and diversity of human experiences in addition to numerical data points.

Disrupting Normative Paradigms

One of the central tenets of queer theory is to disrupt normative paradigms that dictate conventional understandings of gender. By challenging these established norms, queer theory seeks to expose and deconstruct the rigid binaries and societal expectations that marginalize diverse identities and experiences. One such place in need of disruption is the quantitative methodologies that dominate the field of body image and dissatisfaction (Murnen & Smolak, 2019). Indeed, non-binary individuals are excluded from quantitative research because of the

lack of appropriate measurement tools. This is unacceptable. As long as research continues to count and score, it must be done in a way that allows non-binary individuals to be counted and scored. In other words, rather than upending the paradigm itself, my work forces researchers to contend with the exclusionary nature of their tools and creates an inclusive alternative.

In the first study I aim to disrupt the normative paradigm of measuring body dissatisfaction through binary measurement tools. Traditional methods like Stunkard's Figure Rating Scale (1983) have long been the standard, yet they inherently reflect binary gender norms, failing to include individuals who identify outside the male-female spectrum. This limitation excludes nonbinary individuals from quantitative assessments of body dissatisfaction, overlooking their unique experiences and needs in understanding body image (Gardner et al., 2009). Mutale and colleagues (2016) introduced improvements to traditional body dissatisfaction measures by developing the Body Dissatisfaction Scale (BDS), which utilizes computer-generated bodies based on real-life figures. Despite these advancements, the BDS and similar scales remain limited by their binary gender framework, reinforcing the marginalization of nonbinary individuals in research settings (Mutale et al., 2016). By creating a gender-inclusive body dissatisfaction scale, I aim to make body image research more gender inclusive through depictions of androgynous body types, allowing nonbinary individuals to accurately represent their body image perceptions.

Amplifying the Voices of Marginalized Communities

Queer theory also emphasizes amplifying the voices of marginalized communities by challenging dominant narratives and elevating the perspectives of those often excluded or misrepresented. This approach seeks to highlight and address the unique experiences and challenges faced by these communities, fostering a more inclusive and equitable dialogue.

In the second study, the lived experiences of nonbinary individuals are prioritized through qualitative methodology. Qualitative approaches provide a deeper understanding of how nonbinary individuals conceptualize and experience body image beyond the confines of traditional measurement tools (Pfeffer & Kende, 2008). This work explores descriptions of how nonbinary individuals navigate societal norms and expectations related to body image at school, shedding light on the psychosocial impacts of existing gendered frameworks. For nonbinary individuals, the narrative for body image is largely pathologized and fails to recognize their chosen bodies in the routine aspects of life such as school. Thus, I wanted to elevate the voices of nonbinary students' body image as a natural aspect of their person.

Rejecting Comparisons

In both studies, the elevation of nonbinary perspectives and participation occurs without the need to compare to mainstream samples of cisgender individuals. Rather than framing nonbinary experiences against cisgender norms, which can reinforce oppressive standards, the work intentionally focuses solely on the narratives and perspectives of nonbinary individuals themselves. This anti-oppressive stance seeks to validate, prioritize, and amplify nonbinary identities, advocating for environments that affirm their diverse experiences. Overall, in the two studies that comprise this dissertation I not only work to disrupt the normative Western-centric body image measurement but also prioritize amplifying the voices and described experiences of nonbinary individuals in efforts towards promoting greater equity and inclusion (Hardeman et al., 2022). In other words, the tenants of queer theory come together in the completion of these projects.

Ethical Considerations

This project was approved by REB 2 at the University of Alberta and qualifies as minimal risk (approvals included in Appendix A). Nonetheless, I attended to three ethical aspects that are particularly important for working with vulnerable populations according to the tricouncil policy statement on ethics (Canadian Institutes of Health Research et al., 2018): possibly sensitive nature of the topic, the potential power imbalances, and the benefits for the participants.

Responding to survey measures related to body image as well as sharing experiences around gender identity have the potential to elicit distressing emotions for some participants. As such I ensured that participants were fully aware that their participation is voluntary. Survey participants knew that they could stop responding at any time without penalty or skip any questions they were uncomfortable answering. Interview participants were also free to withdraw from the study at any time. However, one of the benefits of qualitative research is that the participant is largely in control of what content and experiences they choose to share. Nonetheless, I provided all participants, from both studies, a list of gender-affirming counselling resources should they wish to seek support following their participation. One of these such resources was *Trans Lifeline* (Trans Lifeline, 2022) which is a hotline that provides emotional support specifically for nonbinary and binary trans individuals.

I also ensured to respect power imbalances with interviewees as Creswell (2013) argues that it inherently exists between the data collector conducting the interview and the participants. The participants are the ones offering their vulnerability through engaging in sensitive interview interactions. In being mindful of this, I engaged in member-checking to ensure accuracy and authenticity leading into the interpretations. I also refrained from sharing personal

impressions/judgments (favourable or otherwise) during data collection to prevent being viewed as someone who has authority to dictate the moral value of a participant's remarks.

In addition, Creswell (2013) advises that all participants receive benefits from their involvement in the research. It is argued that there needs to be reciprocity back to the participant to avoid exploitation of them. Although there are not many direct benefits for participation in this research, Prolific survey participants were remunerated at an intentionally "good" rate to reflect appreciation for their time, in efforts to oppose often undervaluation of minority groups. Additionally, interview participants were remunerated in a gift card of their choice. I received funding for these studies through the University of Alberta's Intersections of Gender Thesis Grant in order to be able to remunerate participants rather than asking them to volunteer given that volunteering can be viewed as a privileged activity (e.g., Hustinx et al., 2022). Moreover, participants may have appreciated the opportunity to share their thoughts, reflections, and stories regarding the intersection of their body image experiences and nonbinary gender identity, as well as to contribute to advancing research in this field.

Conclusion

In striving to illuminate the relationship between body image and gender diversity, this dissertation endeavors to catalyze a shift in how we understand and address body image concerns. By foregrounding nonbinary voices and experiences, my research challenges the prevailing binary frameworks that have historically marginalized diverse gender identities. Through the development of the Androgynous Body Dissatisfaction Scale (ABDS) and the qualitative exploration of nonbinary students' lived experiences, this work not only expands the methodological toolkit available to researchers and practitioners but also amplifies the narratives

that have long been excluded from mainstream discourse. Moving forward, I envision this research contributing to broader societal shifts towards inclusivity and equity.

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Chapter 2:

Validation of the Androgynous Body Dissatisfaction Scale (ABDS)

The body image literature has overwhelmingly focused on cisgender individuals, namely people who's gender identity corresponds with their sex assigned at birth. Moreover, the research has largely highlighted gendered body ideals of thinness for cisgender women (Owen & Laurel-Seller, 2000) and muscularity for cisgender men (Stratton et al., 2015), both of which are rooted in white Eurocentric standards (Awad et al., 2015). This viewpoint of body image suggests binary, white, and cis-normative beliefs about the body and does not adequately consider the intersectionalities of socially constructed ideas like gender and body image.

The Social Construction of Gender

In contrast to sex, which refers to the biological and physical traits determined by chromosomal manifestation, gender refers to the social or cultural traits prescribed by one's contexts (American Psychological Association, 2015). Men and women in different cultures develop different manners and customs that are in part shaped by social norms/practices and the expectations of others. Masculinity is often thought of as being powerful, competitive, independent, and assertive, whereas femininity is associated with submissiveness, nurturance, and sensitivity (Connell, 2020). Social scientists believe these notions came about during the Industrial Revolution that led to men being employed outside the home, and women remaining at home with a focus on family caretaking. Individuals are provided with greater social reinforcement for displaying gender-corresponding traits and engaging in gender-consistent roles. In essence, rather than being inherent aspects of men and women, social and cultural forces shape one's gender development. For instance, it is therefore no surprise that women do indeed

develop greater emotional sensitivity due to their more frequent engagement in nurturing tasks (Eagly & Wood, 2013).

The Social Construction and Measurement of Body Image

Body image is also socially constructed around notions of gender. The literature has consistently found that women and men experience body image differently in their thoughts, feelings, and behaviours with respect to their bodies (e.g., Feingold & Mazzella, 1998). Throughout history, beauty ideals have defined the standards of physical attractiveness within a culture based on certain characteristics of the face and body. Men and women strive to achieve these accepted ideals of bodily perfection, despite often being unattainable and unrealistic. As dictated by cultural beauty ideals, men and women strive for distinct appearance attributes. Currently, in Western culture, that is muscularity for men (e.g., V-shaped body, strong upper body, flat stomach) and thinness for women (e.g., large breasts, small waist, low body fat).

Based on these norms, researchers study body dissatisfaction (Tabaac et al., 2017), which is primarily assessed using pictorial figure rating scales. These measures, such as Mutale and colleagues Body Dissatisfaction Scale (BDS; 2016), require participants to select either man or woman before being accordingly presented with stereotypically feminine or masculine bodies that grow successively in size. The female body stimuli have breasts and an hourglass type shape, whereas the male body stimuli appear to have an inverted triangle shape and muscle definition. Participants select the body that they would ideally like to look like as well as the one they feel they actually look like. The discrepancy between the two selected, if any, is designated their body dissatisfaction score. Higher discrepancies mean higher levels of body dissatisfaction. Body dissatisfaction has longstanding small to moderate associations with noteworthy psychosocial constructs in the literature including, but not limited to: body appreciation (e.g., r =

-.35, Swami et al., 2008), appearance evaluation (e.g., *r* = -.45, Chen et al., 2010), appearance comparison (e.g., *r* = .45, Bamford & Halliwell, 2009), dieting behavior (e.g., *r* = .40, Swami et al., 2012), anxiety (e.g., *r* = .20, Doumit et al., 2016), and self-esteem (e.g., *r* = -.27, Tiggemann, 2005). These types of associations, however, are missing for non-binary individuals in large part because there are no measurement tools.

Additionally, a critical omission from the literature is research that makes the distinction between binary transgender individuals, for example, born male but identifies as a woman (a binary gender representation) and gender nonbinary individuals whose identities do not fit with the binary perspective of "either/or" man/woman (Richards et al., 2016). The small body of research in the gender-diverse body image domain has focused binary transgender people and found, perhaps unsurprisingly, that gender incongruence is associated with high body dissatisfaction. Most of this work is also done in the context of pathology, using clinical samples, and reveals high rates of disordered eating behaviours (Alanka et al., 2012). It is hypothesized that in efforts to suppress or accentuate secondary sexual characteristics, binary transgender men and women become preoccupied with weight loss/weight gain which serves as an integral risk factor in the development of eating disorders (Algars et al., 2012; Hepp et al., 2004; Murray et al., 2013). Although most of this research has been qualitative, Vocks and colleagues (2009) found that binary transgender individuals experience greater levels of body dissatisfaction compared to cisgender men and women in one of the first large-scale quantitative studies in this area.

Nonbinary individuals, however, do not appear to experience the same levels of gender incongruence as binary transgender people (Jones et al., 2020) perhaps because they are not actively trying to fit a societally defined binary. Instead, nonbinary individuals choose to express

themselves with a range of gender identity labels including agender, gender fluid, and genderqueer (Richards et al., 2016). Nonbinary individuals hold body ideals that are non-stereotypical and exist outside the binary societal ideals. Many nonbinary individuals instead uphold a body ideal of androgyny and see it as a better way of reflecting their gender identity (Galupo et al., 2021). Galupo and colleagues found that gender nonconforming participants in their sample discussed their androgynous body idea as a way to achieve neutrality (e.g., not looking overtly masculine or feminine), challenge binary gender categorizations, and achieve authenticity and comfort through their non-stereotypical body ideal. Cusack and colleagues (2022) further emphasized how an androgynous body ideal is a means of gender expression. They additionally explored actions taken to achieve or maintain an androgynous body ideal including gender expression through clothes, hairstyle, and makeup, altering of primary and secondary sex characteristics (e.g., hormone replacement therapy, grooming body hair, minimising chest), and manipulating body shape or weight through changing exercise and diet behaviors.

The notion of an androgynous ideal body image poses a major challenge to the binary gender-based pictorial body scales that exist (e.g., Mutale et al., 2016; Stunkard, 1983; Thompson & Gray, 1995). Although binary transgender individuals can choose between binary images, the emerging research on nonbinary individuals suggests that to participate in body image research they must choose a binary representation that is not true of their desired body. Without this concession, they simply cannot participate. In other words, with no pictorial body dissatisfaction measure depicting androgynous body stimuli, nonbinary individuals will continue to be excluded from the body image research, despite presumably having unique body experiences worthy of examination. Moreover, because body image continues to change, an

androgynous body dissatisfaction scale would also benefit cisgender individuals who similarly hold androgynous body ideals and do not see themselves in the stereotypically feminine or masculine images (Cusack et al., 2022). The current work seeks to correct the gender binary method of measuring body image through the creation of a body dissatisfaction scale depicting androgynous bodies.

Creation of the Androgynous Body Dissatisfaction Scale

We created a measure of body image based on androgynous bodies hereafter referred to as the Androgynous Body Dissatisfaction Scale (ABDS). The ABDS addresses several gaps in the measurement of body dissatisfaction, offering significant advancements in terms of both body shape and size inclusivity.

First, we designed the ABDS around androgynous body shapes rather than stereotypically masculine or feminine appearing bodies. Existing measures of body dissatisfaction begin with a forced-choice binary gender question which participants have to complete to be able to access gendered images (e.g., Mutale et al., 2016; Stunkard, 1983; Thompson & Gray, 1995). Consequently, nonbinary individuals were excluded from research on body dissatisfaction because they could not provide a valid response to this enforced binary choice question. Rather than a gendered question, the ABDS begins by asking participants to select from four different body shapes including rectangle, inverted triangle, hourglass, and pear. According to Penn Medicine (2022) and other more pop-culture based references (i.e., perpetuated through TikTok and Instagram), these are the most referred to body shapes. While a fifth body shape, apple, is often included in the discourse, we chose to keep it removed given the inverted triangle's similar 'top-heavy' shape. This feature enhances the specificity of the scale, enabling individuals to choose body representations that closely align with their unique physical characteristics. This

addition was important to circumvent the potential loss of relatability in the removal of the more gendered characteristics of the figures, such as breasts. Moreover, the added choice of body type not only accommodates nonbinary individuals but also men and women who similarly possess an array of genetically determined body shapes (Loos et al., 2018).

Second, the ABDS demonstrates a greater degree of weight inclusivity. By featuring bodies with higher body mass indexes (BMIs), the scale accounts for individuals who fall on the higher end of the weight spectrum. This advancement is particularly significant, as it acknowledges and embraces the diversity of body sizes and weights akin to those within the real population, where the average BMI of those residing in North America is in the "overweight range" (Hales, 2020). This addition contributes to the scale's mission of becoming a more inclusive assessment of body dissatisfaction. Finally, the ABDS intentionally includes six bodies of each type separated by BMI ranging from 'underweight' to 'obese'.

Researchers examining the ideal number of bodies on similar types of figure rating scale found the ideal number to be seven plus or minus two (Ambrosi-Randić et al., 2005), suggesting that an even six bodies would be appropriate. The even number of figures eliminates the presence of a midpoint body, which was a characteristic of previous measurement scales. By removing this neutral midpoint option, participants are compelled to make intentional choices regarding the bodies they select, preventing the possibility of defaulting to a neutral position. This deliberate design feature encourages participants to critically evaluate their preferences and perceptions (Dalal et al., 2014).

Overall, the ABDS aims to addresses various limitations present in existing measures of body dissatisfaction. Through its inclusion of androgynous bodies, diverse body types, weight inclusivity, and deliberate design considerations, the ABDS aims to enhance the validity,

applicability, and inclusivity of body dissatisfaction assessment, benefiting nonbinary individuals as well as individuals of all genders and body compositions alike.

The Current Study

This validation study of the ABDS will solely highlight the perspectives of nonbinary individuals, therefore avoiding the frequent exclusion of this group by researchers due to inaccessible measures across genders or comparisons with normative genders. In addition, we will use community a sample, as opposed to clinical ones, to move away from our narrow understanding of nonbinary and androgyny as being enmeshed with psychopathology (Galupo et al., 2021). Through this tool, we hope every individual will be able to participate in quantitative body dissatisfaction research by finding a body that adequately depicts themselves/their ideals. The specific research questions were as follows:

1) What is the shape, centre, and spread of scores on the ABDS? We expected the shape, measures of center, and distribution of scores to be normal and relatively in line with previous binary measures of body dissatisfaction.
2) How does the ABDS correlate with common measures of body image? Given the longstanding associations between body dissatisfaction and psychosocial constructs in the literature, we hypothesized that the ABDS would similarly negatively correlate with body appreciation, appearance evaluation, and self-esteem and positively correlate with comparisons, restrained eating behaviour, and anxiety.
3) Do nonbinary individuals prefer the androgynous ABDS in comparison to existing binary male and female measures to describe their gender identity and body image? We hypothesized that nonbinary individuals would respond more favourably to the ABDS than a binary image.

4) How do participants respond when given a choice to select an ideal body across all body types and sizes? As this question was more exploratory in nature, we had no specific hypotheses.

Method

This was a validation study using a survey design entailing a single administration of questionnaires.

Participants

Two hundred participants completed the questionnaire for this validation study. In line with the two inclusion criteria for participation, every individual in this sample described their gender identity as nonbinary and were 18 years of age or older. The sample ranged in age from 18-69, although the majority fell between 18-36 years old (85%, $M = 28$). The mean age at which participants first started identifying as nonbinary was in young adulthood ($M = 21$, range = 3-55). We sampled exclusively individuals residing in North America with the final sample including 92.5% living in the United States and 7.5% in Canada. The participants came from various ethnic backgrounds: Caucasian (68%), Hispanic (10%), Asian (7.5%), Black (6.5%), Indigenous (1.5%), and multi-ethnic (6.5%).

Procedures

Participants were recruited through Prolific (www.prolific.co) to obtain a robust and exclusively nonbinary sample. Prolific allows researchers to set specific inclusion criteria for prospective participants and quickly matches eligible individuals with the survey. For the current study, the inclusion criteria consisted of nonbinary gender identity, adult consenting age, and residence in North America. Once successfully matched with this study, participants were directed to the online survey linked through Google© Forms. They were first presented with the

study's information page, including broad details about the research goals, consent, benefits/risks of involvement, and privacy/confidentiality parameters. If they wished to continue, the participants were then brought to the first page of the questionnaires. Participants answered questions related to their body image attitudes, perceptions, and behaviours as well as questions tapping into wellbeing. The participants took an average of 10 minutes to complete all components of the survey. Participants were remunerated at a rate deemed "good" by Prolific. Data collection was completed in under 24 hours. Approval for the study procedure was granted by the University of Alberta's Research Ethics and Management Online service (Appendix A).

Measures

The survey consisted of three sets of questionnaires. The ABDS is the newly constructed measure of body dissatisfaction for androgynous bodies. Next, to test construct validity, how well a tool measures the concept or trait it is intended to assess, we included six common psychosocial variables that are regularly associated with body dissatisfaction in the binary gender literature. Finally, we implemented participant satisfaction checks to examine participants' preference between the ABDS and a binary body image in addition to posing a more exploratory perceptual body image question.

Androgynous Body Dissatisfaction Scale (ABDS)

Upholding the above-mentioned criteria, a graphic designer working for the researchers' university was hired to develop the figures of the ABDS through a combination of artistic hand design and specific computer software to size the figures accordingly and in a standardized manner. The ABDS is a newly constructed measure of body dissatisfaction that uses androgynous shapes to avoid forcing a dichotomous gendered approach. Completion of the ABDS has two steps: First participants examine the four common body types of hourglass, pear,

inverted triangle, and rectangle and choose one shape that they perceive is most like their body. The selection of shape then calls forth six different sized bodies of only that shape. Second, participants examine the six body sizes and answer a current body image question "*which figure looks most like your current body?*" and an ideal body image question "*what figure would you most like to look like*?" The 24 bodies across four types and six sizes are depicted in Figure 2.1. To score the ABDS, the discrepancy (i.e., difference score) between the current and ideal bodies create a single body dissatisfaction score. Scores can range from 0 indicating no dissatisfaction to ±6 indicating major dissatisfaction either as being too small (negative scores) or too large (positive scores). Descriptive statistics for the individual body types and the total ABDS are presented in Table 2.1 and described in the results section.

Body Appreciation Scale-2 (BAS-2)

A commonly utilized self-report measure of positive body image is the Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2015). Ten items measure whether participants respect their bodies, appreciate their unique qualities, and reject unrealistic appearance ideals in the media. Participants responded to the BAS-2 on a 5-point scale from *never* to *always*. The scale examines several aspects of positive body image such as, "I feel like my body has at least some good qualities" and "I appreciate the different and unique characteristics of my body". Higher scores indicate more appreciation, acceptance, and respect for one's body and physical self. The BAS-2 has been shown to have high-scale reliability, around $\alpha = .96$ (Tylka & Wood-Barcalow, 2015). See Table 2.2 for all descriptive statistics including scale reliabilities.

Multidimensional Body-Self Relations Questionnaire (MBSRQ)- Appearance Evaluation Subscale

The Appearance Evaluation subscale of the Multidimensional Body-Self Relations Questionnaire (Cash, 2000) is commonly implemented as a standalone measure targeted at assessing individuals' perceived attractiveness. This subscale had participants respond to seven items on a 5-point Likert scale ranging from *definitely disagree* to *definitely agree*. Items are related to the participants' perceived sexual appeal, physique, and attractiveness, both in terms of personal feelings as well as how they view others might consider their appearance, such as, "My body is sexually appealing" and "Most people would consider me to be good-looking". Higher scores indicate higher levels of perceived attractiveness. Reported reliabilities for this subscale are high (e.g., $\alpha = .88$, Cash, 2000).

Physical Appearance Comparison Scale (PACS)

We used the Physical Appearance Comparison Scale (PACS; Thompson et al., 1991) to measure participants' appearance comparison tendencies. Participants indicated on a 5-point scale ranging from *never* to *always* how often they engage in appearance comparisons in social situations. For example, "At parties or other social events, I compare my physical appearance to the physical appearance of others". Higher scores indicate higher levels of comparative behaviours. This scale has previously shown acceptable internal consistency (e.g., $\alpha = .73$; Cohen et al., 2017).

Dutch Eating Behaviors Questionnaire-Restraint Subscale (DEBQ-R).

The restraint subscale of the Dutch Eating Behaviors Questionnaire (DEBQ; Van Strien et al., 1986) contains 10 items that measure participants' intent to diet as well as the degree of actual dieting behaviour, both for the purpose of losing weight. For example, "Do you try to eat less at mealtimes than you would like to eat?" and "Do you deliberately eat foods that are slimming?" Responses range from *never* to *very often* where higher aggregated scores indicate

higher levels of restrained eating behaviour. Of note, these levels are indicative of restrictive eating behaviours in general and not the restriction of a particular type of food. Cronbach's alpha has been high for the restraint subscale in validation studies α = .95-.96 (e.g., Bozan et al., 2011; Van Strien et al., 1986).

Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem scale (1965) comprises 10 items that are utilized to measure overall self-esteem (e.g., "I feel that I have a number of good qualities"). Items are responded to on a 4-point Likert scale ranging from strongly disagree to strongly agree where higher aggregated scores indicate higher levels of self-esteem. This is the most widely used measure of global self-esteem in the field and has ample evidence of validity and reliability (e.g., Baldwin & Courneya, 1997).

Spielberger State-Trait Anxiety Inventory -trait items of short form

The original State-Trait Anxiety Inventory (Spielberger et al., 1971) was adapted into a short version by Zsido and colleagues in 2020. We were only interested in measuring trait levels of anxiety, so participants solely answered the five items tapping into trait anxiety. Example items include "I feel the difficulties are piling up so that I cannot overcome them" and "I worry too much over something that really doesn't matter". Participants responded to these items on a 4-point Likert scale ranging from *not at all* to *very much so*. Higher scores are indicative of higher levels of trait anxiety. The short version of the five trait anxiety items had a Coefficient Alpha of .86 in the initial validation study (Zsido et al., 2020) and of .89 in the current study.

Participant Satisfaction Checks and Body Type Exploration

Participants were asked three supplemental questions to determine their preference with the ABDS and to explore body dissatisfaction more generally. First, participants were presented

with an average size pictorial body figure of the ABDS and an equivalent size from the female and male versions of the BDS (Mutale et al., 2016). Considering the three different figures, they were asked to choose (a) which one best represents their gender identity and (b) what their preferred image would be in responding about their body image if they were to participate in such research in the future. Second, they were presented with all 24 bodies from the ABDS and asked, “looking across all the body types and figures, which body do you consider most representative of your body?” This question was exploratory and aimed to examine whether participants may also be dissatisfied with their genetically predetermined body type (Loos et al., 2018; Teplica, 2010).

Figure 2.1

All 24 figures of the ABDS

Plan for Analysis

We completed our data analysis in several steps aligned with the research questions. First, we descriptively explored participants' responses to the body dissatisfaction questionnaire. To do so, we looked at the shape of the distribution of data on a histogram and looked for symmetry/skewness and modality (i.e., unimodal, bimodal, multimodal). We evaluated the

central tendency through the means and the spread of the distribution through examining the range and standard deviation of the difference scores. Second, we ran correlational analyses between the ABDS and the other six psychosocial measures to collect evidence of construct validity for the ABDS. The third and fourth research questions were looked at descriptively for the discrete questions regarding participants most preferred body dissatisfaction scale and their chosen ideal body across all shapes and sizes.

Results

Distribution of the ABDS

Participants' scores on the ABDS showed that, on average, they indeed displayed body dissatisfaction as evidenced by the difference score between their actual and ideal bodies (Table 2.1). While the participants reported a range of difference scores, going from -2 to 4 (see Figure 2.2 for the spread of scores), the mean difference score was positive (.85) indicative of overall choosing an ideal body that was thinner than their actual body. Although the ABDS is meant to be used by collapsing across body shapes, we chose to examine the responses by shape out of interest. All four body shapes were well represented by participants including with 28% choosing hourglass, 12% choosing inverted triangle, 16% choosing pear, and 44% choosing rectangle body types. For every body shape, participants wanted to be smaller than their current body size showing consistency regardless of shape.

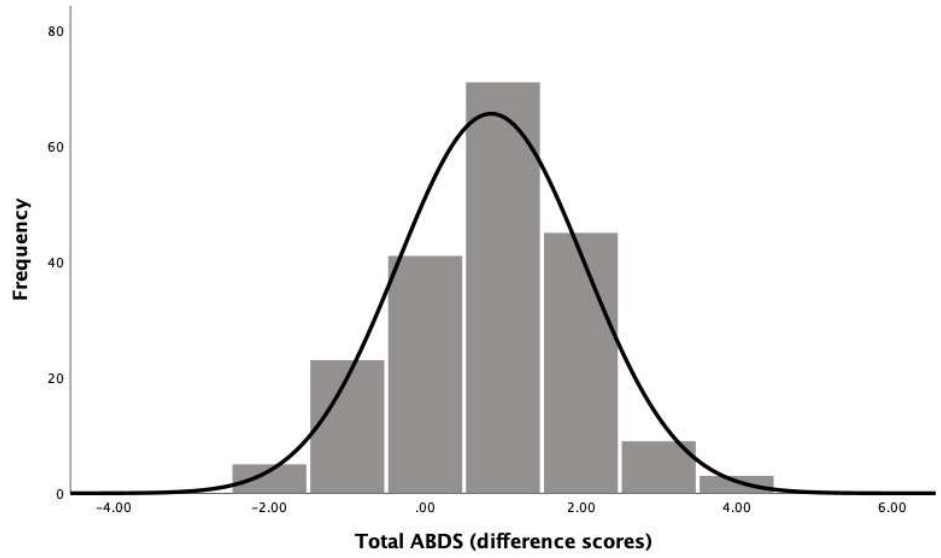
Table 2.1

Descriptive Statistics of The Androgynous Body Dissatisfaction Scale (ABDS)

Variable	N	Mean Actual Body	Mean Ideal Body	Mean Difference Score	*SD*	Range of Difference	Skew of Difference	Kurtosis of Difference
Total ABDS	200	2.83	2.08	.85	1.20	-2-4	-.10	-.02
Hourglass ABDS	57	2.96	2.13	.84	1.19	-2-3	-.42	-.16
Inverted Triangle ABDS	24	2.38	1.96	.42	1.32	-2-3	-.11	-.52
Pear ABDS	32	2.84	2.13	.72	1.02	-1-3	.04	-.44
Rectangle ABDS	89	3.14	2.11	1.03	1.22	-2-4	.05	.17

Figure 2.2

Histogram Spread of ABDS Difference Scores



Correlational Analyses

Construct validity was assessed by the correlations between participants' body dissatisfaction score on the ABDS and six other psychosocial variables commonly found to relate to body dissatisfaction in the binary literature (Table 2.3). As hypothesized, we found negative correlations between nonbinary individuals' body dissatisfaction score and their body appreciation r = -.36, p <.001, appearance evaluation r = -.47, p < .001, and self-esteem r = -.29, p <.001. Thus, higher levels of body dissatisfaction relate to less appreciation for one's body, less favorable evaluations of one's appearance, and lower overall self-esteem. As hypothesized, we also found positive correlations between nonbinary participants' body dissatisfaction score and their physical appearance comparison r = .34, p <.001 and eating behaviour r = .42, p <.001. Therefore, higher levels of body dissatisfaction on the ABDS relate to engaging in increased comparisons of one's appearance with others as well as more restrained (e.g., diet) types of

eating behaviour. Contrary to what was predicted, body dissatisfaction did not positively relate, or relate at all, to anxiety $r = .13$, $p = .064$.

Table 2.2

Descriptive Statistics of All Other Measures

Variable	N	Mean	*SD*	Range	α	Skew	kurtosis
Body Appreciation	193	28.03	9.34	10-50	.95	.07	-.54
Appearance Evaluation	199	18.58	7.29	7-35	.92	.16	-.78
Comparison	197	13.32	3.86	5-25	.71	.14	-.36
Eating Behaviour	193	24.68	10.0	10-50	.95	.39	-.50
Anxiety	197	13.87	4.13	5-20	.89	-.22	-.89
Self-Esteem	199	26.36	7.15	10-40	.93	-.08	-.52

Table 2.3

Correlations Matrix of Study Variables

	1	2	3	4	5	6	7
1. ABDS	-						
2. Body Appreciation	-.36**	-					
3. Appearance Eval	-.47**	.84**	-				
4. Comparison	.34**	-.34**	-.33**	-			
5. Eating Behaviour	.42**	-.26**	-.30**	.43**	-		
6. Anxiety	.13	-.47**	-.38**	.31**	.12	-	
7. Self-Esteem	-.29**	-.80**	-.71**	.39**	.26**	.62**	-

Notes. ** $p < .01$

Participant Satisfaction with the ABDS

In addition to the above-mentioned evidence of validity for the ABDS with an exclusively nonbinary sample, participant preference for the scale was also assessed by examining how they like it compared to the traditional binary body dissatisfaction scales (i.e., Mutale et al., 2016). When presented with the three options (male, female, or androgynous), 69.5% of the sample indicated that the androgynous images in the ABDS best aligns with their gender identity. Further, given the chance to participate in body image research again, 90% of participants indicated preferring to use the ABDS, over the male and female scales.

As the ABDS is the first scale of its kind that offers four different body types (i.e., hourglass, inverted triangle, pear, rectangle) for participants to choose prior to making their current and ideal body size selections, we aimed to explore how participants would respond to a question asking them to choose their ideal body across all body types (i.e., with 24 bodies total, refer to Figure 2.1). When presented with all the bodies, 69% of participants chose an ideal body that was of a different *body type* than the one they had selected as best aligning with their body shape.

Discussion

The purpose of this study was to test a new measure of perceptual body image, the Androgynous Body Dissatisfaction Scale (ABDS), on a nonbinary sample. In this discussion, we summarize the scale's collected validity evidence before addressing implications for nonbinary individuals, limitations, and directions for future research.

Validity Evidence for the ABDS

Body Dissatisfaction Score, Shape, and Weight

Body dissatisfaction was present in our nonbinary sample using the ABDS with participants on average choosing an 'ideal' body that was different and smaller in size than their chosen 'actual' one. Body dissatisfaction scores in this direction is what has been found in binary samples utilizing binary measures (e.g., Mutale et al., 2016; Stunkard, 1983; Thompson & Gray, 1995). Evidently, nonbinary individuals exhibit body dissatisfaction influenced by societal pressures towards a thin ideal, even as they reject societal norms around gender binaries.

The ABDS had participant representation in each of the four designated body shapes. Other BDS scales have only ever offered one shape (e.g., Mutale et al., 2016; Stunkard, 1983; Thompson & Gray, 1995) wherein nonbinary participants have both been forced to select a misaligned gender *and* also a body shape that presumably did not quite represent their 'actual' and 'ideal' choices. The representation across a variety of shapes as noted in this work brings about questions as to whether any scale with only one shape option is adequate. Additionally, each of the four body shapes had participant representation in reported 'actual' body size of up to the fifth or sixth body size depicted, signifying weight representation across the bodies. The fifth and sixth bodies are associated with a higher BMI than previous scales included, which is indicative of increased weight inclusiveness of the ABDS.

Relationship With Other Constructs

Correlations between the ABDS and other relevant psychosocial outcomes were very similar to those found in other measures of body dissatisfaction, The body dissatisfaction score on the ABDS negatively correlated with body appreciation (r = -.36 as compared to r = -.35 with other BDS scales), appearance evaluation (r = -.47 as compared to r = -.45 with other BDS scales), and self-esteem (r = -.29 as compared to r = -.27 with other BDS scales). It positively correlated with physical appearance comparison (r = .34 as compared to r = .45 with other BDS

scales) and restricted eating behavior (r = .42 as compared to r = .40 with other BDS scales). The similarities of these associations should provide researchers with strong confidence that the ABDS is measuring body dissatisfaction similar to the existing scales making it a viable tool for future studies. Overall, participants body dissatisfaction derived from the ABDS was associated with higher levels of maladaptive behaviors and lower levels of adaptive attitudes, as was expected in view of previous body dissatisfaction research. Although these are appropriate measurement findings, we would be remiss if we did not speak to the implications of these associations for nonbinary individuals.

Implications for Nonbinary Individuals

This was the first study to exclusively examine a sample of nonbinary participants' body dissatisfaction using a quantitative measurement tool. The results suggest that, on average, nonbinary individuals do have body dissatisfaction given they prefer a different and smaller body size than the one they are in currently. Importantly, the community sample had smaller difference scores (i.e., less dissatisfaction) than is found for gender diverse individuals in clinical samples (e.g., Alanka et al., 2012). As previously described, the difference score from this nonbinary sample is similar to that of cisgender individuals using other scales. Moreover, the finding that the majority of participants preferred an 'ideal' body outside of their reported 'actual' body shape points to nonbinary individuals not only being dissatisfied with their size but also with their genetically determined body type. In addition to this more fulsome picture of the extent of participants' body image concerns, the four body shapes adds value to the assessment of body dissatisfaction in terms of the specificity and personalization it brings, especially to nonbinary participants with an androgynous ideal where gendered characteristics are not as relevant.

To our knowledge, this was also the first body dissatisfaction validation study that polled participants' satisfaction with the scale's congruence to their gender identity and preference for future use. Nonbinary individuals appear to be identifying with the ABDS and indicating vast preference for use of the ABDS when responding to body dissatisfaction questions in future research. These findings denote that the ABDS serves to make body image research/practice more inclusive and accessible to gender diverse individuals. Recommendations in combatting marginalization suggest giving voice and power back to the individuals of the given group (Satterstrom et al., 2021). This work has explicitly highlighted nonbinary individuals' preference for the ABDS in comparison to other binary scales offering a community-endorsed and inclusive option for quantitative researchers moving forward.

Limitations and Future Directions

This work should be considered in light of the following three limitations. First, we did not focus on other intersectionalities with gender such as race, ethnicity, age, or ability. Although these are important influences on body dissatisfaction (Grogan, 2021), they were simply beyond the scope of this validation study. With the solid validity evidence garnered by this study, future researchers are encouraged to use the ABDS to explore other intersectional nuances of body dissatisfaction.

Second, the ABDS has six body sizes of each shape which differs from existing binary measures that have additional bodies. For example, Mutale and colleagues' measure (2016) and Thompson and Gray's measure (1995) both have nine bodies, whereas Swami and colleague's measure (2011) has ten bodies. For this reason, the ABDS mean difference score of .86 and the BDS (Mutale et al., 2016) mean difference score of 1.55 are not equivalent and should not be compared. To avoid comparisons, future research may test the ABDS with a binary gendered

sample to examine whether the ABDS works adequately for them. If men and women are still able to respond to it, the ABDS can be used as a measure for everyone, not solely nonbinary individuals, in order to have one go-to measure that has the ability to streamline body dissatisfaction measurement for all. Marginalized groups have had to make do with measures not even applicable to them whatsoever, cisgender individuals may similarly start utilizing the ABDS, if proven to be effective, to make body dissatisfaction comparisons across all individuals seamless.

Third, we did not ask participants to report their real weight and height to calculate BMI. As such, we do not know how accurate they were in picking their 'actual' body. Although other validation studies of body dissatisfaction scales did collect this information, we chose not to as the research overwhelmingly indicates that an individual's perception of their body matters more than objective weight status when it comes to feelings of dissatisfaction with one's body (e.g., Tallat et al., 2017). Additionally, researchers consistently find that individuals are quite poor at knowing their true weight anyway which was a further reason to leave it out of this work. People have the tendency to overestimate their height and underestimate their weight in surveys requesting self-report measurements (Gorber et al., 2007). We believe the ABDS' nuances in shape variety provide more valuable information. An interesting direction for future research using the ABDS would be a study that looks at the 'actual' and 'ideal' body discrepancy *across shapes*. This way, participants would be able to choose the two bodies in different body shapes from one another. For instance, a participant might choose their 'actual' body to be an hourglass at size four but their 'ideal' to be an inverted triangle at size two. This is especially important given our finding of 69% of the sample reporting an overall ideal body that was different than the shape of their reported current body. There would benefit of being some type of multiplier if

the chosen ‘ideal’ body is in a different shape category than chosen ‘actual’ body in calculation of the body dissatisfaction score. Although it is true people are genetically predisposed to a certain body shape (Teplica, 2010), body shape augmenting and altering very much exists and has had some social acceptance over time (e.g., waist trainers, plastic surgery, photoshop).

Conclusion

Overall, the validity evidence collected in support of the ABDS suggests that it not only works similarly to previous scales and is related to relevant psychosocial variables with similar magnitude as has been reported in the literature, but that nonbinary individuals feel it better represents their gender identity and prefer to use it over a gendered BDS. The ABDS’s intentional androgynous design, weight inclusiveness, and shape distinctions make it an excellent measurement choice for better depicting the perceptual body image of nonbinary individuals.

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Chapter 3: Nonbinary Students' Experiences of Body Image at Post-secondary School

During compulsory schooling, students spend 1195 hours a year at school (National Center for Education Statistics, 2008). For the 75% of high school graduates that choose to pursue some form of higher education (Zeman, 2023), these hours continue to accumulate. Because schooling takes up so much time of a young person's life, parents, teachers, administrators, and researchers all agree that school needs to be a safe place for all students. In recent years, there has been particular attention paid to enhancing the safety of nonbinary students (Bower-Brown et al., 2023). Nonbinary students are defined as those who do not adhere to the conventional male-female gender binary (Richards et al., 2016). Because they are, by definition, non-conforming to societal expectations, they can be in tension with traditional conventions of institutions such as school. Most of the discussions about safety have focused on either explicitly gendered aspects of schooling such as restrooms (e.g., Price-Feeney, 2021) and sports team involvement (e.g., Clark et al., 2022) or overtly negative instances of bullying/peer victimization (e.g., Marx et el., 2021) that need to be resolved so nonbinary students can function adequately and safely in school.

Although we agree with these priorities, consideration for body image at school may be a less obvious but still important aspect of schooling for nonbinary students. Indeed, in cisgender samples, students' body image has been found to be an important factor influencing school functioning including impacting students' grades, classroom emotions, attendance, and concentration (e.g., Anderson & Good, 2017; Chazan, 2019; Duncan et al., 2017; Florin et al., 2011; Yanover & Thompson, 2008). These associations may be even more significant for individuals who are actively non-conforming to society's established body image ideals. There is an increasingly higher rate of nonbinary identifying post-secondary students and it is a glaring

oversight that researchers and administrators know very little about how they experience their body at school or how that impacts their learning. Thus, the purpose of this study was to qualitatively describe nonbinary students' body image experiences at school thereby allowing their underrepresented voices to guide our collective understanding.

Defining Nonbinary

The term nonbinary collectively refers to individuals who identify as nonbinary, gender fluid, genderqueer, or other similar identities (Richards et al., 2016). This label includes those who do not fit within the conventional male-female gender binary, such as people who feel androgynous, experience a mix of genders, have no gender, or move between genders (i.e., gender fluid). Nonbinary people might identify with a gender that is not male or female, or they may have a gender identity or expression that differs from societal norms associated with their assigned sex at birth, or that goes beyond traditional gender definitions (i.e., genderqueer). Additionally, while some nonbinary individuals might identify as transgender, others may not.

Nonbinary Students

As school is a context in which young people spend the largest portion of their time outside of home, it is unsurprisingly an area that has received some examination. The existing research examining transgender and nonbinary youth at school reveals its significant influence on overall wellbeing. For instance, Kelley et al (2022) noted several contributing factors to transgender and nonbinary youth wellbeing at school including acknowledgement of gender identity, socio-cultural environment, teacher and peer attitudes, physical surroundings, and confidentiality. Some work suggests that school experiences slightly vary between nonbinary and binary-identified transgender youth, with nonbinary individuals being less likely to disclose their gender identity to teachers (Allen et al., 2020). It is easier for nonbinary youth to 'hide' their

gender identity than that of binary transgender youth. Moreover, secondary schools have been criticized for their lack of inclusivity, with gender-diverse adolescents facing discrimination in curriculum, space, and interactions with peers and teachers (Bower-Brown et al., 2023). Paechter and colleagues (2021) elaborated on this notion with their focus on implicit and explicit curricula in which reinforces binary gender norms and makes it challenging for gender-diverse students to express their identities openly. The authors found that their adolescent participants often had to educate themselves about gender identity due to limited support from their schools, facing bullying, and societal pressures to conform to binary expectations.

Although nonbinary post-secondary students have also remained understudied, they have been found to struggle with identity development and community belonging, often seeking support online and offline, and experiencing tension between recognition of their authentic gender and fear of scrutiny (Goldberg & Kuvalanka, 2018). Research on nonbinary college students reveals heightened levels of minority stress (i.e., stressful experiences due to minority-based discrimination, violence, and victimization), relate to poorer mental health outcomes, and less campus involvement compared to their peers, with racial differences further complicating their experiences (Marx et al., 2024). Budge and colleagues (2020) echoed these findings in their study finding revealing the strong influence of campus climate and belonging to the nonbinary student experience and highlighted the crucial need for inclusive policies and support services in higher education.

Nonbinary Body Image

Similar to gender, body image is also socially constructed. Body image is a complex concept that encompasses an individual's internal perception of their body, including their beliefs, attitudes, and behaviours towards it (Cash & Smolak, 2011). Body image is typically

studied through the framework of internalising gender binary standards of attractiveness, often assuming cisgender identities (Cusack et al., 2022). However, not all individuals adhere to traditional appearance norms. Traditionally, research on body image has mainly highlighted societal ideals, such as thinness for cisgender women (Owen & Laurel-Seller, 2000) and muscularity for cisgender men (Stratton et al., 2015). This literature tends to reinforce binary gendered stereotypes of body ideals, rooted in white European standards (Awad et al., 2015), which do not fully acknowledge the diverse spectrum of gender and sexuality.

The existing research on nonbinary individual's body image is scant while offering glimpses of both positive body image and negative body image experiences. Ogle and colleagues (2023) qualitatively examined nonbinary individuals' positive body image. The participants shared that achieving positive body image was a lengthy and sometimes difficult journey for them. Their experiences were influenced by their gender identity, their management of dress and appearance, their resistance to societal norms, and their involvement in the queer community, all which played a significant role in fostering positive body image. Bialy's research (2023) highlighted a more negative view of transgender and nonbinary body image. This work explored how gender minority stress affects eating and body-checking behaviours. Participants reported high levels of gender minority stress, including victimization and discrimination, which correlated with elevated rates of disordered eating and body-checking behaviours. It was also noted that body dissatisfaction, due to incongruence with affirmed gender identity, contributed to these maladaptive behaviours.

Body Image at School

In cisgender samples, researchers have found body image to impact school functioning. Most of the research has focused on the relationship between body size perception/satisfaction

and academic success. Studies have found students' self-perception of being overweight, regardless of their actual weight, to have stronger associations with academic performance than their actual weight (Anderson & Good, 2017). For instance, female students who perceived themselves as overweight tended to have lower grades and more stress from schoolwork compared to those with accurate body perceptions (Xie et al., 2006). Similar findings have been observed across different countries and with both male and female adolescents (Mikkilä et al., 2003; Florin et al., 2011). Moreover, students who perceive themselves as overweight, even if they are not, experience more school absenteeism (Duncan et al., 2017).

Yanover and Thompson (2008) introduced the concept of "academic interference," which refers to behavioural manifestations of body image disturbances impacting academic performance. This interference includes preoccupation with appearance, eating, and exercise that disrupts class attendance, attention, and homework completion. The authors found academic interference to be significantly associated with GPA, particularly among students with severe body image disturbances. Further interference effects were found in relation to students' achievement emotions in class that influence learning, task persistence, and goals (Chazan et al., 2019). Despite there being some existing examination of both nonbinary students as well as the impact of body image in the school setting with cisgender samples, there has yet to be an exploration of nonbinary-identifying students' body image experiences in the school setting.

The Current Study

Nonbinary individuals often face marginalization and lack of representation in academic research and educational settings. By studying their experiences, researchers can better understand the potentially unique needs and challenges of nonbinary students thereby contributing to a more inclusive and representative understanding of body image. To do this,

researchers must highlight the nonbinary voice, truly hear their perspectives, and illuminate their experiences through qualitative methodologies. In this study, we used qualitative research to describe the body image experiences of nonbinary students at school. Investigating body image in this critical context for nonbinary students can provide insights into potential barriers to their educational success and inform strategies to address them. In line with these aims, the research questions were:

1) How do nonbinary students define their body image? What body image ideal might they subscribe to and how is this conveyed at school?
2) How do nonbinary students' body image experiences impact them in the post-secondary context?

Method

We used a qualitative descriptive design (Hesse-Biber, 2017; Sandelowski, 2010) with individual interviews to bring data to bear on the research questions. Qualitative description is an appropriate design at it allows for a straightforward description of the participants' experiences and perceptions of their lived realities with minimal interpretation. It is typically used as a design to guide exploratory research questions. As such, it is particularly well-suited for capturing the nuanced and multifaceted nature of body image experiences among nonbinary students, an unstudied area that warrants a first broad exploratory study to lay the groundwork for future research that seeks to provide a more comprehensive and theoretical understanding.

Participants

We recruited post-secondary students who were at least 18 years old and identified as nonbinary gender. Five participants took part in individual interviews, and all were recruited through Reddit, an online social media forum. Specifically, the study was posted and responded

to in a Subreddit for nonbinary individuals, whose stated mission is to provide a space "for people of every stripe who feel that they don't fit into a preference-binary or gender-binary culture." This type of purposive sampling is appropriate in qualitative descriptive research (Palinkas et al., 2015). Purposive sampling refers to selecting research participants that can speak to the research aims because they have relevant knowledge and experience to draw on. Focusing on selecting participants who provide the most relevant and insightful data is key to achieving the design's descriptive and practical aims and thus an indication of quality.

Additionally, while there is not a strict guideline for sample sizes in qualitative descriptive research, Sandelowski (2000) pointed out that these studies often borrow characteristics from other qualitative approaches, such as phenomenology. Phenomenological research aims to explore and describe individuals' experiences with a particular phenomenon (Creswell, 2013). In this study, I focused on describing nonbinary students' body image experiences in postsecondary education. Phenomenological studies generally involve five to 15 participants to ensure a thorough examination of lived experiences (Creswell, 2013). Although at the outset there was a desire to include approximately 10 participants, given the exploratory nature of the study and time constraints, a sample size of five participants was deemed sufficient to proceed with the analyses given it is the lower end of recommendations.

Participants ranged in age from 18 to 23 ($\bar{x}$ = 19.8) and were therefore at different stages of their post-secondary journey. They represented a variety of backgrounds, including two African American participants, one Caucasian participant, one Hispanic participant, and one who best described themselves as mixed race. Four of the five students were attending post-secondary institutions in Canada, whereas the fifth was enrolled in an American school. Participants

majored in a variety of subjects, including literature, design, engineering, and communications, with one participant remaining undeclared.

Procedures and Materials

We conducted five semi-structured interviews via Zoom with nonbinary students to understand their experiences with body image in post-secondary environments. According to Sandelowski (2000), semi-structured interviews are particularly useful in qualitative descriptive research because they offer a balance between structured and open-ended approaches. They allow researchers to gather detailed, rich descriptions of participants' experiences while still maintaining some level of consistency across interviews. This method enables researchers to explore specific topics of interest while allowing participants the freedom to express their views in their own words. Further, one-on-one interviews rather than group interviews were used to explore the body image experiences of nonbinary students to respect the individual description of a sensitive topic. Individual interviews were described by Sandelowski (2000) as one of the primary methods of data collection for qualitative description studies. Individual interviews were used to highlight the perspectives of the participants, with underlying assumptions that they are knowledgeable and can make their descriptive insights explicit through this medium.

Prior to the interviews, I circulated an information letter to participants, detailing the objectives of the study, potential benefits and risks, and the data analysis plan. During the semi-structured interviews, participants were given time to clarify any questions, and consent was inferred through their participation. The interviews took place over a couple of months from late 2023 to early 2024 and ranged in length from 45 minutes to one hour. The same semi-structured interview guide was used in each session (Appendix B). In brief, the semi-structured interview guide included general exploratory questions as well as questions based on previous empirical

literature and findings. For instance, specific questions around perpetuated societal appearance ideals (Fredrickson & Roberts, 1997) were posed as well as notions relating to 'academic interference' (Yanover & Thompson, 2008) that have been found in cisgender samples. Further, a visualization exercise was also included as it has been shown to be an effective way to help participants engage more deeply with a topic by creating a mental picture that makes the questions more relevant and meaningful. Gergen and colleagues (2001) note that visualization can lead to more detailed and thoughtful responses as well as facilitates increased emotional connection to the topic. The University's Research Ethics Board approved this procedure to ensure compliance with ethical standards throughout the study (Appendix A).

Positionality

The researchers examined the ontological and epistemological foundations guiding this study. Ontologically, we adopted critical realism, which posits that a single reality exists but can only be partially grasped through individual experiences (Gareth et al., 2017). Epistemologically, we were influenced by contextualism, which suggests that absolute answers exist but can only be uncovered through participants' perspectives (Gareth et al., 2017). Consequently, we aimed to uncover participants' subjective experiences rather than pursue an objective truth. This approach aligns with our chosen research method of qualitative descriptive and analysis strategy. We chose inductive thematic analysis, to prioritizing participants' own voices by staying close to the transcripts' content rather than abstracting. Similarly, conducting individual interviews, as previously described, is an effective way to access marginalized voices and is particularly suited for sensitive topics like gender and body image (Hesse-Biber, 2017; Sandelowski, 2010). Moreover, the lead researcher also identified sources of potential bias from her personal experiences and prior work, readings, and teachings in the scholarly area of body image and

intersectionality. In particular, this reflection included a propensity to believe nonbinary students may lean towards increased body image concerns due to gender dysphoria, a belief that all people irrespective of identities should be included and able to access education safely, and strong beliefs about the beauty of body diversity.

Rationale for Analyses

The individual interviews were digitally recorded and transcribed verbatim. We followed two collapsed steps to conduct an inductive thematic analysis as described by Stanley (2014) on all comments related to participants' sharing of their understood gender identity, body image, and related experiences, perceptions, and feelings at school. The approach Stanley (2014) drew on was from Braun and Clark (2006). First, the coding process began by the lead researcher reading and re-reading the interview transcripts, making observational notes (memos) which were then drawn on to open-code the data where meaning units were identified. Second, during open-coding, meaning units were discussed collaboratively to then be collapsed in key codes and themes that characterized essential meanings within the data without substantial abstraction. These themes and codes were subsequently used to create a codebook (Appendix B) to delineate the definition and anti-definition (DeCuir-Gunby et al., 2011) anchored by representative verbatim quotes from participants. The researchers met twice to discuss the process to ensure agreement of the original meaning units being represented accurately in the extracted codes and overarching themes. An inductive thematic analysis is appropriate for a qualitative descriptive design because it allows themes to emerge naturally from the data, closely reflecting participants' experiences and perspectives. This method aligns with the aim of qualitative descriptive research to provide a straightforward, comprehensive summary without imposing pre-existing theories.

Results

The inductive analysis resulted in three overarching themes that describe nonbinary students' body image experiences in the school setting: 1) how nonbinary students *construct* their body image, which is inextricably linked to their making sense of their non-conforming gender identity, 2) how nonbinary students *feel* about their bodies, and 3) how they describe the *impact* of their body image in relation to their school functioning. Each theme and its specific associated categories are described next and depicted in Figure 3.1.

Constructing Body Image

Participants described ways in which they construct their body image and how they convey it to others. These comments were grouped into three categories: body ideal, external factors, and influences.

First, nonbinary students commented on the body ideal that they deemed to aspire to most. Some participants referred to striving for an androgynous ideal "I don't want to look 100% like a boy or a girl; gender is an abstract concept. So I like to go somewhere androgynous that people can't really know," whereas others alluded to aiming for a thin ideal "I always have the pressure to diet and lose extra weight to be smaller because the fat I worry makes me look more feminine than I want to be perceived." Moreover, some participants referred to the idea that their body ideal is fluid alongside the fluidity of their gender identity. For instance, some participants described their nonbinary gender identity as not feeling "in the middle" but rather fluctuating between the binary genders depending on the day. As such, these participants described their body ideal as shifting contingent on whether they wished to convey themselves as more masculine or feminine.

Second, participants described external factors that contribute to their construction of body image. Participants shared that they do not want to constantly explain themselves and/or

have to educate others about nonbinary identities. This notion is summed up in one participant's statement "it's something I don't want to have to always explain. It's just me, my identity. If I were able to I would stick it to the top of my head." Given the desire to simply have their identities be known without explanation, participants referred to ways they convey themselves externally to others including their pronouns and clothes/style. All participants mentioned that specific pronouns are important to their nonbinary identity with some feeling comfortable to share these with others (e.g., "I share my 'they/them' pronouns at school especially to the faculty and other students so they know exactly who I am") and some not yet feeling ready to share them widely (e.g., "right now only my friends know my preferred pronouns"). Additionally, participants made ample reference to expressing themselves through how they dress, their clothes, and style: "The way I understand my body image is the way that I dress first of all, because that's the first thing that people get to see." Dressing was described as a way to convey gender expression through styling clothes in line with androgyny or in a way that externally represents the internal experience of fluctuating gender identities as explained succinctly by one participant "you don't have to have just one style, you can adjust your clothes to whatever you feel inside."

Third, participants spoke of how their body image is/was influenced by those around them. They shared that they are most influenced by other nonbinary individuals in terms of comparing how they looks and dress. For example, participants explained: "there's someone in my class who's nonbinary too and I like the way they look, their expression, their style, and the way they dress. When I see them I think oh maybe I should look like them too"; "other nonbinary people influence my body image way more than like celebrities who I know lots of people want to be like." Participants also shared that they are similarly but less influenced by

cisgender peers, especially those with genders matching their sex assigned at birth. To illustrate, one participant described how there is a female peer in their class who always appears ‘done-up’ with styled hair and makeup and the corresponding influence the classmate has on them: “I think the influence it's kind of like because she's a girl and I was born a girl and people tell me why don't you put makeup on? Why don't you do your hair better? So seeing her doing that, I still think like I need to even if I don't want to but I still feel like I have to sometimes.” Additionally, parents were described as a source of influence on their body image, specifically related to parental pressure to align their physical appearance (i.e., clothes, hair) with what is accepted for their sex assigned at birth. This parental influence was often spoken of through a negative lens such as when one student shared: “my dad told me to dress more like a man when I was in high school and started to explore feminine fashion. I didn’t listen but it did slow down my acceptance and full-blown gender expression in the way I would have wanted.”

Feeling Body Image

As opposed to conveying body image, the second theme revolves around how participants expressed feeling their body image; the internal processes behind the above-mentioned external construction. These comments were also grouped into three categories: confidence/satisfaction, emotions, and diversity variables.

First, participants mentioned several positive feelings about their body associated with confidence and satisfaction. Some participants' confidence with their body image manifested as not wanting to change anything about it with clear comments such as “I do not want to change myself in any way.” However, participants did not readily arrive at these feelings of confidence and satisfaction and explained the effort involved with reaching this point: “it's something I have really worked on. It has been a development. So currently, right now I'm more comfortable with

my body than I ever was." They shared that body image has come slowly over the years with increased comfort in who they are and with concerted effort such as the intentional rejection of pressures to fit a certain mould. They all also mentioned feeling more confident and at ease with their body and who they are when connected to nonbinary/gender-diverse communities, both online and at school. Participants referred to spaces such as school Gay Straight Alliance (GSA), activities in Pride Month, and the online nonbinary 'Subreddit' (where they were recruited for the present study) as having positive impacts on their feelings towards their bodies and promoting feelings of acceptance.

Second, participants highlighted a myriad of emotions they experienced in discussion of their gender identity and body image, specifically in the school setting. Most emotions referred to were of negative valence as they shared navigating their intersecting identities at school, some of which included feeling: confused, frustrated, sad, nervous, self-conscious, anxious, worried, angry, lonely, as well as a combination of these emotions. One participant shared an experience of two emotions in a classroom context: "For some reason, I feel a bit nervous when I enter a room and there's people there. I feel like some people are watching me but I don't really think they are, I think they're just minding their business but I still feel self-conscious when I enter." Another shared their feelings related to sharing their gender identity publicly: "I'm still a bit worried about the fact of coming out, that's why I'm not." In this example, as well as others mentioned by participants, it is evident how their emotions link directly to subsequent behaviour (action or inaction). For instance, other participants shared that their anger in response to ignorance around their identity increases their propensity to withdraw from others, their feeling of anxiousness in gendered structures leads to avoidance, and sadness fuels connection-seeking.

Third, participants shared feeling as though their gender identity is very much intersected with their body image. For example, one participant explained that “the way I see myself and how I feel about my body is very influenced by my gender identity.” Other participants linked gender identity and body image to other aspects of their person explaining, for example, “I’m mixed, half black and half white and also because of my gender identity, sometimes I feel a bit not left out, but like I may not always fit in” or “I'm not white, most people at school are white. I'm not. People already presume I’m a girl when I’m not and they also assume I’m white. But then black people don't perceive me as black either, so it gets confusing.” One participant’s feelings around their multiple intersecting identities were so pointed that they exclaimed they “don’t need more diversity!”

Impact on School

The third and final theme encompasses the crux of the research question first posed which revolves around how participants experienced their body image interplaying in the school setting. These comments were grouped into four categories: peers/teachers, structures, academic interference, and coping strategies.

First, participants referred to people they interact with at school including their perceptions of their peers and teachers. Most participants believed that their peers were accepting of their nonbinary identities. No mention of bullying, teasing, or harassment was noted as happening in their current university context. One participant indicated that “people in post-secondary are generally more open-minded of people’s differences.” Despite no strong accounts of negative peer interactions, some participants vocalized still feeling judged by their peers sometimes leading to a tendency to dislike or avoid group work. This notion is illustrated by this participant: “I don’t really like group work because you have to be sitting in close proximity to

each other and yeah they see your body. I see them judging me." Further, all participants referred to their teachers when discussing their school experiences. Most referred to teachers being inclusive (i.e., using desired pronouns), such as in this participant's statement: "I know my teachers are open-minded. They even asked us at the beginning of the year, what pronouns we want to use." A couple of participants spoke of specific teachers they had who were especially above and beyond in being helpful and supportive. For instance, one participant recounted a teacher who gave them access to their staff restroom given their known discomfort with the student's access to gendered ones. However, mostly participants shared that their interactions with teachers have focused primarily on academic topics such as projects, grades, and homework completion, none of which was noted as a negative or distracting from their functioning at school.

Second, some participants also referred to school structures that serve to exclude them due to their nonbinary status such as gendered restrooms and forms. For example, one participant's sentiments well represent how others described their feelings around binary restrooms: "The gendered restrooms are like the biggest problem for me in school. I don't understand why my school hasn't adopted gender-neutral restrooms and so, yeah, I mostly don't go there. I try to avoid going as much as I can." Some participants shared having had bad experiences in the forced-choice binary restrooms, such as peers screaming at them for being in the 'wrong' one. Similar to the above-quoted participant, others noted trying to wait to use the restroom once back at home or strategically during class time when the facilities are less likely to be occupied. Forms were also brought up by some participants as highlighting the improvements made to them such as the incorporation of a nonbinary option to check off when indicating gender, whereas some did not feel seen or included by an 'other' box which they indicated

"further others [them]." One participant shared that they simply avoid extracurricular activities that warrant a formal sign-up process due to the form structures.

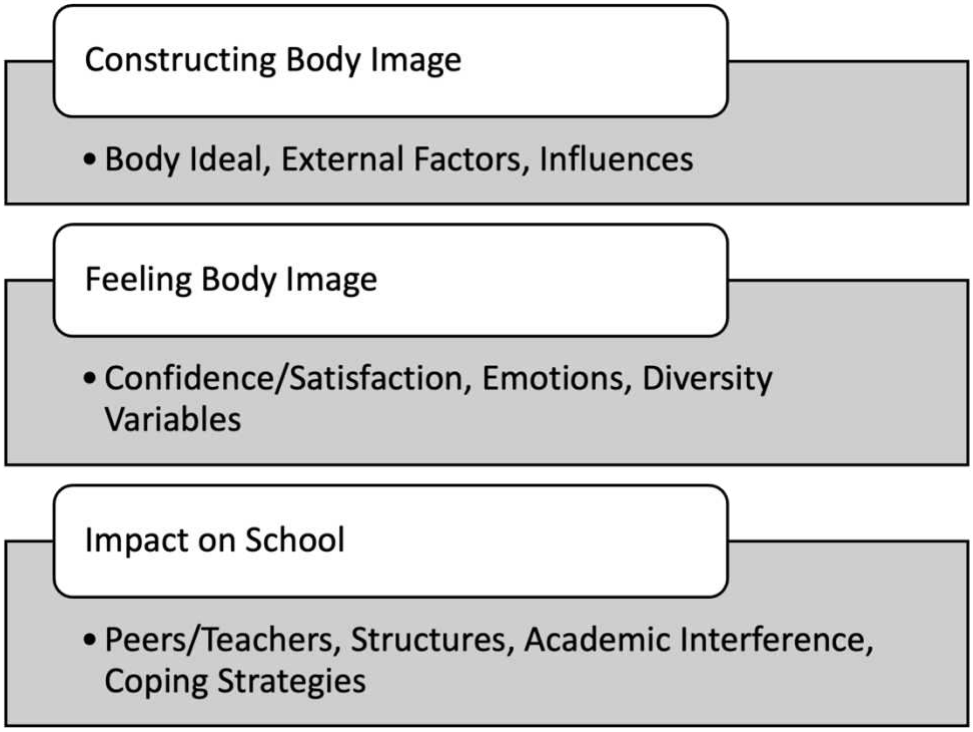
Third, participants referred to how their body image influences any academic interference, namely, their attendance, concentration, and motivations in class. Some participants deemed that their body image experiences never impact their class attendance whereas others noted that it may be one of the many factors that lead to absenteeism as illustrated by this participant: "...it may have a small part of how I'm feeling plus all the other stuff that brings me down sometimes pushed me to skip class because I'm just not feeling it." Although participants deemed that they "don't lose focus because of how [they] feel about [their] body," they shared that body preoccupation contributes to feeling like sometimes they do not belong in class and feeling judged by their peers whether real or imagined. In terms of their motivations in class, participants mostly shared a desire to get their class work done when in class saying things like "I think I want to finish the lectures as quickly as I can. I'm motivated to more so do the work and not really socializing." Two participants' desire to avoid social contact and being seen by others went as far as choosing seats in the back of the classroom. This body preoccupation-induced academic interference was further explained by another participant: "I don't want to be the last one getting to the class and getting noticed and I don't want to leave the class as the first one for the same reason." Despite clear instances of academic interference, overall, the participants' body image experiences did not seem to affect their grades or have notable self-described impacts on their attendance, homework completion behaviours, or concentration levels in class.

Fourth, participants mentioned several coping strategies employed to deal with related stressors such as delaying negative emotion. For example, one student said "...I'll just try and

keep it to myself and go on with my day. I may think about it later like when I come home but I don't let myself go there really when I'm in the class." Others described radical acceptance of misgendering such as "...you just have to you take it sometimes it's not malicious really you know, they just forget about it." And the decision to keeping gender identity hidden also served as a coping strategy with one participant explaining "people around me don't really know about my gender identity. When I talk about myself, I tweak my sentences in a way that I don't have to use gendered words."

Figure 3.1

Qualitative Descriptive Results



Discussion

The purpose of this qualitative study was to describe nonbinary students' body image experiences in the postsecondary context. In this discussion we discuss and offer implications for

the indivisible connection between gender and body image and the nuances of experienced body image at school before addressing limitations and directions for future research.

Gender and Body Image: Interwoven Realities

The findings of this study underscore the critical interconnection between experiencing gender and experiencing body image among nonbinary students. In the narratives shared by participants, these two aspects of identity were almost inseparable, highlighting a unique dimension that distinctly differs from the experiences of cisgender students. For cisgender individuals, body image concerns can often be addressed independently of their gender identity. However, for nonbinary students, the two are inextricably linked; a positive body image is closely tied to their sense of gender acceptance and validation. This connection is supported by existing research, which shows that gender identity significantly impacts body image. A study by McGuire et al. (2016) found that transgender and nonbinary youth often experience body dissatisfaction linked directly to their gender dysphoria. Similarly, research by Jones et al. (2020) indicates that body image issues among nonbinary individuals are frequently related to the incongruence between their physical appearance and their gender identity. These studies suggest that interventions must holistically address both gender identity and body image to be successful.

The current study sheds light on this strong link through participants' frequent mention of pronouns and gender-expressive clothing as integral parts of their body image. For the participating nonbinary students, feeling good about their body is often contingent upon feeling affirmed and accepted in their gender identity. This was also seen through reference to feeling accepted (or not) by their peers and teachers and limiting school structures when asked about how they experience their body image at postsecondary. Therefore, interventions aimed at improving body image must also include components that foster gender acceptance and

understanding. This dual approach is essential, as focusing solely on body image without addressing the underlying issues of gender identity may prove ineffective. These insights point to the necessity of comprehensive support systems in educational settings that acknowledge and address the complex realities of nonbinary students' experiences, ultimately promoting both gender affirmation and positive body image.

The Nuanced Landscape of Nonbinary Students

Participants described substantial positive feelings about their bodies and satisfaction with their appearance. These findings suggest that by challenging societal norms around gender and appearance, the nonbinary participants were able to build and maintain aspects of positive body image. This aligns with research by McGuire et al. (2016), which found that transgender young people exhibit resilience by rejecting restrictive cultural ideals and definitions. For example, participants resisted Western, cisgender standards of beauty and stereotypes about nonbinary appearances. They embraced flexible ideals and rejected the notion that they needed to look a certain way to be recognized as nonbinary (Ogle et al., 2023). This resistance and self-acceptance appear to contribute to their positive body image and overall well-being.

Despite reporting positive feelings about their bodies, participants shared numerous negative emotions related to their body image experiences at school. These emotions, which included anxiety, frustration, and anger, underscore the complexities and nuances of their lived experiences. Pekrun’s Control-Value Theory provides a useful framework for understanding how these negative emotions can impact learning. According to this theory, emotions in educational settings are influenced by students' perceptions of control over their learning and the value they place on academic tasks (Pekrun, 2006). Negative emotions can hinder motivation and academic performance, creating barriers to success. Our findings highlight that while our participating

nonbinary students may possess degrees of body confidence and satisfaction, the negative emotional responses to their school environment and tumultuous navigation of felt intersecting diversity variables can nevertheless significantly impact their educational experiences.

Interestingly, participants did not describe instances of body-preoccupied academic interference (Yanover & Thompson, 2008). They reported that their grades, attendance, and concentration were not notably impacted by feelings related to their body image. This finding contrasts with the often pathological lens through which nonbinary individuals' experiences are studied, which typically emphasizes negative outcomes and struggles (Richards et al., 2016). Instead, our data suggests a more nuanced reality where nonbinary students can manage academically despite societal pressures and negative emotions. This challenges prevailing narratives and underscores the importance of recognizing the diverse experiences and resilience of nonbinary students at school.

Limitations and Future Directions

While this study provides valuable insights into the described experiences of nonbinary students' body image at school, some important limitations should be acknowledged. The recruitment of participants through an online community for nonbinary individuals might have introduced selection effects. Participants who are already engaged in such a community may have a stronger sense of gender identity and potentially more positive body image perceptions due to the supportive nature of the community. It is possible that those less connected might have different experiences. Future research could address this imitation by employing recruitment from diverse sources, including schools, community centers, and other online platforms in efforts to help capture a broader spectrum of experiences among nonbinary students.

Additionally, although participants did come from diverse racial and ethnic backgrounds, and the intersectionality of these variables emerged organically during the interviews, this study did not focus specifically on examining these intersections. Future research should ensure greater diversity among participants to capture a broader range of nonbinary student experiences. Including participants from various racial, socioeconomic, and geographic backgrounds, as well as those with disabilities, while adopting an intentional intersectionality approach, may provide a more comprehensive understanding of the factors influencing body image among nonbinary students. There is ample research highlighting existing disparities between dominant Eurocentric assumptions and body image amongst diverse ages (e.g., Deeks & McCabe, 2001; Tiggemann, 2004), sexual orientations (e.g., Kelly, 2007; Morrison & McCutcheon, 2011), and ethnicity (e.g., Cachelin et al., 2014; Franko & Roehrig, 2011).

Another important future direction involves better understanding the processes of body image experiences throughout the school years. Existing literature indicates that nonbinary experiences in elementary and high school tend to be more negative. Interestingly, the results of the current research show that nonbinary individuals often experienced an improvement in their body image throughout the years in discussions of their perspectives as a post-secondary student. A longitudinal study could be instrumental in exploring how nonbinary students' body image evolves over time and in response to changing school environments and personal developments. This approach can help identify how and why the post-secondary students who participated in this study seem to have adequate body image. Understanding the factors that contribute to this positive shift—such as increased autonomy, further developed identity formation, a more supportive and inclusive environment, or greater access to resources—could provide valuable

information for developing interventions and support systems aimed at promoting positive body image and overall wellbeing throughout all levels of the school years.

Lastly, given that the exploration of nonbinary students' body image at school is new, further studies could build on this initial work by employing a grounded theory approach. This method would allow for the development of a theoretical framework grounded in the lived experiences of nonbinary individuals. This could help identify specific areas to inform intervention and policy recommendations within educational institutions, ultimately fostering a more inclusive and supportive environment for all students.

While this study offers a valuable starting point, it also underscores the need for continued research with larger, more diverse samples and methodological approaches that can capture the complexity of nonbinary students' body image experiences at school.

Conclusion

This study illuminates the intricate connection between gender identity and body image among nonbinary students in postsecondary education. It emphasizes the inseparability of these facets of identity and highlights the unique challenges and resilience of nonbinary individuals in navigating school environments. The findings suggest the need for interventions that holistically address both gender affirmation and body image to promote positive educational experiences. While this research provides valuable insights, it also points to the necessity for studies that explore the nuanced experiences of nonbinary students across different educational stages and demographic backgrounds. By addressing the outlined limitations and pursuing future research directions, we can better understand and support the body image and overall wellbeing of nonbinary students in school settings.

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Chapter 4: General Discussion

The purpose of the two studies in this dissertation was to advance inclusion of nonbinary people in both quantitative and qualitative research on body image. In this overarching discussion, I first provide a synthesis of findings from both quantitative and qualitative studies drawing between the two to create the fullest understanding possible. Second, I delve into the wide-ranging implications of the results of these studies for both academic research and practical applications. Third, I establish connections between the findings and queer theory, underscoring their theoretical significance. Last, I conclude by reflecting on personal and professional insights gleaned from this doctoral research process.

Summary of Results

These studies delved into the body image landscape among nonbinary individuals through two separate quantitative and qualitative methodologies. Quantitatively, findings from the validation study of the Androgynous Body Dissatisfaction Scale (ABDS) illuminated a consistent preference among participants for a thinner ideal body, irrespective of their specific body shape; highlighting evidence body dissatisfaction amongst the nonbinary sample. This scale, accommodating four distinct body types (hourglass, inverted triangle, pear, rectangle), effectively measured these preferences. Correlational analyses provided further validity evidence for the ABDS, revealing significant associations between higher levels of body dissatisfaction and lower levels of body appreciation, less favorable evaluations of one's appearance, reduced self-esteem, heightened appearance comparisons, and increased engagement in restrained eating behaviors. These quantitative results underscored the pervasive impact of body image concerns on nonbinary individuals' psychological well-being and self-perception. Participants overwhelmingly favored the ABDS over traditional binary scales, with 90% preferring its use in

future research compared to that of existing scales. When presented with various body types, a significant majority chose an ideal body shape different from their self-identified body type, highlighting diverse preferences in ideal body image within the nonbinary community- which puts into question our current measurement tools for perceptual body image that do not take account for such dimensions of dissatisfaction. These findings highlight the ABDS's utility in assessing body dissatisfaction among nonbinary populations, aligning with participants' gender identities and preferences for inclusive body image research methodologies.

Qualitatively, the second study provided insights into how nonbinary students construct and experience their body image within the school environment. Participants articulated a multifaceted approach to body image construction, navigating between ideals such as androgynous presentations or slender physiques. Importantly, these constructions were often shaped more by influences from within the nonbinary community than by mainstream cisgender norms. The use of preferred pronouns and clothing emerged as pivotal tools for expressing their gender identities while negotiating pressures from familial expectations and societal gender stereotypes. Emotionally, participants described a complex interplay of positive and negative experiences related to their body image. Positive feelings such as body confidence and satisfaction were bolstered by supportive communities and environments that affirmed their gender identities (Ogle et al., 2023). However, negative emotions such as confusion, frustration, and anxiety were prevalent, often leading to withdrawal from peer interactions and school activities such as group work and extracurriculars. The study highlighted how these emotional responses were intricately tied to broader societal attitudes and institutional practices that either validated or marginalized nonbinary identities. Moreover, the impact of body image on school functioning emerged as a final important theme. While some participants experienced supportive

interactions with peers and educators who respected their gender identities, others faced challenges stemming from feelings of judgment and exclusion. Gendered facilities and administrative procedures exacerbated these feelings of alienation (Price-Feeney, 2021). Although some participants referred to their body image as influencing their attendance and motivations in class, body preoccupied academic interference did not emerge as a prominent occurrence.

These two studies illuminated the interplay between quantitative assessments of body dissatisfaction using the ABDS and qualitative descriptions of nonbinary students within educational settings. Both serve to increase gender inclusivity in the body image field.

Implications for Research

The ABDS, developed and validated in this work, represents a critical advancement in body image research for nonbinary individuals who have been excluded or othered by traditional binary measurement tools. Body dissatisfaction scales are widely utilized due to their practicality and robust correlations with various psychosocial constructs (Cash & Smolak, 2011). However, these tools have often excluded nonbinary individuals, forcing them into inadequate gender categories through using perceptual figures that do not align with their identities. The ABDS addresses these limitations by offering a gender-inclusive alternative (i.e., androgynous figures) that enables nonbinary individuals to meaningfully participate in body image research. The ABDS demonstrated comparable psychometric properties and associations with psychosocial constructs as traditional scales, ensuring its validity across diverse gender identities. Using the ABDS is not only an empirically sound choice but also respects participants' preferences in selecting measurement tools that resonate with their identities.

Moreover, although not the focus of the present work, the development of the ABDS paves the way for future research to explore nuanced body image experiences among nonbinary individuals in comparison to cisgender counterparts. By employing a measurement tool like the ABDS, researchers can move beyond assumptions of greater dissatisfaction among nonconforming genders and empirically investigate distinct variations, if any. This contributes to a more equitable and inclusive discourse on body image, acknowledging and valuing the diversity of experiences within nonbinary communities.

Ethically, this research underscores the importance of adopting non-pathologizing (Nicholas, 2020) language and interpretations in studying nonbinary identities. Nonbinary individuals often face stigma and misunderstanding in societal contexts, necessitating a sensitive and inclusive approach that highlights their resilience and diversity (Johnson et al., 2020). This includes respecting participants' chosen names and pronouns throughout the research process, thereby affirming their identities as integral to their experiences and ensuring that research outputs accurately reflect their lived realities. Relatedly, the qualitative insights from interviews with nonbinary students stress the profound impact of using chosen pronouns on their body image perceptions. This emphasizes the essential practice for researchers to consistently respect and affirm participants' gender identities. Such practices not only cultivate a supportive research environment but also uphold ethical standards that recognize the centrality of gender identity in shaping experiences.

Furthermore, this research highlights the interconnectedness of gender identity and body image experiences among nonbinary individuals. Future quantitative studies should integrate gender-related variables alongside any given body image measures to capture these intricate

dynamics. Qualitative inquiries can further explore these intersections, providing comprehensive insights into how gender influences body image perceptions and experiences.

Implications for Practice

The current work sheds light on three practical implications: the application of the ABDS in healthcare and psychologists' ethical responsibility, the necessity for dually targeted body image and gender-affirming school-based interventions, and further advocacy for systemic changes within education institutions

First, the ABDS holds significant potential for practical application in various healthcare settings such as hospitals, clinics, and therapy practices. Validated specifically on a nonbinary sample, the ABDS offers a unique tool for progress and outcome monitoring and assessing body dissatisfaction among individuals whose gender identity does not conform to traditional binary norms. Providers have an ethical obligation, as outlined in the Canadian Code of Ethics for Psychologists, to uphold "non-discrimination and promote the inherent worth of all individuals, regardless of their gender identity" (Canadian Psychological Association, 2017). This ethical duty mandates that psychologists "keep themselves up to date with a broad range of relevant research methods" and "use assessment methods that are appropriate to the particular cultural and social context of the individuals and groups involved". Employing the ABDS, which is inclusive and sensitive to diverse gender identities, ensures that interventions are tailored appropriately to meet the needs of nonbinary individuals.

Second, effective body image interventions in school settings have demonstrated positive outcomes by enhancing media literacy, challenging societal appearance ideals, and fostering body appreciation among students (e.g., Yager & O'Dea, 2008). However, this work highlights the inseparable link between body image and gender identity for nonbinary individuals. This

finding suggests that interventions addressing body image must also incorporate gender-affirming practices to effectively support nonbinary students. Simply addressing body image without acknowledging and affirming diverse gender identities may be insufficient in promoting holistic well-being among nonbinary individuals. Therefore, educators and school administrators are encouraged to integrate comprehensive interventions that embrace both positive body image and gender affirmation to create inclusive and supportive environments for nonbinary students.

Third, exclusionary school structures, such as gendered restrooms and administrative forms that do not accommodate nonbinary identities, contribute to body image concerns among nonbinary students. Existing literature has already established the detrimental effects of these structures on students' sense of belonging and well-being (Kattari & Walls, 2019; McGuire et al., 2020). This work adds nuance by illustrating how these institutional barriers are similarly influencing nonbinary students' feelings about their bodies. There is an urgent need for policy changes and institutional reforms within educational settings to dismantle exclusionary practices and promote inclusivity. Advocating for gender-neutral facilities, revising administrative policies to recognize nonbinary identities, and fostering a supportive school climate are crucial steps toward addressing the systemic factors that contribute to body image issues among nonbinary students.

Connections to Queer Theory

As I have continued to learn and expand my personal and professional viewpoints, I return to the relevance of queer theory in understanding the unique body image experiences of nonbinary individuals. By challenging normative assumptions about gender and sexuality, queer theory critiques the binary frameworks that dominate traditional body image research (Jagose, 1996). The creation of the ABDS addresses this by offering a tool specifically designed to

capture the experiences of nonbinary individuals, thereby filling a critical gap in the existing literature. This alignment with queer theory's goal to disrupt normative paradigms and create more inclusive tools underscores the importance of addressing the diversity of gender identities in body image research (Sullivan, 2003).

Furthermore, queer theory emphasizes the significance of lived experiences and the voices of marginalized communities (Sullivan, 2003). In the qualitative study, interviews with nonbinary students provided nuanced insights into their body image experiences in school environments—insights that quantitative measures alone could not capture. These interviews allowed nonbinary individuals to articulate their unique perspectives, aligning with queer theory's commitment to amplifying marginalized voices (Halberstam, 2005). This approach not only enriches the data but also ensures that the research is grounded in the real-world experiences of those it seeks to understand.

Additionally, queer theory addresses power dynamics and the systemic marginalization of certain groups. My research highlights the challenges nonbinary individuals face in educational settings, such as lack of representation and structural issues, which significantly impact their closely linked body image and overall well-being. Documenting these experiences is a step toward informing policies and practices that can mitigate these power imbalances, aligning with queer theory's advocacy for social change and inclusivity (Jagose, 1997; Sullivan, 2003). By shedding light on these issues, my dissertation aims to contribute to creating more supportive environments for nonbinary students.

This work closely aligns with the principles of queer theory by challenging normative assumptions, emphasizing lived experiences, deconstructing binary thinking, and addressing power dynamics. These connections highlight a theoretical foundation of this research and its

contribution to a more inclusive and comprehensive understanding of body image among nonbinary individuals. This alignment not only enhances the academic rigor of the work but also underscores its potential to effect meaningful change in both research and practical applications (Jagose, 1996).

Personal and Professional Takeaways and Learnings

When conducting research with minority groups, a significant challenge becomes recruiting a sufficiently large and representative sample. As a minority group, nonbinary participants can be difficult to gather in large enough samples through traditional recruitment methods. Given the decision to recruit an exclusively nonbinary sample for the ABDS validation, I circumvented these issues using Prolific, a platform known for its effectiveness in reaching specific populations. Not only was Prolific simple, efficient, and effective in recruiting 200 nonbinary participants but it afforded me the privilege of being able to collect validity evidence from the individuals that the scale was designed for. From this experience, I have no hesitations using and/or recommending Prolific or similar services in the future, especially for those hoping to target minority samples and include them in research in a meaningful and intentional way.

This process has also shed light on the difficult endeavor it is to make a research area more inclusive. I have noted elsewhere that there have been developments in terms of body diversity and representation in research and in the media. Slowly and steadily, appearance ideals have been taking steps away from their Eurocentric and fatphobic roots. There has been a growing demand for body diversity in media, fashion, and beauty through various individuals such as models Paloma Elsesser and Ashley Graham. Many other brands have followed the example of Aerie, which stopped retouching its models in 2014. Moreover, when online shopping, it is not uncommon to see two sizes of models sporting each clothing item, one thin

and one fat. Although the fat model is typically shown second to the image of the thin model (i.e., the default image of the advertised item), this nonetheless is progress compared to merely years prior when seeing non-thin images was considered taboo. Even high fashion shows, such as the one put on by Versace, have been including plus-size models in recent years. In a similar vein, there have also been more efforts of representation of ethnic and gender diversity in fashion models. Through the two studies presented in this dissertation I am contributing to these types of gains in scholarly spaces. I worked to address this by first attending to a significant gap in a popular body image measurement tool as well as acknowledging its limitations in being deficit-based and narrow in meaning by conducting interviews that provided deeper insights into nonbinary students' body image experiences at school. This experience reinforced my belief in the importance of using diverse research methods to capture more of the complexity of human experiences. However, even with the multi-method studies tapping into different ways of representing gender nonconformity, this is just the beginning of the necessary work to make body image research more inclusive. The field still requires much more intentional efforts to address the unique needs and experiences of nonbinary individuals. I am hopeful that my dissertation serves as a stepping stone for future research dismantling the binary gendered viewpoint of body image. I look forward to seeing how this research evolves and continues to contribute to more gender inclusivity in the body image field, both in research and in practical applications.

Ensuring that the voices of underrepresented populations, such as nonbinary individuals, are heard and accurately represented in research is crucial. I am now more committed than ever to advocating for inclusivity in my future endeavors. This includes not only choosing research topics that matter to marginalized communities but also employing methods that respect and

amplify their experiences as well as going into my practical work with greater sensitivity to the intersecting nuances of gender and body image in the young people I will continue to support.

Conclusion

In my candidacy paper I wrote "We will only arrive at a fulsome understanding of the impact of these intersecting identities/factors [on body image] if researchers design their studies with this goal at the outset." I believe one of the most important contributions of the two studies I conducted for my dissertation is that it met this goal. These studies prioritized nonbinary individuals without pathology or comparison and showed that important quantitative and qualitative gains can be made by doing so. In conclusion, this dissertation not only advances empirical knowledge but also contributes to social change by shifting the common pathologizing discourse and promoting gender inclusivity in relation to the study and practice of body image. By embracing body image diversity in research and practice, we can strive towards a future where all bodies, regardless of gender identity, are seen, heard, supported, and celebrated.

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Appendix A: Ethics Approval from Both Studies

UNIVERSITY OF ALBERTA

RESEARCH ETHICS OFFICE
2-01 North Power Plant (NPP)
11312 - 89 Ave NW
Edmonton, Alberta, Canada T6G 2N2
Tel: 780.492.0459
www.uab.ca/reo

Notification of Approval

Date:	March 3, 2023	
Study ID:	Pro00126321	
Principal Investigator:	Devon Chazan	
Study Supervisor:	Lia Daniels	
Study Title:	Validation of the Androgynous Body Dissatisfaction Scale	
Approval Expiry Date:	Friday, March 1, 2024	
Sponsor/Funding Agency:	SSHRC - Social Sciences and Humanities Research Council	SSHRC

Thank you for submitting the above study to the Research Ethics Board 2. Your application has been reviewed and approved on behalf of the committee.

Approved Documents:

Consent Forms
Informed Consent-Clean
Questionnaires, Cover Letters, Surveys, Tests, Interview Scripts, etc.
Survey items

Any proposed changes to the study must be submitted to the REB for approval prior to implementation. A renewal report must be submitted next year prior to the expiry of this approval if your study still requires ethics approval. If you do not renew on or before the renewal expiry date, you will have to re-submit an ethics application.

Approval by the REB does not constitute authorization to initiate the conduct of this research. The Principal Investigator is responsible for ensuring required approvals from other involved organizations (e.g., Alberta Health Services, Covenant Health, community organizations, school boards) are obtained, before the research begins.

Sincerely,

Dr. Ubaka Ogbogu, LLB, BL, LLM, SJDA
Chair, Research Ethics Board 2

Note: This correspondence includes an electronic signature (validation and approval via an online system).

UNIVERSITY OF ALBERTA

RESEARCH ETHICS OFFICE
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11312 - 89 Ave NW
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Notification of Approval

Date:	July 20, 2023
Study ID:	Pro00131528
Principal Investigator:	Devon Chazan
Study Supervisor:	Lia Daniels
Study Title:	Non-binary Students' Experiences of Body Image at Post-secondary School
Approval Expiry Date:	July 19, 2024

Thank you for submitting the above study to the Research Ethics Board 1. Your application has been reviewed and approved on behalf of the committee.

Approved Documents:

Recruitment Materials
Recruitment Poster Updated July 4th
Consent Forms
Information letter CLEAN July 19th.docx
Questionnaires, Cover Letters, Surveys, Tests, Interview Scripts, etc.
Interview Guiding Questions

Any proposed changes to the study must be submitted to the REB for approval prior to implementation. A renewal report must be submitted next year prior to the expiry of this approval if your study still requires ethics approval. If you do not renew on or before the renewal expiry date, you will have to re-submit an ethics application.

Approval by the REB does not constitute authorization to initiate the conduct of this research. The Principal Investigator is responsible for ensuring required approvals from other involved organizations (e.g., Alberta Health Services, Covenant Health, community organizations, school boards) are obtained, before the research begins.

Sincerely,

Theresa Garvin, Ph.D, MUA,BA
Chair, Research Ethics Board 1

Note: This correspondence includes an electronic signature (validation and approval via an online system).

Appendix B: Semi-Structured Interview Schedule

1. Tell me what body image means to you?
2. How do you feel about your body image?
3. How would you describe your body image?
4. Researchers have found that body image tends to develop through the internalization of appearance ideals from the media, public, and friends/family. For people who identify as women, this is stereotypically a thin ideal. For people who identify as men, this is stereotypically a muscular ideal. We are curious to know what sort of appearance ideal may be influential in your thinking about your body (i.e., thin, muscular, androgynous).
5. How have you experienced your body in relation to the classroom?
    a. Potential prompt: Some researchers have found that body image can play an interference effect on students concentration in class, their attendance at school, and their homework completion behaviours because they are preoccupied with their appearance, eating, and exercising. How do your experiences relate to this concept?
        i. Has how you felt about your body ever interfered with your academic performance (i.e., grades, GPA)? Attendance? Homework completion? Emotions in the classroom? Motivation? Concentration? Do you feel your nonbinary gender identity has any role in these associations? If yes, how so?
6. Let's move on to a brief visualization exercise. If it feels comfortable to do so, you may close your eyes or softly gaze down. Visualize walking into school, finding your classroom, and then sitting in class. Can you describe what you can see, hear, smell, and touch? How is it immersing yourself in this context? What first thoughts come up? Do you experience any physical sensations/feelings/emotions? What are you motivated to do? (e.g., engage, socialize, avoid, retreat etc.)
7. Body image can be influenced by our peer group and influential others. We are curious as to how your classmates might impact your body perceptions, attitudes, and/or behaviours at school? How about your professor(s)?
8. How do you experience your gender identity at school? How does your nonbinary identity intersect with you being a student at post-secondary?
9. Do you feel like you belong at school? Do you feel included? Why or why not?
10. What do you wish others (e.g., the general public, educators, researchers, practitioners) would know/understand about your body image experiences as a nonbinary student?

Appendix C: Qualitative Descriptive Codebook

Category	Codes	Definition – What it IS	What it is NOT	Example(s)
Constructing body image	Body ideal	The body type participants deemed to aspire to most. This included androgynous and thin ideals as well as the notion that it can be fluid	Feelings about one's body	"I don't want to look 100% like a boy or a girl; gender is an abstract concept. So I like to go somewhere androgynous that people can't really know" "I always have the pressure to diet and lose extra weight to be smaller because the fat I worry makes me look more feminine than I want to be perceived so I guess a thin ideal is influencing me"
	External factors	The desire to not want to constantly explain themselves to others. How participants thus present/convey themselves externally, including their pronouns and clothes/style.	How they feel inside about their appearance	"It's something I don't want to have to always explain. It's just me, my identity. If I were able to I would stick it to the top of my head" "The way I understand my body image is the way that I dress first of all, because that's the first thing that people get to see" "I share my 'they/them' pronouns at school especially to the faculty and other students so they know exactly who I am"

	Influences	How participants' body image is/was influenced by those around them. More positively influenced by nonbinary peers and less positively by parents	Body ideals to aspire to	“There's someone in my class actually, they're nonbinary too. And I like the way they look their expression, their style, the way they dress. And when I see them, I think oh maybe I should look like them too, since they're non binary too” “My dad told me to dress more like a man when I was in high school and started to explore feminine fashion. I didn’t listen but it did slow down my acceptance and full-blown gender expression in the way I would have wanted”
Feeling body image	Confidence/ Satisfaction	Positive feelings about one’s body associated with finding community, rejecting pressures, and improving over time	Body dissatisfaction	“I do not want to change myself in any way” “It's something I have really worked on. It has been a development. So currently, right now I'm more comfortable with my body than I ever was” “I don't like to think what other people think about me like, I try as much as possible to control what I can and I say the rest... I say the rest they can just f$&# off”

	Emotions	Emotions associated with being a nonbinary student	Exclusively related to body image	"For some reason, I feel a bit **nervous** when I enter a room and there's people there. I feel like some people are watching me but I don't really think they are, I think they're just minding their business but I still feel **self-conscious** when I enter" "But I'm still a bit **worried** about the fact of coming out, that's why I'm not" "There are some people who don't understand you, especially those who are brought up in a place where they don't accept LGBTQ and so sometimes somebody can treat you or talk to you in a way that can make you really **angry**"
	Diversity variables	Participants having multiple diversity variables and their relation to fitting in	Solely gender diversity	"I'm mixed, half black and half white and also because of my gender identity, sometimes I feel a bit not left out, but like I may not always fit in" "I'm not white, most people at school are white. I'm not. People already presume I'm a girl when I'm not and they also assume I'm white. But then black people don't perceive me as black either, so it gets confusing" "I don't need more diversity"

Impact on School	Peers/Teachers	The people that participants interact with at school including their perceptions of their peers and teachers	Supports	"I don't really like group work because you have to be sitting in close proximity to each other and yeah they see your body. I see them judging me" "I know my teachers are open minded. They even asked us at the beginning of the year, what pronouns we want to use"
	Structures	School structures that serve to exclude them due to their nonbinary status such as gendered restrooms and forms.	Related to other diversity variables	"The gendered restrooms are like the biggest problem for me in school. I don't understand why my school hasn't adopted gender-neutral restrooms and so, yeah, I mostly don't go there. I try to avoid going as much as I can"
	Academic Interference	How participants' body image impacts their attendance and motivations in class	How it impacts grades/GPA	"...it may have a small part of how I'm feeling plus all the other stuff that brings me down sometimes pushed me to skip class because I'm just not feeling it" "I don't lose focus because of how I feel about my body" "I don't want to be the last one getting to the class and getting noticed and I don't want to leave the class as the first one for the same reason"

				“I think I want to finish the lectures as quickly as I can. I'm motivated to more so do the work and not really socializing”
	Coping Strategies	Strategies participants use to deal with related stressors like delaying negative emotion, radical acceptance of misgendering, and keeping gender identity hidden	Always adaptive	“...I'll just try and keep it to myself and go on with my day. I may think about it later like when I come home but I don’t let myself go there really when I'm in the class” “...you just have to you take it sometimes it's not malicious really you know, they just forget about it” “People around me don't really know about my gender identity. When I talk about myself, I tweak my sentences in a way that I don't have to use gendered words”