Rochester Institute of Technology

RIT Digital Institutional Repository

Theses

7-10-2023

Outness among Transgender and Non-Binary Adults: Effects of Identity and Agency on Mental Health

Beau M. Gibbs bmghcw@rit.edu

Follow this and additional works at: https://repository.rit.edu/theses

Recommended Citation

Gibbs, Beau M., "Outness among Transgender and Non-Binary Adults: Effects of Identity and Agency on Mental Health" (2023). Thesis. Rochester Institute of Technology. Accessed from

This Thesis is brought to you for free and open access by the RIT Libraries. For more information, please contact repository@rit.edu.

Department of Psychology, College of Liberal Arts

Rochester Institute of Technology

Outness among Transgender and Non-Binary Adults: Effects of Identity and Agency on Mental Health

by

Beau M. Gibbs

A Thesis in

Experimental Psychology

Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science

July 10, 2023

Copyright ©[2023, Beau M. Gibbs]

We approve the thesis of Beau M. Gibbs:

Dr. Alan Smerbeck Associate Professor, Department of Psychology Faculty Adviser and Chair of the Thesis Committee

Dr. Rebecca Houston Associate Professor, Department of Psychology Reader

Dr. Christopher Hinesley

Assistant Director, LGBTQIA+ Programs and Outreach

Reader

i

Date

Date

Date

Acknowledgements

I cannot extend enough gratitude and thanks towards Dr. Alan Smerbeck, my mentor and thesis advisor. If it were not for your support and teachings throughout my time here at RIT, I am unsure if I would have been able to finish this project. Additionally, I would like to thank Dr. Rebecca Houston and Dr. Christopher Hinesley for their insight, feedback, and support with this project. Despite the unexpected happening at every turn, all four of us made it through this project. You all have my sincerest gratitude.

Additionally, I would like to thank my parents, sister, and brother-in-law for their support these past two years, and for putting up with my ramblings regarding this project. And all of the crying. And the yelling. You all put up with a lot. Thank you.

I would especially like to thank Moet Aita and Archana Pandurangan, in addition to all of the wonderful students, staff, and faculty connected to the Experimental Psychology M.S. program for their support and counsel when the going got tough. Without your companionship, I don't know where I would be.

Abstract

The present study investigated binary transgender (BT) and non-binary (NB) individuals both as an entire transgender non-binary (TNB) group and as two separate groups to examine entire group mental health trends and discern differences in mental health problems between groups. Outness, agency, experiences of transgender identity based microaggressions, and internalized transphobia in particular were investigated in relation to mental health. This study was conducted via an online survey and included 34 BT participants and 58 NB participants (92 participants in total). The correlation matrices and ANCOVAs revealed that none of the study hypotheses were supported. However, it was found that the BT group reported being more out and having higher levels of internalized transphobia than the NB group. Additionally, in post-hoc analyses, a negative correlation was found between outness and internalized transphobia, and a positive correlation was found between experiences of microaggressions and mental health problems. These results may in part be due to the unique TNB community the sample drew from, in addition to the lack of prior literature to draw from. More research on this topic should be conducted considering these contradictory findings, especially comparing BT and NB individuals. Future research on the topic should be used to help create more inclusive care practices and inform policy and legislation related to TNB individuals.

Keywords: transgender, binary transgender, non-binary, transphobia, internalized transphobia, outness, agency, mental health problems, microaggressions, passing

iii

Contents

Acknowledgements	ii
Abstract	iii
Introduction	8
Discrimination and Harassment	8
Microaggressions	9
Minority Stress Model	10
Effects of Discrimination and Harassment	14
Internalized Transphobia	16
Outness	17
Agency	19
Hypotheses	21
Method	22
Measures	22
Procedure	30
Data Analytic Strategy	31
Results	31
Participants	32
Primary Analysis	33
Hypothesis 1	33
Hypothesis 2	34
Hypothesis 3	35

Hypothesis 4	36
Post Hoc	37
Summary	37
Discussion	37
Adequacy of Measures	40
Limitations and Future Directions	44
Conclusion	47
References	49
Figures	60
Tables	62
Appendix A	69
Appendix B	82

List of Figures

1	Disclosure Agency Inventory Average Score Histogram $(N = 92)$ 60
2	Transgender Identity Survey Total Score Histogram $(N = 92)$ 61

List of Tables

1	Participant Eligibility	62
2	Demographics of Study Participants	63
3	Demographic Differences Between BT and NB Groups	64
4	Zero-Order Correlations	65
5	Partial Correlations	66
6	Difference Between BT and NB Groups ANCOVA Results	67
7	Normality of Disclosure Agency Inventory and Transgender Identity Survey	68

Outness among Transgender and Non-Binary Adults: Effects of Identity and Agency on Mental Health

Transgender people, or those whose gender assigned at birth is not their gender identity, include those with binary identities (i.e., transgender men and transgender women; binary trans or BT for short), as well as nonbinary identities (i.e., those whose gender identity is neither male nor female; NB for short; Staples, Neilson, George, et al., 2018). Thus, the phrase transgender/nonbinary (TNB) is often used to refer to both BT and NB individuals. The majority of people are cisgender, or those whose gender assigned at birth matches their gender identity.

Gender expression is the elements of appearance, mannerisms, and behavior that communicate one's gender to others. Most cisgender people's gender expression is consistent with their gender identity and gender assigned at birth. NB people usually prefer a gender expression that matches their gender identity and is therefore neither exclusively male nor female. Most BT people would prefer a gender expression consistent with their gender identity and in contrast to their gender assigned at birth. Because of this, some BT people are perceived as cisgender members of their gender identity, whereas nonbinary people seldom are. That is, some BT women are perceived as cisgender women and some BT men are perceived as cisgender men, but a non-binary gender expression does not match any cisgender gender expression, so NB people who choose a non-binary gender expression are rarely perceived as cisgender.

Discrimination and Harassment

TNB individuals experience discrimination and harassment in a variety of ways. These different instances of discrimination and harassment often fall into one of two categories: overt or covert discrimination and harassment (Meyer, 2003; Staples, Neilson, Bryan, et al., 2018).

Overt discrimination and harassment consist of obvious and direct behaviors enacted upon a member of a minority group (Staples, Neilson, Bryan, et al., 2018). TNB people may experience covert discrimination and harassment such as the use of TNB-specific derogatory terms and comments directed at them (McNamara et al., 2021; Nadal et al., 2016), purposeful misgendering (the act of using the wrong pronouns for a TNB individual on purpose), the refusal of services and opportunities (Dimant et al., 2019; Goldberg et al., 2021; McNamara et al., 2021; Nadal et al., 2016), and the passing and supporting of TNB based discrimination laws, such as "Save Women's Sports" legislation (Ronan, 2021; Tebbe et al., 2021).

Covert discrimination and harassment, however, include subtle and sometimes unintentional and/or unconscious behaviors and mannerisms that imply a prejudice or stigma a member of the majority group may have against a certain minority group (Polanco-Roman et al., 2016). Typical examples of covert discrimination and harassment include the use of noninclusive language (e.g., "ladies and gentlemen"), assuming a TNB person fits various stereotypes, failing to provide adequate bathroom facilities, etc. The most common form of covert discrimination and harassment comes in the form of microaggressions.

Microaggressions

Microaggressions are a chronic form of covert discrimination and harassment (Nadal et al., 2016). The various forms of microaggressions TNB people experience may include off-color jokes or comments about TNB individuals (e.g. joking about falling for a "trap" in reference to having a sexual and/or romantic relationship with a trans woman) (Annalisa et al., 2021) or a TNB person being asked about their "actual" or "true" name (in reference to the TNB individual's name assigned at birth) in casual conversation (Nadal et al., 2016). Other microaggressions may include being stared at, having someone comment that being a TNB

individual is a choice and/or that having a TNB identity is a mental illness, and a TNB individual being dismissed by someone as not having experienced discrimination and/or harassment when they did.

It has been theorized that the lack of knowledge the public has related to NB identities has created a sense of invisibility around NB people (Goldberg et al., 2019). This, in turn, suggests NB individuals face unique microaggressions related to this invisibility. For example, a common microaggression that TNB individuals may experience, especially in health care settings, is what is known as education burdening. Education burdening is when a non-TNB individual(s) asks a TNB individual to represent the entire TNB community and educate them on TNB identities and issues (Nadal et al., 2016). While this is a microaggression many TNB individuals may face, it has been posited that NB people may face education burdening more so than BT individuals due to the cultural ignorance of NB individuals (Goldberg et al., 2019).

This cultural ignorance may then potentially lead to more dismissals of NB-based microaggressions as well (Goldberg et al., 2019). Some non-NB individuals view NB identities as fake or a cry for attention. These same individuals may then feel that NB identities are fake and that NB people do not experience microaggressions, especially in comparison to the more overt struggles faced by BT people. Some NB individuals may even endure microaggressions from some BT individuals in a phenomenon known as lateral aggression, potentially due to this invisibility and ignorance as well (Worthen, 2021).

Minority Stress Model

A way to best conceptualize the effects of microaggressions and discrimination TNB people may experience is through the Minority Stress Model (MSM) posited by Meyer (2003). In essence, it suggests that those with a minority identity experience stressors, such as

discrimination and harassment, that are related to their minority identity, and those stressors' effects accumulate over time. Though the MSM was initially conceptualized around the experiences of sexual minority individuals (i.e., those who do not identify as heterosexual) (Meyer, 2003), there is growing evidence to support the application of the model to TNB people (Hendricks & Testa, 2012; Jäggi et al., 2018). In the MSM, there are two categories of stressors that affect sexual minority people, and in turn, TNB people: external stressors and internal stressors (Meyer, 2003).

The first category of stressors in the MSM is external stressors, or, objective events that can affect sexual minority individuals (Meyer, 2003). Both overt and covert forms of discrimination and harassment can be considered external stressors, though not all external stressors can be considered discrimination and harassment. For example, the unavailability of local medical professionals with expertise in transgender health would be considered an external stressor, though it would not fall into the category of discrimination and harassment (Hendricks & Testa, 2012).

The second category of stressors in the MSM is internal stressors, or, generally, the stress related to the TNB individual's reaction to external stressors and the relationship a TNB person has with their TNB identity (Meyer, 2003). This relationship, in turn, may affect other internal stressors a TNB person may have. Often, these other internal stressors are derived from the anticipation and dread some TNB individuals feel when they perceive an external stressor to be likely, potentially leading to concealment, a common internal stressor.

Concealment is when a TNB person chooses to shield their TNB identity from another person (Dias et al., 2021). Often, when concealment is done, it is so non-TNB individuals do not become aware of a TNB person's TNB identity, for fear that the TNB individual may then

increase their risk of experiencing discrimination and harassment. In doing so, TNB people may lose out on opportunities afforded to their cisgender peers. For example, a TNB youth may forgo a potentially beneficial class trip to avoid peer knowledge of their gender identity and subsequent harassment. There are many ways concealment may be performed. Research on sexual minorities concealing their sexual minority identity in the workplace has been an analogous topic used to discuss TNB identity concealment, due to the likely similarities shared in basic concealment strategies between the two groups. In these studies, research has shown that some acts of concealment may include not disclosing their sexual minority identity (Corlett et al., 2021; Rood et al., 2017), completely avoiding and ignoring any topics or inquiries about either the sexual minority community or about themselves (Rood et al., 2017), and, in some cases, fabricating aspects of their lives related to their sexual minority identity (e.g. a lesbian, or a woman-aligned person who are sexually attracted to women-aligned people, claiming that she had a date with her boyfriend when she actually was on a date with her girlfriend; Corlett et al., 2021).

However, a TNB-specific concealment strategy that can be used is what is known as "passing". Passing is the act of a minority group member taking on the appearance of a member of the majority (Dias et al., 2021). In this case, a TNB individual may choose to appear as much like a cisgender individual as they can (Timmins et al., 2017). At the time of writing this paper, there is some controversy over the term passing. The term passing can imply that while a cisgender person's gender expression is inherent, a TNB person who desires to appear as cisgender as possible is performing their gender expression, and therefore, being inauthentic to themselves (Tabler et al., 2021). However, this paper uses the term passing to describe this concealment strategy as, at this time, it is a common and more acceptable term for the concealment strategy used in both the literature and in casual conversation. It also has been

subject to less change than other terms used to describe this concealment strategy, such as "clocking" or "reading" someone as a TNB individual or not.

Passing has been noted to be a temporary strategy that is situationally dependent (Rood et al., 2017). The importance of passing for a TNB individual is also known to change over time as well, based on external events and internal thoughts and values. Its main purposes are to protect TNB individuals from discrimination and harassment (Schrimshaw et al., 2018; Ussher et al., 2022), potentially giving those TNB individuals the same privileges as cisgender individuals (Budge et al., 2010), and affirming the TNB individuals' gender identity (Anderson, 2020; Levitt & Ippolito, 2014).

However, it is important to note that this concealment strategy is primarily used by BT individuals as their gender identity and gender expression often align with the gender binary (Staples, Neilson, George, et al., 2018). As most cisgender individuals also often have gender identities and gender expressions that align with the gender binary, it can be easier for some BT individuals to pass as cisgender, and potentially also have their gender affirmed.

On the other hand, NB people typically do not use this concealment strategy, as both their gender identity and gender expression do not align with the gender binary (Levitt & Ippolito, 2014). To these NB people, it would not affirm their gender identity to conform their gender expression to appear exclusively masculine or feminine. Therefore, most NB individuals do not choose to pass as cisgender individuals, as cisgender individuals' gender identity and expression fall often into the gender binary.

Internal stressors can also take the form of internalized prejudice, or, the internalization a minority person does of external minority-specific based stigma and prejudices (Meyer, 2003). Or, in other words, a minority individual may feel anger, shame, and/or guilt about and towards

their minority identity. For TNB individuals, this concept is specifically known as internalized transphobia (Hendricks & Testa, 2012). It is thought that TNB people may be at risk of developing internalized transphobia via repeated experiences of TNB-based discrimination, harassment, and rejection (Bockting et al., 2020; Hendricks & Testa, 2012; Scandurra et al., 2017).

Effects of Discrimination and Harassment

Experiences of TNB-based discrimination and harassment have been linked to numerous health issues that affect some TNB individuals physically and mentally. Many of these effects of discrimination and harassment are related to the barriers some TNB people face to getting adequate physical or mental healthcare compared to cisgender individuals (Cicero et al., 2020; Dimant et al., 2019; Drabish & Theeke, 2022; Scandurra et al., 2019; Veale et al., 2021). Discrimination and harassment from primary care providers, for example, have been linked to some TNB individuals receiving worse quality healthcare compared to their cisgender counterparts (Dimant et al., 2019), which in turn correlate to some TNB individuals avoiding or delaying some preventative disease screenings (e.g., a trans man avoiding getting a mammogram done) that could potentially save their lives (Drabish & Theeke, 2022).

Discrimination and harassment are also known to have mental health effects as well, particularly when talking about microaggressions (Cicero et al., 2020; Rood et al., 2016; Scandurra et al., 2017). In the literature, some studies suggest that the effects of microaggressions correlate with an increase in some TNB individuals' levels of depression, anxiety, and suicidal ideation, as well as the risk of suicide attempts (Hendricks & Testa, 2012; Perez-Brumer et al., 2015; Rood et al., 2016). This would be in line with research regarding sexual minority individuals and the effects of microaggressions on their mental health as well (Dyar et al., 2021; Mendoza-Perez & Ortiz-Hernandez, 2021; Szymanski, 2006). Furthermore, TNB individuals have been reported to, on average, have more lifetime suicide attempts (Perez-Brumer et al., 2015), be more at risk for substance abuse (Valentine & Shipherd, 2018), and have increased levels of depression and anxiety compared to their cisgender sexual minority counterparts.

It is unclear whether BT or NB people experience more severe negative mental and physical health effects as a result of these stressors, although this may be due to the lack of research that has been conducted examining NB individuals and the effects of discrimination and harassment on them (Allen et al., 2020; Scandurra et al., 2019; Todd et al., 2019). There is even less research comparing the two communities on the matter (Scandurra et al., 2019). However, potentially related to the lack of knowledge of NB identities, NB individuals may have more barriers to getting support from health care providers compared to some BT participants (Cicero et al., 2020; Scandurra et al., 2019). To potentially cope with discrimination and harassment, some of the literature posits that some NB individuals are more at risk for developing eating disorders (Uniacke et al., 2021), non-suicidal self-injurious behaviors (Todd et al., 2019), anxiety, and depression than BT people.

It should also be kept in mind that some of the literature suggests that some NB individuals may be more at risk for experiencing discrimination and harassment (Levitt & Ippolito, 2014). This may potentially be due in part to some NB individuals choosing not to pass as cisgender as it would feel disingenuous to who they are. In turn, this accumulation of negative mental and physical health effects from discrimination and harassment (Meyer, 2003), coupled with potentially having more barriers to getting support from health care providers (Scandurra et al., 2019), may lead to an exacerbation of mental and physical health harms. However, more

research is still needed to better address this research question and better compare BT individuals and NB individuals and their physical and mental health responses to discrimination and harassment.

Internalized Transphobia

One TNB-specific internal stressor and psychological effect related to experiences of discrimination and harassment for TNB people is internalized transphobia (Hendricks & Testa, 2012). As stated earlier, internalized transphobia is a TNB person's shame, guilt, and/or anger at having a transgender identity. This shame, guilt, and/or anger of a TNB person toward their own identity has been hypothesized to correlate with the accumulation and internalization of experiences of TNB-based discrimination and harassment. This correlation in turn suggests that the more discrimination and harassment a TNB person experiences, the worse their internalized transphobia will be (Barr et al., 2021).

As internalized transphobia is thought of as resulting from the accumulation of experiences of discrimination and harassment, some effects of internalized transphobia are similar to those of discrimination and harassment (Drabish & Theeke, 2022). These effects may include ineffective coping strategy use, lower levels of self-esteem, and lower levels of resilience (Flynn & Bhambhani, 2021). This suggests that internalized transphobia can lower the effectiveness of some known buffering variables against mental health problems, thereby worsening the effects of further experiences of discrimination and harassment.

There is not much literature at the time of writing this paper on the group differences between BT people and NB people on the effects of internalized transphobia. Nevertheless, it can be theorized that, as internalized transphobia correlates with discrimination and harassment, group differences for internalized transphobia may be similar to group differences for discrimination and harassment. With this line of thinking, it may be that NB individuals are more prone to having internalized transphobia if they are more prone to experiencing discrimination and harassment.

Outness

To be "out" is to have others know of one's TNB identity (Orne, 2011). Originally, the literature posited that coming out is a one-time milestone in the lives of sexual minority people (and, analogously, TNB people) as they work towards living as their authentic selves (Cass, 1979). However, some controversy surrounds this idea, as it may imply that sexual minority individuals who are not open about their identity are "living a lie" and are ashamed of their sexual minority identity. This one-time model in turn ignores any nuances some situations may have regarding the sexual minority person's choice to come out.

Recently, researchers have shifted away from the one-time milestone model of coming out and instead posit that sexual minority people's (and analogously, TNB people's) coming out is more of an ongoing process akin to identity management (Orne, 2011). In this model, sexual minority individuals constantly navigate and appraise their identity in different situations to decide how to interact with others. Thus, sexual minority people who are not fully "out" are not assumed to be ashamed of their sexual minority identity, but instead, for example, may be trying to be safe in situations their sexual minority identity may bring them harm if discovered (Orne, 2011; Rosario et al., 2001; Van Dyke et al., 2021).

For some TNB people, in particular, the ongoing process model has been a better fit to describe their coming out process, due to the disproportionally high rates of discrimination, harassment, and internalized stigma some TNB individuals experience (Anderson, 2020; Tankersley et al., 2021; Ussher et al., 2022). The ongoing process model can account for the

situation a TNB person may find themselves in and better explain why a TNB person chooses to come out or not (Fernandez & Birnholtz, 2019; Orne, 2011).

If a TNB person does come out, it is thought that there are benefits to their mental health. For example, being out is correlated with higher levels of self-esteem (Pollitt et al., 2021; Rood et al., 2017; Van Dyke et al., 2021), higher levels of self-acceptance, and a strengthening of TNB people's social support networks (Andrzejewski et al., 2021; Erosheva et al., 2016). For some TNB individuals, being out may also be associated with strengthening their relationship with their TNB identity and feeling more of a connection to the TNB community (Allen et al., 2020; Tatum et al., 2020). Additionally, it has been suggested that being out may allow for some TNB individuals to feel more affirmed in their gender identity as being out may also be thought of as a rejection of their assigned gender at birth (Todd et al., 2019).

However, there may be some drawbacks to being out as well. Much like in the literature regarding sexual minority individuals and being out, being out may also put some TNB people at a higher risk for TNB-based discrimination (especially microaggressions) as those with TNB-based stigmas may then be able to target an out TNB individual to express their prejudices (Allen et al., 2020; Tebbe & Moradi, 2016).

For some sexual minority individuals, being out may also lessen the quality of their relationship with their social support systems if those support systems engage in discrimination or harassment (Robbins et al., 2016; Suppes et al., 2021). Analogously, other social supports may completely withdraw from some TNB individuals upon disclosure due to anti-TNB prejudices (Andrzejewski et al., 2021; Suppes et al., 2021).

Agency

What helps determine the benefits and drawbacks of being out may be the control a sexual minority and/or TNB individual has over who they are out to. This paper refers to this concept as "agency." In prior literature regarding sexual minority people and their agency over their outness, sexual minority individuals tend to come out to others based on what they think that individual's reaction will be (Rosario et al., 2001). By doing so, sexual minority people can target coming out to those that they believe will have a positive reaction. This agency over outness then helps these sexual minority individuals to minimize negative reactions and/or control when and where the negative reactions may occur. TNB individuals may be expected to employ a similar strategy as well, as some TNB individuals, particularly when either willingly or forcibly appearing cisgender (though, not necessarily always attempting to pass) due to environmental nuances, also have choices to make in their coming out processes.

A lack of agency over one's outness in both sexual minority people and TNB people may take the form of being "outed". Being outed occurs when another person who knows of a person's sexual minority and/or TNB identity discloses this identity without the consent of the sexual minority and/or TNB person (Rosario et al., 2001). The person who outs a sexual minority and/or TNB person may not always have malicious intent (Howard, 2012), but there may be negative impacts for a sexual minority and/or TNB person was outed in an environment hostile to such identities (Ellis et al., 2014; Skerrett et al., 2016). Such impacts may include higher levels of anxiety (Skerrett et al., 2016), depression, and suicidal ideation, being more at risk for suicide attempts, an increased risk for discrimination and harassment (McNamara et al., 2021; Skerrett et al., 2016).

For sexual minority people, being able to choose the who, when, and where they come out helps avoid or mitigate negative reactions (Gates, 2014), and this can be extrapolated to apply to TNB people as well. Both groups tend to come out to people in situations where they feel they will be safe, accepted, and welcomed (Garvey et al., 2018; Gates, 2014). For example, in a workplace setting, sexual minority individuals report that they are more comfortable coming out to their supervisors and coworkers if they are in inclusive environments that have legal protections and/or anti-discrimination policies for sexual minority workers (Gates, 2014).

The targeting of people and environments where coming out may be a positive experience may allow for TNB people, in particular, to elevate their levels of self-esteem (Pollitt et al., 2021) and strengthen social support networks (Andrzejewski et al., 2021; Schmitz & Tyler, 2018). Both of these impacts then, in turn, may help buffer against the effects of discrimination and harassment other more negative reactions to coming out may bring.

Though the literature lacks research that differentiates between BT and NB individuals on agency over their outness, there is evidence to suggest that both groups may have different experiences being out, and thus, different mental health outcomes associated with being out. For example, as many BT people choose to have a strictly masculine or feminine gender expression that can align with the cisgender norms of gender expression, some BT individuals may appear indistinguishable from cisgender people (Staples, Neilson, George, et al., 2018). On the other hand, many NB people tend to choose a gender expression that is neither exclusively male nor female and therefore does not align with the cisgender norms of gender norms of gender expression and do not want to appear indistinguishable from cisgender from cisgender people.

With this in mind, it can be hypothesized that BT people have more agency over their outness than many NB people since some BT individuals are able to pass as cisgender (Staples,

Neilson, George, et al., 2018). Passing may thus allow some BT individuals to come out to others only when they feel it is safe to do so. This would help BT individuals avoid experiences of discrimination and harassment. NB individuals, however, may have less agency over their outness than BT individuals as they may be instantly recognizable as a NB person. This implies that NB individuals may be more at risk for experiencing discrimination and harassment.

Hypotheses

Hypothesis 1a: It is expected that for the entire sample, there will be negative correlations between outness and mental health problems. This is thought to occur as the literature reports that the more out an individual is, the less likely they are to have mental health problems.

Hypothesis 1b: It is expected that for the entire sample, there will be a negative correlation between agency over outness and mental health problems as agency can be used to protect people from the harmful effects of coming out.

Hypothesis 1c: BT people will report less outness than NB people, but more agency over outness, because some BT people have the option of passing while few NB people do.

Hypothesis 2a: The entire sample will have a negative correlation between agency over outness and the experience of microaggressions. The more agency a TNB person has, the more control they have over not coming out to those with TNB-based prejudices thus potentially avoiding exposure to microaggressions.

Hypothesis 2b: BT people will report fewer experienced microaggressions than NB people. This may be the case as BT individuals are thought to have more agency over outness as their gender expression tends to be more in line with the cisgender norm. So, BT individuals, in particular, may be able to better avoid coming out to people who may expose them to microaggressions.

Hypothesis 3a: The entire sample will have a positive correlation between experienced microaggressions and internalized transphobia. The literature suggests that the more microaggressions a TNB individual experiences, the more likely they are to internalize those microaggressions.

Hypothesis 3b: BT individuals will report less internalized transphobia than NB individuals. BT individuals may experience fewer microaggressions than NB individuals as they have more agency over their outness, leading to less internalized transphobia.

Hypothesis 4a: The entire sample will have a positive correlation between internalized transphobia and mental health problems.

Hypothesis 4b: BT individuals will report less mental health problems overall compared to NB individuals. In essence, this is thought to occur as BT individuals may be less out, but have more agency over that outness, suggesting they can avoid coming out to people who may expose them to microaggressions, and thus experience less internalized transphobia.

Methods

Measures

Demographics

Participants were asked to report their gender identity, gender assigned at birth, sexual orientation, race/ethnicity, age, transition status, when the transition started, hearing status, year in school, GPA, any diagnosed mental health problems, religion, living situation, partner situation, and degree of parental support. Not all variables collected were used in the final analyses but were collected in hopes to aid future research on the population.

Attention Checks

Throughout the online survey, 6 attention checks were used to ensure that the data contained accurate information (see Appendix). Participants were told in the informed consent about the importance of being mindful of the questions being asked and responding to the questions as accurately as possible. Participants were also informed at the end of the survey of how many attention checks they failed. If the amount of failed attention checks exceeded 3, the participant did not receive their SONA credits or entry into a gift card raffle, and their data was not used. This was because too many failed attention checks may have indicated inaccurate responses due to inattentiveness and were not used in the final analysis to avoid introducing noise into the data.

Genderqueer Identity Scale (GQI; McGuire et al., 2019)

The GQI is a 23-item questionnaire to assess NB identities and gender non-conforming ideation (McGuire et al., 2019). This questionnaire was distributed as a way to confirm the self-assignment of BT individuals and NB individuals to their respective groups. All items are measured on a 5-point Likert scale (0 = strongly disagree, 4 = strongly agree). Two of the subscales focus on more complex, theoretical notions of gender: Social Construction (the degree to which an individual's gender varies by time and situation) and Theoretical Awareness (interest in gender theory and activism). The other two subscales focus on individual gender identity and expression: Challenging the Binary (the extent an individual's gender identity and expression goes against the binary) and Gender Fluidity (the blurring of gender boundaries of an individual's gender expression, experience, and identity and the frequency at which this happens).

This study used a composite of the two individual identity and expression subscales (Challenging the Binary and Gender Fluidity) as they were used to assess the individual's relationship with their gender (McGuire et al., 2019). The range of possible scores for these two scales is 0 to 8 with higher scores suggesting a more genderqueer identity (McGuire et al., 2019).

Internal consistency reliability was reported as adequate and stable for the pilot study clinical and community samples used: Social Construction (clinical sample: $\alpha = 0.61$; community sample: $\alpha = 0.80$), Theoretical Awareness (clinical sample: $\alpha = 0.77$; community sample: $\alpha = 0.84$), Challenging the Binary (clinical sample: $\alpha = 0.74$; community sample: $\alpha = 0.80$), and Gender Fluidity (clinical sample: $\alpha = 0.65$; community sample: $\alpha = 0.56$) (McGuire et al., 2019).

To establish content validity, McGuire et al. (2019) performed a pilot study of the GQI that was conducted with four different samples across two countries. From both the U.S. and Europe, clinical and community samples were collected. Its original purpose was to measure the experiences of individuals' interactions with their binary or nonbinary gender and confirm initial psychometrics for the scale. The GQI was administered with 24 items, with all items being based on empirical research, qualitative interviews, and clinical expertise. The authors additionally consulted experts in both countries on the topic. Confirmatory factor analyses support the GQI's construct validity, with all items loading on their respective scales ($r \ge .4$).

Outness Inventory (OI; Mohr & Fassinger, 2000)

This 11-item scale was developed to measure the degree a gay or lesbian individual's sexual orientation is acknowledged and openly discussed by various people in the individual's life (Mohr & Fassinger, 2000). Participants were asked to rate on an 8-point Likert scale from 0 to 7 (1 = the person does not know about your sexual orientation status, 7 = the person knows about your sexual orientation status) to what degree they would say that they are out to the target individual or groups. A rating of 0 indicates the person or group is not a part of the rater's life and the item was excluded from the final scoring. The measure can be interpreted as a whole or

by dividing it into three subscales: Out to World, Out to Family, and Out to Religion. For this study, the whole scale was used. Scores are calculated by averaging items receiving a score of 1 or more (i.e., excluding ratings of 0).

As the OI was initially created using lesbian or gay individuals, this study replaced the phrase "sexual orientation status" with "transgender-nonbinary identity" to help measure this study's construct of TNB identity outness – with the aim of having minimal effects on the psychometrics of the scale. This in part changed the original 8-point Likert scale responses to better reflect what is being measured.

The OI was given twice. The first time was done to assess whom the participant was out to, with the wording slightly adjusted to minimize the impact on the original scale's psychometric characteristics (see Appendix). Participants were then asked to rate *how out* they are with the target individual(s). This measured this paper's construct of outness. The higher the score on this iteration, the more publicly out the participant is.

For example, one of the questions asked the participant to rate how out they are to their mother. A rating of 1 would indicate that the participant's mother does not at all know about their TNB identity, while a rating of 7 would indicate that the participant's mother definitely knows about the participant's TNB identity and the TNB identity is something that is openly talked about among the participant and their mother. The higher the score on this iteration of the measure, the more publicly out the participant is.

This measure was then given a second time. This second time was done to assess if the participant came out of their own volition or if the target individual(s) found out without the participant's consent. Again, the wording of the original measure was slightly adjusted to minimize the impact on the original scale's psychometric characteristics (see Appendix). This

25

version of the measure was named the Disclosure-Agency Inventory (DAI). Participants were asked to rate the *degree of control* they had over the target individual(s) knowledge of their TNB identity. This measured this paper's construct of agency. The higher the score on this iteration of the measure, the more control the participant had over coming out to those individual(s).

For example, one of the questions asked the participant to rate how much control the participant had over their mother knowing of their TNB identity. A rating of 1 would indicate that the participant had no control at all over their mother knowing of the participant's TNB identity, while a rating of 7 would indicate that the participant had complete control over informing their mother of their TNB identity. There was again an option of rating 0 if the individual or group is not a part of the rater's life.

Mohr & Fassinger (2000) do not report internal consistency for the scale as a whole, but report adequate internal consistency reliability coefficients for each of the subscales: Out to World ($\alpha = 0.79$), Out to Family ($\alpha = 0.74$), and Out to Religion ($\alpha = 0.97$), so it is likely that the overall score has adequate internal consistency as well. Items for this inventory were developed by reviewing the literature. To ensure content validity, multiple graduate students knowledgeable in the area of lesbian and gay identity development were asked to review the items and give feedback on the wording of the inventory and areas of interest that were missing. Ultimately, this process yielded the 11 questions that currently comprise the OI.

To test for construct validity, the OI has correlated with 5 related measures: Rosenberg Self-Esteem Scale (r = .87), Mohr & Fassinger's Lesbian Identity Scale (r = .69), Mohr & Fassinger's Gay Identity Scale (r = .62), Garnet & Kimmel's Lesbian and Gay Identity Process Milestones (r = .85), and a modified version of Roberts et al.'s Multigroup Ethnic Identity Measure, worded to reflect in-group and out-group behavior of sexual minority individuals (r = .88) (Mohr & Fassinger, 2000). The positive correlations between these scales and the OI theoretically align with the scale's purpose, as higher levels of outness correlate to higher levels of self-esteem, pride, and identification with one's LGBTQ+ identity and community.

Transgender Discrimination Scale – 21 (TDS – 21; Watson et al., 2019)

Created by Watson et al. (2019), this 42-item survey measures experiences of transgender identity-based discrimination on a scale of 1 (the event has never happened) to 6 (the event almost always happens). The same 21 questions were answered twice, once measuring the experiences in the participant's entire life, and again measuring the participant's experiences in the past year. These 21 questions consist of 5 subscales: Microaggressions and Harassment, Restricted Career and Work Opportunities, Maltreatment in Healthcare Settings, Harassment by Law Enforcement, and Bullying and Harassment in Educational Settings. The total possible score is 252, with a higher score indicating more experiences of transgender-based discrimination.

The measure's overall internal consistency as reported by Watson et al. (2019) is excellent (r = .90). Subscale internal consistency ranged from .72 (Harassment by Law Enforcement) to .88 (Microaggressions and Harassment). Test-retest reliability is also psychometrically sound two to three weeks after the initial measure was given (r = .91).

Concurrent validity was demonstrated with significantly positive correlations with Cohen et al.'s (1983), Perceived Stress Short Form Scale (r = .84), the Negative Expectations of the Future (r = 0.80), Nondisclosure (r = .89), and Internalized Transphobia (r = .91) subscales on Testa et al.'s (2015) Proximal Minority Stressors Scale, and Szymanski's (2006) Heterosexist Harassment, Rejection, and Discrimination Scale (r = .90). These correlations supported the notion that this measure was appropriate for this study, as its constructs are similar to the constructs this study explored.

Items were developed via an intense literature review on discriminatory experiences specific to TNB individuals, leading to the creation of 59 items (Watson et al., 2019). Experts then gave feedback on the items, eliminating 24 items, thus, leaving 35 items to distribute as part of a pilot study. The results from that pilot study were then run through exploratory factor analysis and confirmatory factor analysis, resulting in the expansion and elimination of certain items, leaving to the measure's final 21 items.

Transgender Identity Survey (TIS; Bockting et al., 2020)

The TIS is a 26-item questionnaire developed to measure internalized transphobia (Bockting et al., 2020). This questionnaire is measured on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). A total score was used. The total possible score with 186, with higher scores suggesting higher rates of internalized transphobia.

The TIS demonstrated excellent internal consistency reliability (r = .90) and test-retest reliability over one week (r = .93) (Bockting et al., 2020). With regards to validity, the survey authors also found that the total score is positively correlated with a gender ideology scale the authors adapted from Taywaditep's (2001) work (measures the beliefs of traditional gender norms; r = 0.88), a shortened version of Bockting's (2014) Stigma Consciousness Scale (r = .70), and Derogatis's (2001) Brief Symptom Inventory (r = .72). This is in line with this study's purposes, as this study examined internalized transphobia through the context of similar measures to the ones that validated the TIS, such as the SCL-R-90 and TDS-21.

Initially, these items were developed via open-ended questionnaires from a small clinical TNB adult sample in the Midwest, resulting in 108 items (Bockting et al., 2020). Through expert

feedback, exploratory factor analyses, and confirmatory factor analyses, the current 26 items were presented.

Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1994)

The SCL-90-R is a 90-item questionnaire to measure mental health functioning (Derogatis, 1994). The total score is a composite of 9 subscales in which each item is measured on a Likert scale from 0 (not at all) to 4 (extremely) such that higher ratings always indicate greater psychological distress. The subscales that contribute to the composite are Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. The total possible score is 360, and a higher score on the SCL-90-R suggests more abnormal psychological symptomatology.

As an expansion of Parloff, Kelman, and Frank's (1954) Hopkins Symptom Checklist (HSCL), the SCL-90-R was designed to offer separate scores for constructs that were grouped into a single scale in the HSCL (Derogatis, 1994). This helped provide more accurate measures of these constructs, and later lead to the inclusion of 4 more separate constructs.

The test-retest reliability was adequate for the SCL-90-R (Derogatis, 1994). With a week between distributions of the test to psychiatric outpatients, the reliability of the SCL-90-R subscales has been found between a range of .80 to .90. Even after 10 weeks of the initial measure distribution, the SCL-90-R was found to hold test-retest reliability subscale ranges between .68 and .83.

In two subsequent studies of the SCL-90-R's psychometric properties, subscale internal consistency reliability coefficients were found ranging from .77 (Psychoticism) to .90 (Depression) (Derogatis, Rickles, and Rock, 1976) and a different validation study of the SCL-90-R found internal consistency reliability coefficients that ranged from .79 (Paranoid Ideation)

to .90 (Depression) (Boleloucky & Horvath, 1974). However, there is no overall internal consistency reliability for the SCL-90-R (Derogatis, 1994). Both validation studies also correlated scores from the SCL-90-R with the most relevant scale scores from Hathaway and McKinley's (1943) Minnesota Multiphasic Personality Inventory (MMPI). Correlations between the MMPI and SCL-90-R scales measuring similar constructs ranged from .40 to .75.

The SCL-90-R was compared to Wing et al.'s (1974) Present State Examination (PSE), a structured interview used to help diagnose psychological disorders via a total score that uses similar constructs to the SCL-90-R (such as anxiety, depression, somatization, etc.) (Derogatis, 1994). All correlations between the subscales between the PSE and SCL-90-R were statistically significant (r = .60 - .82). The SCL-90-R's depression subscale has also been found to correlate with the Beck Depression Inventory (r = .80) and Montgomery-Asberg Depression Rating Scale (r = .81).

Procedure

After approval by the Institutional Review Board at R.I.T. was obtained, participants began the online survey by first indicating they had read the informed consent form and agreed to take part in the study. Participants were then asked to provide the demographic information stated above and afterward completed the OI, TDS-21, GQI, TIS, and SCL-90-R with various attention checks throughout the battery. Participants were forced to respond to all questions to avoid missing data, with text boxes provided when necessary for participants to add clarifying information if they wished. Upon completion of the survey, participants were debriefed, given the chance to voice any concerns they had about the survey and its wording, and given information on supportive resources if the survey induced negative feelings. Participants were able to choose between receiving 2 SONA credits (1 credit per 15 minutes) and an entry into a \$50 Amazon gift card raffle as compensation.

To ensure the data was collected anonymously for the gift card raffle, a link leading outside of the survey was available for participants to then give their email addresses for gift card entry. The emails were then put into an Excel spreadsheet, and a random number generator (*random.org*) was used to determine who won.

Data Analytic Strategy

All analyses were performed using IBM-SPSS.

Correlations were done to examine the relationships between variables for the entire sample to investigate Hypotheses 1a, 1b, 2a, 3a, and 4a. A complete zero-order correlation matrix can be found in Table 4.

For Hypotheses 1c, 2b, 3b, and 4b, one-way analysis of covariance (ANCOVA) tests with a testwise alpha level of .05 were to evaluate for group differences in binary transgender (BT) and non-binary (NB) individuals. Based on preliminary analyses; gender assigned at birth (GAB) was the only covariate controlled for in all of the ANCOVAs, due to its statistical significance. A summary of these results can be found in Table 6.

Initially, a Dunn-Bonferroni correction was planned to determine if the findings would survive a more conservative standard, however, due to the lack of findings, was not performed. If readers wish to apply this correction, use a studywise alpha of .005.

Results

Participants

In total, 172 participants initiated the survey. Of those responses, around half were used in the final analyses (53.80%, n = 92). The rest of the responses were screened out (25.73% did not

complete the survey and 24.05% were not eligible to take the survey). A full breakdown of screening criteria can be found in Table 1.

In the final sample of 92 participants, the majority reported being assigned female at birth (66.30%, n = 61). As a significant difference existed between the binary transgender (BT) and non-binary (NB) in gender assigned at birth (GAB; χ^2 (1) = 6.42, *p* = .011), GAB was controlled for in the final analyses. Around two-thirds of the participants identified as NB (63.04%, *n* = 58), and the remainder as BT (36.96%, *n* = 34). Of the NB participants, specific identities (non-exclusive) included gender fluid (27.17%, n = 25), genderqueer (27.17%, *n* = 25), enby (20.65%, *n* = 19), and agender (6.52%, *n* = 6). Of the BT participants, participants were equally likely to be male-to-female (MtF; i.e. trans women; 18.48%, *n* = 17) and female-to-male (FtM; i.e. trans men; 18.48%, *n* = 17).

Three first-year students input "0" as their grade point average (GPA). This was likely because it was their first semester in their undergraduate degree, and they did not yet have this information. These three cases were removed from the analysis of the GPAs, leaving 89 respondents that were examined. Of these respondents, the sample's GPAs ranged from 1.80 to $4.00 \ (M = 3.36, SD = 0.49)$.

Participants reported being between the ages of 18 and 23 (M = 19.00, SD = 0.77), though, due to an error of the primary investigator, age was only collected for about half of the participants (n = 42). However, all participants' year in school was collected, with most participants indicating that they were in the second year of their undergraduate degree (31.52%, n = 29). With the ages collected reflecting the sample as being primarily traditional college-aged students, a correlation was run to see if participants' year in school could act as a proxy for age. A significant correlation (r = .832, p < .001) was found between the two, thus, participants' year in school was deemed a suitable proxy for age in the primary analysis. However, year in school ultimately was not controlled for in the final analyses as no significant difference was found between BT and NB groups (χ^2 (1) = 3.21, *p* = .667).

The participants were asked to select one or more race/ethnicity identities. Most participants identified as being exclusively Caucasian, Non-Hispanic (75.00%, n = 69). This was followed by participants identifying as Multiracial (11.96%, n = 11), Asian/Asian American (7.60%, n = 7); Latinx or Hispanic (3.26%, n = 3); Black/African American (1.09%, n = 1); and Other (1.09, n = 1). Race/Ethnicity was dichotomized into Caucasian, Non-Hispanic and Racial/Ethnic Minority Identities to see if there were significant differences between the NB and BT samples (χ^2 (1) = 0.06, p = .803). No significant differences were found, so race/ethnicity was not controlled for in the final analysis.

A full breakdown of participant demographic information used in the primary analyses can be found in Table 2 and Table 3.

Primary Analysis

Hypothesis 1

The first hypothesis focused overall on the relationship between outness and agency with mental health, and group differences concerning the variables.

It was speculated in Hypothesis 1a that there would be a negative correlation between outness and mental health problems. No significant correlation was found in the entire sample between an individual's outness, as measured by the Outness Inventory (OI), and their mental health, as measured by the Symptom Checklist-90-Revised (SCL-90-R), contrary to what was expected ($r_{OIxSCL-90-R}(89) = -.030$, p = .774).

Hypothesis 1b posited for the entire sample that a negative correlation between agency and mental health problems could be expected. The results found no significant correlation between agency, measured by the Disclosure-Agency Inventory (DAI), and mental health for the entire sample ($r_{\text{DAIxSCL-90-R}}(89) = .125$, p = .235).

For Hypothesis 1c, it was expected that BT individuals would report less outness than NB individuals, but more agency. As reported in Table 6, the ANCOVA performed showed that there was a statistically significant difference between the BT and NB groups on scores on the OI $(F(1, 89) = 4.65, p = .034, \eta^2 = 0.05)$, such that the BT group had the higher scores of the two groups. This diverged from the expectation that the NB group would report higher scores. On the DAI, however, no statistically significant difference between BT and NB groups' scores was found $(F(1, 89) = 1.29, p = .259, \eta^2 = 0.01)$.

Altogether, the results indicate that there is no relationship between outness or agency with mental health for the entire sample, nor group differences between the BT and NB groups concerning agency. While group differences were found concerning outness, BT individuals reported being more out than NB individuals, in contrast to expectations.

Hypothesis 2

Hypothesis 2 focused on the relationship between agency and microaggressions, and if group differences were present in experiences of microaggressions.

Non-significant correlations were found for the entire sample between agency and experiences of transphobia in the past year ($r_{\text{DAIxTDS-21:Past Year}}(89) = -.148, p = .160$), entire life ($r_{\text{DAIxTDS-21:Entire Life}}(89) = -.159, p = .130$), and overall ($r_{\text{DAIxTDS-21:Total}}(89) = -.164, p = .119$), as measured by the Transgender Discrimination Scale-21 (TDS-21). These results are against the

expectation of Hypothesis 2a, which predicted that there would be a negative correlation for the overall sample between agency and microaggressions. Table 4 summarizes these results.

As no statistically significant differences were found between BT and NB groups' scores on the TDS-21, either on the past year ($F_{TDS-21:PY}(1, 89) = 0.04, p = .834, \eta^2 = 0.00$), entire life ($F_{TDS-21:EL}(1, 89) = 2.94, p = .090, \eta^2 = 0.03$), or in total scores ($F_{TDS-21:Total}(1, 89) = 1.23, p =$.271, $\eta^2 = 0.01$), Hypothesis 2b's assertion that BT individuals would report fewer experiences of microaggressions than NB individuals was not supported.

These results counter the expectations of Hypothesis 2, as no significant correlation was found between agency and mental health, nor were any group differences noted in experiences of microaggressions.

Hypothesis 3

The relationship between experiences of microaggressions and internalized transphobia, and group differences in internalized transphobia were considered in Hypothesis 3.

Hypothesis 3a expected that the entire sample would have a positive correlation between experienced microaggressions and internalized transphobia. This was not supported. As shown in Table 4, no significant correlations were found between internalized transphobia, measured by the Transgender Identity Survey (TIS), and experiences of transphobia, in the past year ($r_{TISxTDS-}$ $_{21: Past Year}(89) = -.065, p = .539$), entire life ($r_{TISxTDS-21: Entire Life}(89) = -.062, p = .558$), or overall ($r_{TISxTDS-21: Total}(89) = .067, p = .524$) for the entire sample.

While the results of the ANCOVA comparing scores on the TIS between the two groups were statistically significant, they were inconsistent with Hypothesis 3b, which assumed that the BT group would report less internalized transphobia than the NB group. Instead, it was found that the BT group had higher scores on the TIS than the NB group (refer to Table 6; F(1, 89) = 9.46, p = .003, $\eta^2 = 0.10$).

No relationship between microaggressions and internalized transphobia was found, and group differences present in levels of internalized transphobia showed the BT group had higher levels of internalized transphobia instead of the NB group. All findings were in contrast to Hypothesis 3's expectations.

Hypothesis 4

The final hypothesis focused on the relationship between internalized transphobia and mental health, and expected group differences in overall mental health.

No correlations were found between internalized transphobia, measured by the TIS, and mental health problems, measured by the SCL-90-R, for the entire sample, contrary to Hypothesis 4a, which asserted a significant positive correlation would be present ($r_{\text{TISxSCL-90-}}$ _R(89) = .057, p = .590).

Hypothesis 4b predicted that the BT group would report lower scores on the SCL-90-R than the NB group. The ANCOVA results, as shown in Table 6, yielded no support for differences in scores between the two groups (F(1, 89) = 0.62, p = .434, $\eta^2 = 0.01$).

As no relationship emerged between internalized transphobia and mental health for the entire sample, nor any group differences found in overall mental health status, Hypothesis 4 was not supported.

Post Hoc

While running the analyses, other findings of note emerged. For the entire sample, being out was noted to negatively correlate with internalized transphobia (r(89) = -.221, p = .034). Additionally for the entire sample, experiences of microaggressions in the past year ($r_{\text{TDS-21: Past}}$ $_{\text{YearxSCL-90-R}}(89) = .272, p < .001)$, over an individual's entire life ($r_{\text{TDS-21: Entire LifexSCL-90-R}}(89) = .259, p = .013)$, and overall ($r_{\text{TDS-21:TotalxSCL-90-R}}(89) = .282, p = .007$) were positively correlated with mental health problems. These results are summarized in Table 4.

Summary

In conclusion, none of the hypotheses of this study were supported. No relationships were present for the entire sample concerning outness and mental health problems (Hypothesis 1a), agency and mental health problems (Hypothesis 1b), agency and experiences of microaggressions (Hypothesis 2a), experiences of microaggressions and internalized transphobia (Hypothesis 3a), and internalized transphobia and mental health problems (Hypothesis 4a).

Post-hoc analyses displayed, however, that for the entire sample, a negative correlation existed between outness and internalized transphobia, and a positive correlation existed between experiences of microaggressions and mental health problems.

Regarding group differences between the BT and NB groups, none were found concerning scores on the DAI, TDS-21, and SCL-90-R, partially in contrary to Hypotheses 1c, and fully in contrary to Hypotheses 2b and 4b, in that order. Group differences were found in scores on the OI and TIS, however, both differences revealed the BT group scored higher than the NB group on these scales, as opposed to the expectations of Hypotheses 1c and 3b.

Discussion

The present study aimed to examine the mental health of binary transgender (BT) and nonbinary (NB) individuals as an entire transgender non-binary (TNB) group and to discern any differences in mental health between the two subgroups. The effects of an individual's degree of outness, how much agency they perceived themselves as having when coming out, experiences of microaggressions based on their transgender identity, and the intensity of their internalized transphobia on their mental health were examined for the entire group, and differences between the two groups were investigated.

None of the hypotheses proposed in this study regarding differences between the BT and NB groups were supported. Originally, it was hypothesized that the BT group would be able to be more selective in their outness, conferring a range of advantages. All of the remaining hypotheses were elaborations on this initial supposition. Since this first hypothesis was not found to be correct, it is unsurprising that the others were also nonsignificant. Only one group difference was found regarding differing levels of outness between the BT and NB groups, with the BT group reporting being more out than the NB group. This was contrary to the expectation that the NB group would be more out, as the group is thought to generally have little desire to pass as eisgender (due to the non-binary gender identity being outside of the gender binary). While the hypotheses emphasized the fact that NB individuals can be selective in their gender expression in a way that increases their agency over disclosure, it is also the case that many NB individuals intentionally dress androgynously and use gender-neutral pronouns, and through this unique appearance and "uncommon" pronouns, would either intentionally or unintentionally out themselves as NB.

An explanation for these contradictory results may be the lack of knowledge the public has on NB identities (Goldberg et al., 2019). BT individuals are thought to experience less education burdening (the act of having a TNB individual act as a representative for the entire TNB community and educate non-TNB individuals about the TNB community) as there is more cultural education and awareness of BT identities (Goldberg et al., 2019; Nadal, 2019). To avoid this form of microaggression, in addition to avoiding discrimination and harassment as a whole, some NB individuals may remain closeted. In these cases, these NB individuals may only come out to those that they know and trust to have a positive reaction to their coming out (Rosario et al., 2001).

On a politically liberal college campus, like the one where this study was conducted, a more androgynous appearance may not be uncommon, due less constrictive gender norms (Schmitz & Tyler, 2018). This may suggest that some NB individuals, especially on college campuses, may not necessarily be outing themselves as having a NB identity purely by dressing more androgynously. Unless an interaction involves asking about pronouns and/or gender identities, or a NB individual is wearing something that explicitly exhibits their NB identity (such as a they/them pronoun pin or a patch with the NB flag on it), some cisgender individuals may make the assumption they are talking to someone who identifies within the gender binary. Thus, some NB individuals may not be out by their general appearance.

Though this is a plausible explanation as to what occurred in the case of this study, there is little prior research on BT and NB group differences, so hypotheses based on these differences were highly speculative. Hence, it is not very surprising that none of the hypotheses related to group differences were supported. This study was unique in that it attempted to fill this gap in the literature, in hopes of informing future research.

Adequacy of Measures

There is prior literature on the entire TNB community as a whole this study drew on for entire sample hypotheses, and in many cases, this study's results were inconsistent with expectations. Specifically, findings relating to outness and microaggressions were consistent with the prior literature, while findings pertaining to agency and internalized transphobia were not. As such, we assessed whether measurement problems could explain the unexpected findings.

Outness Inventory and Transgender Discrimination Scale-21

Regarding outness, prior research has contradictory views of its relationship to the other variables studied. Some research suggests a negative relationship exists between outness and internalized transphobia, experiences of discrimination and harassment, and mental health problems. In these studies, outness has been found to correlate with higher levels of self-esteem and self-acceptance, among other things, which are known buffers against internalized transphobia and mental health problems (Erosheva et al., 2016; Pollitt et al., 2021). Yet, other research suggests a positive relationship between outness and these variables. In some cases, higher levels of outness correlate with more experiences of discrimination and harassment and a loss of certain social support systems (Allen et al., 2020; Suppes et al., 2021; Tebbe & Moradi, 2016). These outcomes are known risk factors for the development and/or worsening of internalized transphobia and mental health problems.

The literature regarding experiences of transgender identity-based microaggressions and outness is contradictory. Outness can either act as a buffer against the negative effects of microaggressions (Hendricks & Testa, 2012) or can increase the risk of experiencing microaggressions (Allen et al., 2020; Tebbe & Moradi, 2016). However, it is consistently found that microaggressions and mental health problems have a positive relationship. The more experiences of microaggressions a TNB individual has can correlate with an increase in levels of depression and anxiety, in addition to an increase in suicidal ideation and risk of suicide attempts (Hendricks & Testa, 2012; Perez-Brumer et al., 2015; Rood et al., 2016).

Our post-hoc analyses of the Transgender Discrimination Scale-21 (TDS-21) found an internal consistency reliability of .943 in our sample. With regard to validity, higher rates of experienced transgender-based microaggressions correlated positively with mental health

problems in both groups, as expected. This implies that the Transgender Discrimination Scale-21 (TDS-21) was a sound instrument to include in this study. For the OI, either a positive or negative correlation between outness and mental health problems would be consistent with prior literature. The results of this study are in line with the vein of research suggesting that being out is beneficial for a TNB individual. For both the BT and NB groups in this study, outness was found to negatively correlate with internalized transphobia. From these results, it was determined that there was no reason to believe the Outness Inventory (OI) was not a valid instrument to use for this thesis. Though, it should be noted that the internal consistency reliability of the OI within our sample was low ($\alpha = .243$). If reliability is low, the instrument cannot be valid. Thus, this calls into question not only if an instrument designed to measure sexual minority individuals' outness is valid for use in measuring TNB individuals' outness, but if the concept of outness is the same between sexual minority individuals and TNB individuals.

Disclosure-Agency Inventory

Based loosely on the OI, the Disclosure-Agency Inventory (DAI) was a scale created to capture this study's concept of agency, or an individual's degree of control and selectivity in coming out. Prior literature suggests that being outed (i.e., an extreme lack of agency) can have detrimental consequences for a TNB individual not only psychologically and emotionally, but potentially physically as well (Skerrett et al., 2016). Therefore, some TNB individuals may only come out to other individuals who they trust will have a positive reaction to the disclosure (Rosario et al., 2001). Due to this, agency has been assumed to play a mediating role in the relationship between outness and microaggressions, though it has never been directly studied. There is no reason to expect that agency will have mixed effects – it should be strictly positive.

One possibility for this study's unexpected findings is that the DAI is not a valid measure, either generally or in this sample specifically. Since the DAI was adapted for this study, validity was not guaranteed and is of particular concern. Full psychometric data on the DAI could not be obtained due to the constraints of the study (for example, no test-retest data is available), but some aspects of its reliability and validity could be assessed. Internal consistency reliability appears adequate (r_{xx} = .922; see Table 7). The distribution of scores appears roughly normal, with skewness and kurtosis within acceptable ranges, and no evidence of severe outliers, floor, or ceiling effects (see Figure 1 and Table 7). This does not, however, guarantee the scale's validity. The fact that agency did not correlate significantly with microaggressions or mental health problems suggests a significant problem with the DAI's construct validity.

Transgender Identity Survey

There are three things prior data suggests that internalized transphobia should be related to that were not found in this study: outness, discrimination, and mental health. Prior research has consistently shown that microaggressions are positively related to internalized transphobia and that internalized transphobia is associated with worsened mental health (Barr et al., 2021; Flynn & Bhambhani, 2021; Perez-Brumer et al., 2015; Valentine & Shipherd, 2018). Thus, the psychometric properties of the Transgender Identity Survey (TIS) were examined further.

The TIS has previously been psychometrically validated by Bockting et al. (2020), and its psychometric properties were factored into the selection of this instrument for this survey's methodology. Furthermore, internal consistency was assessed in our sample and was found to be adequate (r_{xx} = .870; see Table 7). Additionally, the distribution of total scores for this instrument was within a normal range as well, with no apparent floor or ceiling effects, or any outliers (see

Table 7 and Figure 2). This suggests that the TIS was reliable, but does not guarantee the instrument's validity.

Outness can act as a buffer against the harmful effects of internalized transphobia via many pathways, such as increasing levels of social support, or can act as a risk factor for internalized transphobia by potentially increasing experiences of discrimination and harassment, so no prediction can be made about correlations between the OI and TIS (Tebbe & Moradi, 2016). But, the more experiences of discrimination and harassment a TNB individual experiences, the greater their risk for developing or worsening their internalized transphobia becomes (Barr et al., 2021). As internalized transphobia is a form of self-hatred, it has been found to correlate with mental health problems such as depression, anxiety, and increase risk of suicide attempts (Drabish & Theeke, 2022). So, if the TIS is valid for this population, there should be significant positive correlations between the TIS and the TDS-21, as well as between the TIS and the SCL-90-R. The results of this study found neither correlation. The TIS and TDS-21 are research instrument with good evidence of their psychometric adequacy. However, the SCL-90-R is an extremely well-validated instrument across a wide range of populations. Therefore, any unexpected correlations between an instrument and the SCL-90-R are more likely to suggest a problem with the other instrument. Furthermore, our data were used to confirm the internal consistency reliability of the SLC-90-R and found it to be excellent ($\alpha = .995$).

Additionally, because the TIS was developed a few years ago, the wording of the items themselves was examined to discern if perhaps the language could be considered too extreme or even outdated for the average age of the sample, but based on a qualitative analysis, no such wording was found. More research should be conducted to examine this unique phenomenon pertaining to this instrument and the sample, or even the TNB population, to see if perhaps an updated version of the measure is needed.

The general state of mental health in the TNB community can be unclear due partly to a.) what little research is available on TNB individuals in general, b.) how contradictory that research is at times, and c.) the ever-changing political landscape regarding the rights of TNB individuals, especially in the United States of America at the time of writing this paper. Regarding the findings of this paper, the presumed results of a positive relationship between experiences of transgender-based microaggressions and mental health problems are in line with the research. The lack of direct significant relationships with the other variables may be due to the lack of research, contradictory findings, or, the instrumentation failures (DAI and TIS).

Ultimately, all but two of the instruments utilized were sound instruments to include in this study. The DAI and the TIS had adequate internal consistency reliability and obtained generally normal data, but nonetheless produced results that suggest a problem with their validity.

Limitations and Future Directions

There are three major limitations to this study. The biggest limitation was the lack of previous research to draw from, making hypotheses more speculative. While studies have been conducted regarding the TNB population on a variety of topics, the literature base itself has only begun to truly accumulate research in the past two decades. As such, some of these studies are contradictory to one another as they too have little to draw on to inform their research. To fill in these gaps, this study drew from literature and instruments regarding the sexual minority community and this study's variables of interest, such as outness. The incongruent results of this study in regard to the patterns found in the sexual minority literature may suggest that the sexual

minority community and the TNB community have drastically different concepts of these variables. Future research should focus on defining these concepts in a way that is specific to the TNB community. Furthermore, literature that differentiates between the BT and NB subgroups is nearly non-existent. The TNB community is not a homogenous group, much like the lesbian, gay, bisexual, transgender, plus (LGBT+) community. Even within the BT or NB categories, there are subgroups which cannot be assumed to have similar experiences. For example, under the NB umbrella are genderfluid and agender individuals. Genderfluid individuals are individuals whose gender identity is not fixed, and instead, shift multiple times over their lifetime. This identity is not a transitionary identity for individuals questioning their gender identity, but a gender identity based on the constant changing of an individual's gender identity. Agender individuals are individuals who do not have a gender identity. Unlike NB individuals who have a gender identity outside of the gender binary, agender individuals do not have a gender within or outside of the gender binary. While both genderfluid and agender individuals may consider themselves under the NB identity umbrella, they are vastly different identities compared to one another.

These different communities that fall within or are associated with the TNB community warrant further study individually and in comparison to one another not only to help inform future inclusive care practices, but to raise awareness of these identities and educate the public on them as well.

Another limitation concerned this study's specific sample. This sample consisted of BT and NB students from a moderately selective private university comprised of academically able individuals (*How Does Rochester Institute of Technology Rank Among America's Best Colleges*?, 2023). Tuition is substantially higher than public or community colleges, even after

financial aid. Because of this, the student body is disproportionately middle- and high- socioeconomic status. Young people who have been rejected by their parents are unlikely to attend an expensive college, so average parental support is likely higher in this sample than the general TNB population. With this parental acceptance and support comes access to a wider variety of resources for the BT and NB students, thus, these students may have had more access to more gender affirming care, such as hormone replacement therapy and gender affirming mental health care (Andrzejewski et al., 2021). Furthermore, university students do not represent the larger population – for example, it is unlikely that many were working full-time or were married. Replications should be conducted with a broader range of participants, including other postsecondary institutions and community samples.

The last limitation concerned the average age of the study's participants (M = 19.00). The sample likely consisted of individuals who have been out for only a few years, and therefore, have had less time living as their true selves compared to BT and NB individuals who have been out for almost a decade or more. This study did not require participants to be out for either a certain length of time or to a certain degree, nor were these covaried due to the ambiguous nature of what it means to be "out". This study merely required participants to indicate if they had begun the transitioning process (i.e., taking any step toward an identity-congruent gender expression).

In turn, these participants may not have had many experiences with microaggressions. This may explain why certain relationships that were expected to be found were not, such as the expected correlation between internalized transphobia and mental health problems. The participants may not have been out long enough for these patterns to form. Future studies should consider time since self-identifying as TNB, time since beginning transition, and extent of transition as covariates. Not all TNB individuals are "out" in the same way, intensity, or degree as each other, and being out holds different importance to different individuals. However, there are likely psychological differences between a TNB individual who has been socially and medically transitioned for years and a TNB individual who has only been socially transitioned for years.

Conclusion

The present study sought to further the field's knowledge of binary transgender (BT) and non-binary (NB) individuals' mental health as an entire group and in comparison to one another in terms of six variables: outness, agency, experiences of transgender-based discrimination and harassment, internalized transphobia, and mental health problems. The study's primary hypotheses are built on one another. Since the first hypothesis regarding BT/NB differences was not supported, it is unsurprising that the others were not either. In fact, BT individuals were found to be more out and reported higher levels of internalized transphobia than NB individuals, contrary to expectations. Additionally, post-hoc analyses revealed that for the entire sample, being out was negatively correlated with internalized transphobia, and experiencing discrimination and harassment was positively correlated to mental health problems.

The lack of prior literature to inform this study's hypotheses, the need to create an entirely novel instrument, and the uniqueness of the sample utilized in the study may have contributed to this study's hypotheses not being supported. Accordingly, we recommend that future researchers continue to expand the literature, primarily through the development of more comparison studies of not only BT individuals and NB individuals, but on studies that differentiate among specific NB identities as well.

Though the findings regarding this study's hypotheses were unexpected, the post-hoc results confirming the relationship between microaggressions and mental health problems reinforce the need for more allyship with the TNB community. Allies ca assist in the creation of more inclusive and safe environments for TNB individuals to exist in. This creates buffers against TNB individuals' mental health problems by allowing them to be out as their authentic selves, potentially increasing self-esteem and increasing social connections. This emphasizes the importance of promoting inclusive and safe environments for TNB individuals. Since discrimination and harassment are not limited to interpersonal mistreatment, this must include fighting back against the wave of discriminatory TNB legislation that is sweeping the United States at the time of writing this paper. While this paper shows that there is still improvement to be made in the quality of life of TNB individuals, this paper also shows that there may be a path to achieve it.

References

- Allen, B. J., Andert, B., Botsford, J., Budge, S. L., & Rehm, J. L. (2020). At the margins:
 Comparing school experiences of nonbinary and binary-identified transgender youth.
 Journal of School Health, 90(5), 358–367. https://doi.org/10.1111/josh.12882
- Anderson, S. M. (2020). Gender matters: The perceived role of gender expression in discrimination against cisgender and transgender LGBQ individuals. *Psychology of Women Quarterly*, 44(3), 323–341. https://doi.org/10.1177/0361684320929354
- Andrzejewski, J., Pampati, S., Steiner, R. J., Boyce, L., & Johns, M. M. (2021). Perspectives of transgender youth on parental support: Qualitative findings from the resilience and transgender youth study. *Health Education & Behavior*, 48(1), 74–81. https://doi.org/10.1177/1090198120965504
- Annalisa, A., Lindley, L., Giacomo, T., Paz, G. M., & Antonio, P. (2021). "Being talked to like I was a sex toy, like being transgender was simply for the enjoyment of someone else":
 Fetishization and sexualization of transgender and nonbinary individuals. *Archives of Sexual Behavior*, *50*(3), 897–911. http://dx.doi.org.ezproxy.rit.edu/10.1007/s10508-021-01935-8
- Barr, S. M., Snyder, K. E., Adelson, J. L., & Budge, S. L. (2021). Posttraumatic stress in the trans community: The roles of anti-transgender bias, non-affirmation, and internalized transphobia. *Psychology of Sexual Orientation and Gender Diversity*. https://doi.org/10.1037/sgd0000500
- Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Dolezal, C., Robinson, B. "Bean" E., Rosser, B. R. S., & Coleman, E. (2020). The transgender identity survey: A measure of internalized transphobia. *LGBT Health*, 7(1), 15–27. https://doi.org/10.1089/lgbt.2018.0265

- Budge, S. L., Tebbe, E. N., & Howard, K. A. S. (2010). The work experiences of transgender individuals: Negotiating the transition and career decision-making processes. *Journal of Counseling Psychology*, 57(4), 377–393. https://doi.org/10.1037/a0020472
- Cass, V. C. (1979). Homosexual identity formation: A theoretical model. *Journal of Homosexuality*, 4(3), 219–235. https://doi.org/10.1300/J082v04n03_01
- Cicero, E. C., Reisner, S. L., Merwin, E. I., Humphreys, J. C., & Silva, S. G. (2020). The health status of transgender and gender nonbinary adults in the United States. *PLOS ONE*, 15(2), e0228765. https://doi.org/10.1371/journal.pone.0228765
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24(4), 385. https://doi.org/10.2307/2136404
- Corlett, S., Di Marco, D., & Arenas, A. (2021). 'Coming out' across cultures: Examining the experiences of Ecuadorian and Spanish LGB employees. *Current Psychology*, 40(11), 5391–5401. https://doi.org/10.1007/s12144-019-00463-y
- Derogatis, L. R. (1994). SCL-90-R: Symptom Checklist-90-R. Administration, scoring, and procedures manual. [Manual].
- Dias, C. K., Rocha, L. R. L., Tateo, L., & Marsico, G. (2021). "Passing" and its effects on Brazilian transgender people's sense of belonging to society: A theoretical study. *Journal* of Community & Applied Social Psychology, 31(6), 690–702. https://doi.org/10.1002/casp.2535
- Dimant, O. E., Cook, T. E., Greene, R. E., & Radix, A. E. (2019). Experiences of transgender and gender nonbinary medical students and physicians. *Transgender Health*, 4(1), 209– 216. https://doi.org/10.1089/trgh.2019.0021

Drabish, K., & Theeke, L. A. (2022). Health impact of stigma, discrimination, prejudice, and bias experienced by transgender people: A systematic review of quantitative studies. *Issues in Mental Health Nursing*, *43*(2), 111–118.

https://doi.org/10.1080/01612840.2021.1961330

- Dyar, C., Feinstein, B. A., Sarno, E. L., Pirog, S., Newcomb, M. E., & Whitton, S. W. (2021). Prospective associations between bi+ minority stressors and internalizing symptoms: The mediating roles of general and group-specific processes. *Journal of Consulting and Clinical Psychology*, 89(10), 845–855. https://doi.org/10.1037/ccp0000689
- Ellis, S. J., McNeil, J., & Bailey, L. (2014). Gender, stage of transition and situational avoidance:
 A UK study of trans people's experiences. *Sexual and Relationship Therapy*, 29(3), 351–364. https://doi.org/10.1080/14681994.2014.902925
- Erosheva, E. A., Kim, H.-J., Emlet, C., & Fredriksen-Goldsen, K. I. (2016). Social networks of lesbian, gay, bisexual, and transgender older adults. *Research on Aging*, 38(1), 98–123. https://doi.org/10.1177/0164027515581859
- Fernandez, J. R., & Birnholtz, J. (2019). "I don't want them to not know": Investigating decisions to disclose transgender identity on dating platforms. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 226:1-226:21. https://doi.org/10.1145/3359328
- Flynn, M. K., & Bhambhani, Y. (2021). Internalized transphobia, nondisclosure of gender identity, and life satisfaction among transgender and non-binary adults: The moderating roles of psychological flexibility and inflexibility. *Journal of Contextual Behavioral Science*, 20, 194–201. https://doi.org/10.1016/j.jcbs.2021.04.008
- Garvey, J. C., Matsumura, J. L., Silvis, J. A., Kiemele, R., Eagan, H., & Chowdhury, P. (2018). Sexual borderlands: Exploring outness among bisexual, pansexual, and sexually fluid

undergraduate students. *Journal of College Student Development*, 59(6), 666–680. https://doi.org/10.1353/csd.2018.0064

- Gates, T. G. (2014). Assessing the relationship between outness at work and stigma consciousness among LGB workers in the Midwest and the resulting implications for counselors. *Counselling Psychology Quarterly*, 27(3), 264–276. https://doi.org/10.1080/09515070.2014.886998
- Goldberg, A. E., Kuvalanka, K. A., Budge, S. L., Benz, M. B., & Smith, J. Z. (2019). Health care experiences of transgender binary and nonbinary university students. *The Counseling Psychologist*, 47(1), 59–97. https://doi.org/10.1177/0011000019827568
- Goldberg, A. E., Matsuno, E., & Beemyn, G. (2021). "I want to be safe...and I also want a job":
 Career considerations and decision-making among transgender graduate students. *The Counseling Psychologist*, 49(8), 1147–1187. https://doi.org/10.1177/00110000211037671
- Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, 43(5), 460–467. https://doi.org/10.1037/a0029597
- Howard, S. C. (2012). Intercultural (mis)communication: Why would you "out" me in class? *Sexuality & Culture*, *16*(2), 118–133. https://doi.org/10.1007/s12119-011-9112-3
- Jäggi, T., Jellestad, L., Corbisiero, S., Schaefer, D. J., Jenewein, J., Schneeberger, A., Kuhn, A., & Garcia Nuñez, D. (2018). Gender minority stress and depressive symptoms in transitioned Swiss transpersons. *BioMed Research International*, 2018, 1–10. https://doi.org/10.1155/2018/8639263

- Levitt, H. M., & Ippolito, M. R. (2014). Being transgender: Navigating minority stressors and developing authentic self-presentation. *Psychology of Women Quarterly*, 38(1), 46–64. https://doi.org/10.1177/0361684313501644
- McGuire, J. K., Beek, T. F., Catalpa, J. M., & Steensma, T. D. (2019). The Genderqueer Identity (GQI) Scale: Measurement and validation of four distinct subscales with trans and LGBQ clinical and community samples in two countries. *International Journal of Transgenderism*, 20(2–3), 289–304. https://doi.org/10.1080/15532739.2018.1460735
- McNamara, K. A., Lucas, C. L., Goldbach, J. T., Holloway, I. W., & Castro, C. A. (2021). "You don't want to be a candidate for punishment": A qualitative analysis of LGBT service member "outness." *Sexuality Research and Social Policy*, *18*(1), 144–159. https://doi.org/10.1007/s13178-020-00445-x
- Mendoza-Perez, J. C., & Ortiz-Hernandez, L. (2021). Association between overt and subtle experiences of discrimination and violence and mental health in homosexual and bisexual men in Mexico. *Journal of Interpersonal Violence*, *36*(23–24), NP12686–NP12707. https://doi.org/10.1177/0886260519898423
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674
- Mohr, J., & Fassinger, R. (2000). Measuring dimensions of lesbian and gay male experience.
 Measurement and Evaluation in Counseling and Development, 33(2), 66–90.
 https://doi.org/10.1080/07481756.2000.12068999
- Nadal, K. L., Whitman, C. N., Davis, L. S., Erazo, T., & Davidoff, K. C. (2016). Microaggressions toward lesbian, gay, bisexual, transgender, queer, and genderqueer

people: A review of the literature. *The Journal of Sex Research*, *53*(4–5), 488–508. https://doi.org/10.1080/00224499.2016.1142495

- Orne, J. (2011). 'You will always have to "out" yourself': Reconsidering coming out through strategic outness. *Sexualities*, *14*(6), 681–703. https://doi.org/10.1177/1363460711420462
- Perez-Brumer, A., Hatzenbuehler, M. L., Oldenburg, C. E., & Bockting, W. (2015). Individualand structural-level risk factors for suicide attempts among transgender adults. *Behavioral Medicine*, 41(3), 164–171. https://doi.org/10.1080/08964289.2015.1028322
- Polanco-Roman, L., Danies, A., & Anglin, D. M. (2016). Racial discrimination as race-based trauma, coping strategies, and dissociative symptoms among emerging adults.
 Psychological Trauma: Theory, Research, Practice, and Policy, 8(5), 609–617.
 https://doi.org/10.1037/tra0000125
- Pollitt, A. M., Ioverno, S., Russell, S. T., Li, G., & Grossman, A. H. (2021). Predictors and mental health benefits of chosen name use among transgender youth. *Youth & Society*, 53(2), 320–341. https://doi.org/10.1177/0044118X19855898
- Robbins, N. K., Low, K. G., & Query, A. N. (2016). A qualitative exploration of the "coming out" process for asexual individuals. *Archives of Sexual Behavior*, 45(3), 751–760. https://doi.org/10.1007/s10508-015-0561-x
- Ronan, W. (2021, March 13). 2021 becomes record year for anti-trans legislation. Human Rights Campaign. https://www.hrc.org/press-releases/breaking-2021-becomes-record-yearfor-anti-transgender-legislation
- Rood, B. A., Maroney, M. R., Puckett, J. A., Berman, A. K., Reisner, S. L., & Pantalone, D. W. (2017). Identity concealment in transgender adults: A qualitative assessment of minority

stress and gender affirmation. *American Journal of Orthopsychiatry*, 87(6), 704–713. https://doi.org/10.1037/ort0000303

- Rood, B. A., Reisner, S. L., Surace, F. I., Puckett, J. A., Maroney, M. R., & Pantalone, D. W. (2016). Expecting rejection: Understanding the minority stress experiences of transgender and gender-nonconforming individuals. *Transgender Health*, 1(1), 151–164. https://doi.org/10.1089/trgh.2016.0012
- Rosario, M., Hunter, J., Maguen, S., Gwadz, M., & Smith, R. (2001). The coming-out process and its adaptational and health-related associations among gay, lesbian, and bisexual youths: Stipulation and exploration of a model. *American Journal of Community Psychology*, 29(1), 133–160. https://doi.org/10.1023/A:1005205630978
- Scandurra, C., Amodeo, A. L., Valerio, P., Bochicchio, V., & Frost, D. M. (2017). Minority stress, resilience, and mental health: A study of Italian transgender people. *Journal of Social Issues*, 73(3), 563–585. https://doi.org/10.1111/josi.12232
- Scandurra, C., Mezza, F., Maldonato, N. M., Bottone, M., Bochicchio, V., Valerio, P., & Vitelli,
 R. (2019). Health of non-binary and genderqueer people: A systematic review. *Frontiers in Psychology*, *10*, 1453. https://doi.org/10.3389/fpsyg.2019.01453
- Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology*, 57(1), 1–10. https://doi.org/10.1037/a0018082
- Schmitz, R. M., & Tyler, K. A. (2018). The complexity of family reactions to identity among homeless and college lesbian, gay, bisexual, transgender, and queer young adults. *Archives* of Sexual Behavior, 47(4), 1195–1207. https://doi.org/10.1007/s10508-017-1014-5

- Schrimshaw, E. W., Downing, M. J., & Cohn, D. J. (2018). Reasons for non-disclosure of sexual orientation among behaviorally bisexual men: Non-disclosure as stigma management. *Archives of Sexual Behavior*, 47(1), 219–233. https://doi.org/10.1007/s10508-016-0762-y
- Skerrett, D. M., Kõlves, K., & De Leo, D. (2016). Factors related to suicide in LGBT populations: A psychological autopsy case-control study in Australia. *Crisis*, 37(5), 361– 369. https://doi.org/10.1027/0227-5910/a000423
- Staples, J. M., Neilson, E. C., Bryan, A. E. B., & George, W. H. (2018). The role of distal minority stress and internalized transnegativity in suicidal ideation and nonsuicidal selfinjury among transgender adults. *The Journal of Sex Research*, 55(4–5), 591–603. https://doi.org/10.1080/00224499.2017.1393651
- Staples, J. M., Neilson, E. C., George, W. H., Flaherty, B. P., & Davis, K. C. (2018). A descriptive analysis of alcohol behaviors across gender subgroups within a sample of transgender adults. *Addictive Behaviors*, 76, 355–362. https://doi.org/10.1016/j.addbeh.2017.08.017
- Suppes, A., van der Toorn, J., & Begeny, C. T. (2021). Unhealthy closets, discriminatory dwellings: The mental health benefits and costs of being open about one's sexual minority status. *Social Science & Medicine*, 285, 114286. https://doi.org/10.1016/j.socscimed.2021.114286
- Szymanski, D. M. (2006). Does internalized heterosexism moderate the link between heterosexist events and lesbians' psychological distress? *Sex Roles*, *54*(3–4), 227–234. https://doi.org/10.1007/s11199-006-9340-4

- Tabler, J., Schmitz, R. M., Nagata, J. M., & Geist, C. (2021). Self-perceived gender expression, discrimination, and mental health disparities in adulthood. SSM - Mental Health, 1, 100020. https://doi.org/10.1016/j.ssmmh.2021.100020
- Tankersley, A. P., Grafsky, E. L., Dike, J., & Jones, R. T. (2021). Risk and resilience factors for mental health among transgender and gender nonconforming (TGNC) youth: A systematic review. *Clinical Child and Family Psychology Review*, 24(2), 183–206. https://doi.org/10.1007/s10567-021-00344-6
- Tatum, A. K., Catalpa, J., Bradford, N. J., Kovic, A., & Berg, D. R. (2020). Examining identity development and transition differences among binary transgender and genderqueer nonbinary (GQNB) individuals. *Psychology of Sexual Orientation and Gender Diversity*, 7(4), 379–385. https://doi.org/10.1037/sgd0000377
- Tebbe, E. A., & Moradi, B. (2016). Suicide risk in trans populations: An application of minority stress theory. *Journal of Counseling Psychology*, 63(5), 520–533. https://doi.org/10.1037/cou0000152
- Tebbe, E. A., Simone, M., Wilson, E., & Hunsicker, M. (2021). A dangerous visibility:
 Moderating effects of antitrans legislative efforts on trans and gender-diverse mental health. *Psychology of Sexual Orientation and Gender Diversity*.
 https://doi.org/10.1037/sgd0000481
- Testa, R. J., Habarth, J., Peta, J., Balsam, K., & Bockting, W. (2015). Development of the gender minority stress and resilience measure. *Psychology of Sexual Orientation and Gender Diversity*, 2(1), 65–77. https://doi.org/10.1037/sgd0000081

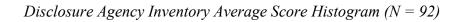
- Timmins, L., Rimes, K. A., & Rahman, Q. (2017). Minority stressors and psychological distress in transgender individuals. *Psychology of Sexual Orientation and Gender Diversity*, 4(3), 328–340. https://doi.org/10.1037/sgd0000237
- Todd, K., Peitzmeier, S. M., Kattari, S. K., Miller-Perusse, M., Sharma, A., & Stephenson, R.
 (2019). Demographic and behavioral profiles of nonbinary and binary transgender youth.
 Transgender Health, 4(1), 254–261. https://doi.org/10.1089/trgh.2018.0068
- Uniacke, B., Glasofer, D., Devlin, M., Bockting, W., & Attia, E. (2021). Predictors of eatingrelated psychopathology in transgender and gender nonbinary individuals. *Eating Behaviors*, 42, 101527. https://doi.org/10.1016/j.eatbeh.2021.101527
- Ussher, J. M., Hawkey, A., Perz, J., Liamputtong, P., Sekar, J., Marjadi, B., Schmied, V., Dune, T., & Brook, E. (2022). Crossing boundaries and fetishization: Experiences of sexual violence for trans women of color. *Journal of Interpersonal Violence*, *37*(5–6), NP3552–NP3584. https://doi.org/10.1177/0886260520949149
- Valentine, S. E., & Shipherd, J. C. (2018). A systematic review of social stress and mental health among transgender and gender non-conforming people in the United States. *Clinical Psychology Review*, 66, 24–38. https://doi.org/10.1016/j.cpr.2018.03.003
- Van Dyke, N., Hagaman, N., Beattie, I. R., & Alnagar, H. (2021). Coming out (or not) on college applications: Institutional and interpersonal dimensions of disclosing LGBQ+ identities. *Socius: Sociological Research for a Dynamic World*, 7, 237802312110546. https://doi.org/10.1177/23780231211054641
- Veale, J. F., Tan, K. K. H., & Byrne, J. L. (2021). Gender identity change efforts faced by trans and nonbinary people in New Zealand: Associations with demographics, family rejection,

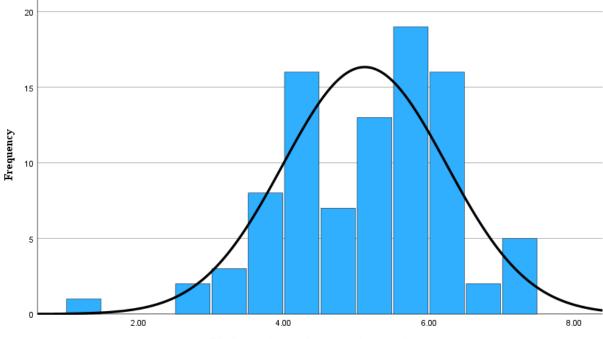
internalized transphobia, and mental health. *Psychology of Sexual Orientation and Gender Diversity*. https://doi.org/10.1037/sgd0000537

- Watson, L. B., Allen, L. R., Flores, M. J., Serpe, C., & Farrell, M. (2019). The development and psychometric evaluation of the Trans Discrimination Scale: TDS-21. *Journal of Counseling Psychology*, 66(1), 14–29. https://doi.org/10.1037/cou0000301
- Worthen, M. G. F. (2021). Why can't you just pick one? The stigmatization of nonbinary/genderqueer people by cis and trans men and women: an empirical test of normcentered stigma theory. *Sex Roles*, 85(5–6), 343–356. https://doi.org/10.1007/s11199-020-01216-z

Figures

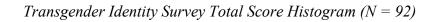
Figure 1.

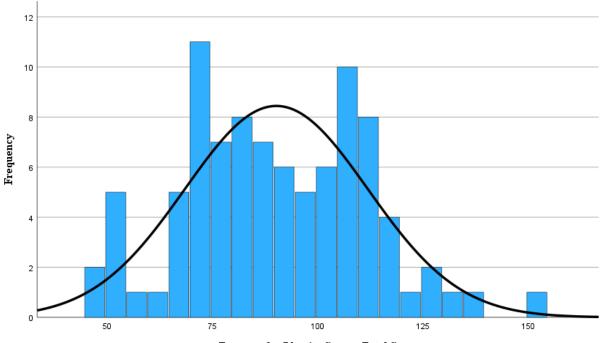




Disclosure-Agency Inventory Average Score

Figure 2.





Transgender Identity Survey Total Score

Tables

Table 1Participant Eligibility

	N	%
Eligible	92	53.80
Ineligible		
No consent or questions answered	14	8.19
Not TNB	30	17.54
Have taken no steps toward transition	5	2.92
Did not complete survey	25	14.61
Failed 3 or more attention checks	5	2.92
Total	171	10.0

	N	%	Mean	SD	
Gender Identity					
Binary	34	36.96			
FTM	17	18.48			
MTF	17	18.48			
Non-binary	58	63.04			
Gender Fluid	25	27.17			
Genderqueer	25	27.17			
Enby	19	20.65			
Agender	6	6.52			
GAB					
Male	31	33.70			
Female	61	66.30			
Year in School					
Undergraduate – 1 st Year	24	26.09			
Undergraduate -2^{nd} Year	29	31.52			
Undergraduate – 3 rd Year	19	20.65			
Undergraduate -4^{th} Year	14	15.20			
Undergraduate – 5 th Year or More	3	3.26			
Graduate	3	3.26			
Age ^a	42		19.00	0.77	
GPA ^b	89		3.36	0.49	

Table 2

Demographics of Study Participants

Note. FTM = Female to Male; MTF = Male to Female; GAB = Gender Assigned at Birth;

GPA = Grade Point Average.

^aAge was collected for only 42 participants. ^b3 first-year students entered "0" for their GPA. These cases were removed for the calculation of the mean and standard deviation.

	χ^2	BT (n)	BT %	NB (<i>n</i>)	NB %
GAB	6.42*				
Male		17	18.48	14	15.22
Female		17	18.48	44	47.83
Year in School	3.21				
Undergraduate – 1 st Year		8	8.70	16	17.39
Undergraduate – 2 nd Year		14	15.22	15	16.30
Undergraduate – 3 rd Year		7	7.61	12	13.04
Undergraduate – 4 th Year		3	3.26	11	11.96
Undergraduate – 5 th Year or More		1	1.09	2	2.17
Graduate		1	1.09	2	2.17

Table 3Demographic Differences Between BT and NB Groups

Note. **p* < .05 level.

	1	2	3	4	5	6	7	8	9	10
1. Binary/Non-Binary	-									
2. GAB	.264*	-								
3. Year in School	.074	057	-							
4. Outness Inventory	241*	102	.005	-						
5. DAI	.101	052	136	.143	-					
6. TDS-21: Past Year	043	084	138	054	148	-				
7. TDS-21: Entire Life	175	010	.004	.002	159	.763**	-			
8. TDS-21: Total	124	045	063	024	164	.923**	.953**	-		
9. TIS	326**	110	.052	221*	.001	065	062	.067	-	
10. SCL-90-R	.102	.085	176	030	.125	.272**	.259*	.282**	.057	-

Table 4Zero-Order Correlations

Note. GAB = Gender Assigned at Birth; DAI =Disclosure Agency Inventory; TDS-21 = Transgender Discrimination Survey-21; TIS = Transgender Identity Survey. SCL-90-R = Symptom Checklist-90-Revised. Positive correlations involving binary/non-binary identities and GAB indicate a stronger correlation with identifying as non-binary and being assigned female at birth, respectively. *p < .05 level. **p < .01. ***p < .001

Table 5										
Partial C	Correlations									
Control V	Variable	1	2	3	4	5	6	7	8	9
GAB	1. Binary/Non-Binary	-								
	2. Year in School	.093	-							
	3. Outness Inventory	223*	011	-						
	4. DAI	.120	140	.139	-					
	5. TDS-21: Past Year	022	143	063	153	-				
	6. TDS-21: Entire Life	179	.003	.001	160	.765***	-			
	7. TDS-21: Total	117	065	029	167	.924***	.953***	-		
	8. TIS	310**	.046	235*	004	.056	.061	.063	-	
	9. SCL-90-R	.083	172	022	.130	.281**	.261*	.287**	.067	-

Note. GAB = Gender Assigned at Birth; DAI =Disclosure Agency Inventory; TDS-21 = Transgender Discrimination Survey-21; TIS = Transgender Identity Survey. SCL-90-R = Symptom Checklist-90-Revised. Positive correlations involving binary/non-binary identities and GAB indicate a stronger correlation with identifying as non-binary and being assigned female at birth, respectively. *p < .05 level. **p < .01. ***p < .001

		B	BT		NB			
Control Variable	Source	M	SD	М	SD	F	Sig.	η^2
GAB	Outness Inventory	4.40	1.23	3.83	1.06	4.65	.034*	0.05
	DAI	4.97	1.08	5.20	1.15	1.29	.259	0.01
	TDS-21: Past Year	44.14	11.24	43.07	12.55	0.04	.834	0.00
	TDS-21: Entire Life	58.14	15.36	52.67	14.84	2.94	.090	0.03
	TDS-21: Total	102.29	21.72	95.74	25.92	1.23	.271	0.01
	TIS	99.35	21.71	84.74	20.02	9.46	.003**	0.10
	SCL-90-R	200.00	50.83	212.02	60.51	0.62	.434	0.01

Table 6Difference Between BT and NB Groups ANCOVA Results

Note. GAB = Gender Assigned at Birth; GQI = Genderqueer Identity Scale; DAI =Disclosure Agency Inventory; TDS-21 = Transgender Discrimination Survey-21; TIS = Transgender Identity Survey. Symptom Checklist-90-Revised. All ANOVAs controlled for Gender Assigned at Birth.

*p < .05 **p < .01 ***p < .001

	DAI	TIS
N	92	92
Items	11	26
Cronbach's Alpha	.922	.870
Mean	5.116	90.141
Median	5.293	88.500
Mode	6.00	72.00*
Std. Deviation	1.124	21.731
Skewness	593	.170
Std. Error of Skewness	.251	.251
Kurtosis	.317	261
Std. Error of Kurtosis	.498	.498
Range	5.64	105.00
Maximum	7.00	152.00
Minimum	1.36	47.00

 Table 7

 Normality of Disclosure-Agency Inventory and Transgender Identity Survey

Note. DAI = Disclosure Agency Inventory. TIS = Transgender Identity Survey.

*Multiple modes exist. The smallest value is shown.

Appendix A

Instruments

Genderqueer Identity Scale (GQI; McGuire et al., 2019)

Challenging the Binary Subscale

The statements below are about your gender identity and expression. Please indicate how much you agree with each statement.

- **0** = Strongly Disagree
- 1 = Disagree
- $\mathbf{2} = Neutral$
- $\mathbf{3} = Agree$
- 4 = Strongly Agree

Items.

- 1. I am non-binary, genderqueer, or an identity other than male or female.
- 2. I don't want to be seen in the gender binary (as either male or female).
- 3. I try to deliberately confuse people about whether I am male or female.
- 4. I try to do things that are masculine and feminine at the same time.
- 5. I enjoy it when people are not sure if I am male or female.

Gender Fluidity Subscale

The statements below are about how fluid you think your gender will be in the future. Please indicate how much you agree with each statement.

0 = Strongly Disagree
1 = Disagree
2 = Neutral
3 = Agree
4 = Strongly Agree

1. In the future, my gender expression will be traditional. (Reverse Coded)

- 2. In the future, it will upset me if people misgender me.
- 3. The way I show my gender will probably be mostly the same from day to day. (Reverse

Coded)

- 4. In the future, I expect that people will rarely question my gender. (Reverse Coded)
- 5. In the future, I think my gender will be fluid or change over time.
- 6. I will have a non-traditional gender role (be gender non-conforming).

Outness Inventory (OI; Mohr & Fassinger, 2000) - Edited

Use the following rating scale to indicate how open you are about your [transgender-nonbinary identity] to the people listed below on a scale of 0 to 7. Try to respond to all of the items, but [rate items as 0] if they do not apply to you. If an item refers to a group of people (e.g., work peers), then indicate how out you generally are to that group.

0 = not applicable to your situation; there is no such person or group of people in your life

1 = person definitely does NOT know about your [transgender-nonbinary identity]

2 = person <u>might</u> know about your [transgender-nonbinary identity], but it is NEVER talked about

3 = person <u>probably</u> knows about your [transgender-nonbinary identity], but it is NEVER talked about

4 = person <u>probably</u> knows about your [transgender-nonbinary identity], but it is RARELY talked about

5 = person definitely does know about your [transgender-nonbinary identity], but it is RARELY talked about

6 = person <u>definitely</u> knows about your [transgender-nonbinary identity], and is SOMETIMES talked about

7 = person <u>definitely</u> knows about your [transgender-nonbinary identity], and is OPENLY talked about

- 1. Mother
- 2. Father
- 3. Siblings (sisters, brothers)
- 4. Extended family/relatives
- 5. My new straight [cisgender] friends
- 6. My work peers
- 7. My work supervisor(s)
- 8. Members of my religious community (e.g., church, temple)
- 9. Leaders of my religious community (e.g., church, temple)
- 10. Strangers, new acquaintances
- 11. My old heterosexual [cisgender] friends

Disclosure-Agency Inventory (DAI; Based on Mohr & Fassinger's (2000) OI)

Use the following rating scale to indicate how much *control* you had over how open you are about your [transgender-nonbinary identity] to the people listed below on a scale of 0 to 7. Try to respond to all of the items, but [rate items as 0] if they do not apply to you. If an item refers to a group of people (e.g., work peers), then indicate how out you generally are to that group.

0 = not applicable to your situation; there is no such person or group of people in your life

1 = you had NO control over coming out to this person

2 = you had <u>little</u> control over coming out to this person, but did NOT fully consent to coming out to this person

3 = you had <u>some</u> control over coming out to this person, but did NOT fully consent to coming out to this person

4 = you had <u>some</u> control over coming out to this person, but only PARTIALLY consented to coming out to this person

5 = you <u>had</u> control over coming out to this person, but only PARTIALLY consented to coming out to this person

6 = you <u>had</u> control over coming out to this person, and MOSTLY consented to coming out to this person

7 = you had control over coming out to this person, and FULLY consented to coming out to this person

- 1. Mother
- 2. Father
- 3. Siblings (sisters, brothers)
- 4. Extended family/relatives
- 5. My new straight [cisgender] friends
- 6. My work peers
- 7. My work supervisor(s)
- 8. Members of my religious community (e.g., church, temple)
- 9. Leaders of my religious community (e.g., church, temple)
- 10. Strangers, new acquaintances
- 11. My old heterosexual [cisgender] friends

Transgender Discrimination Scale-21 (TDS-21; Watson et al., 2019)

Please think carefully about your life as you answer the questions below. For each question, read the question, and then answer it twice: answer once for what your ENTIRE LIFE (from when you were a child to now) has been like, and then once for what the PAST YEAR has been like. Circle the number that base describes events in YOUR ENTIRE LIFE and in the PAST YEAR, using these rules:

Circle $\mathbf{1} =$ If the event has NEVER happened to you.

Circle 2 = If the event happened ONCE IN A WHILE (less than 10% of the time).

Circle 3 = If the event happened SOMETIMES (10-25% of the time).

Circle 4 = If the event happened A LOT (26-49% of the time).

Circle 5 = If the event happened MOST OF THE TIME (50-70% of the time).

Circle 6 = If the event happened ALMOST ALL OF THE TIME (more than 70% of the time).

BECAUSE OF OTHERS' TRANSGENDER PREJUDICE, HOW OFTEN HAVE YOU ...

- 1. Had others deny or minimize your experiences of transgender discrimination?
- 2. Been denied opportunities in the workplace (e.g., promotions, raises, opportunities to work with customers, work on certain projects, not offered professional development opportunities)?
- 3. Experienced maltreatment in health care settings?
- 4. Experienced harassment or bullying from peers in educational settings?
- 5. Experienced harassment (e.g., slurs, physical harm, prolonged "pat downs") from law enforcement (e.g., police officers, security officials, transportation, security administration)?
- 6. Been judged by others after they learned about your gender identity?
- 7. Hear comments that all transgender people are the same (e.g., assumptions that all transgender people undergo or wish to undergo gender-affirming surgeries)?
- 8. Experienced limited mentorship in career settings?
- 9. Been discriminated against while trying to access health care (e.g., gynecological exams, shots, prostate exams, etc.)?
- 10. Had teachers or instructors refuse to stop abuse or bullying directed towards you?
- 11. Been unfairly questioned about your gender identity by law enforcement (e.g., police officers, security officials, transportation security administration)?
- 12. Experienced people in your life who refused to use your true gender pronouns (e.g., he, her, they, zir)?

- 13. Received demeaning messages about your physical appearance (e.g., you do not look "enough" like your true gender identity, comments about your attire, "I never would have known that you're trans")?
- 14. Been denied employment?
- 15. Had to educate doctors, nurses, or administrative staff about transgender-related care?
- 16. Experienced harassment from faculty, staff, and administrators in educational settings?
- 17. Heard intrusive comments about your body (e.g., "what's between your legs?")?
- 18. Been expected to be or act in gender-conforming ways?
- 19. Experienced social rejection in educational settings?
- 20. Experienced harassment from family members?
- 21. Been stopped by law enforcement (e.g., police officers, security officials, transportation security administration) and unfairly questioned?

Transgender Identity Survey (TIS; Bockting et al., 2019)

The following questions are about how you have felt *in the last 3 months* about being transgender. Please indicate to what extent you agree/disagree.

- 1 = strongly disagree
- **2** = disagree
- **3** = somewhat disagree
- **4** = neither agree/disagree
- 5 = somewhat agree
- 6 = agree
- 7 = strongly agree

- 1. Being transgender makes me feel special and unique. (Reverse Coded)
- 2. Being perceived as transgender by others is okay for me. (Reverse Coded)
- 3. I sometimes resent my transgender identity.
- 4. Being transgender makes me feel like a freak.
- 5. I isolate and separate from other transgender people.
- I have no problem talking about my transgender identity to almost anyone. (Reverse Coded)
- 7. Being transgender is a gift. (Reverse Coded)
- 8. When I think of being transgender, I feel depressed.
- 9. For me, passing is everything.
- 10. I cannot be happy unless I am perceived as a cisgender woman or man.
- 11. Being read (recognized as transgender) makes me try harder to pass.
- 12. I am like other people but I am also special because I am transgender. (Reverse Coded)
- 13. Passing is my biggest concern.
- 14. When I think about being transgender, I feel unhappy.
- 15. Often, I feel weird like an outcast or a pervert.
- 16. I often ask myself: Why can't I just be normal?
- 17. It's much better to pass as female or male than to be recognized as transgender.
- 18. I sometimes feel that being transgender is embarrassing.
- 19. I am proud to be a transgender person. (Reverse Coded)
- 20. If I look the part, talk the talk, and walk the walk of a woman or man, it will allow others to accept me.

- 21. Passing is a standard to measure my success.
- 22. When interacting with members of the transgender community, I often feel like I don't fit in.
- 23. I envy people who are not transgender.
- 24. I'm not like other transgender people.
- 25. I am comfortable revealing to others that I am transgender. (Reverse Coded)
- 26. I'd rather have people know everything and accept me as transgender. (Reverse Coded)

Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1994)

Below is a list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, select one of the numbered descriptors that best describes HOW MUCH THAT PROBLEM HAS BOTHERED OR DISTRESSED YOU DURING THE PAST WEEK, INCLUDING TODAY. Circle the number in the space to the right of the problem and do not skip any items. Use the following key to guide how you respond:

Circle **1** if A LITTLE BIT Circle **2** if MODERATELY Circle **3** if QUITE A BIT Circle **4** if EXTREMELY

Circle **0** if your answer is NOT AT ALL

[Items not provided due to copyright. See the original instrument for full text.]

Appendix B

Attention Checks

In the Genderqueer Identity Scale (GQI; McGuire et al., 2019)

The statements below are about your gender identity and expression./ The statements below are about how fluid you think your gender will be in the future. Please indicate how much you agree with each statement.

- **0** = Strongly Disagree
- 1 = Disagree
- $\mathbf{2} = Neutral$
- $\mathbf{3} = Agree$
- 4 = Strongly Agree
- A. I need to breathe oxygen with my lungs to survive.
- B. I frequently visit the international space station.

In the Transgender Discrimination Scale-21 (TDS-21; Watson et al., 2019)

Please think carefully about your life as you answer the questions below. For each question, read the question, and then answer it twice: answer once for what your ENTIRE LIFE (from when you were a child to now) has been like, and then once for what the PAST YEAR has been like. Circle the number that base describes events in YOUR ENTIRE LIFE and in the PAST YEAR, using these rules:

Circle $\mathbf{1} =$ If the event has NEVER happened to you.

Circle 2 = If the event happened ONCE IN A WHILE (less than 10% of the time).

Circle $\mathbf{3}$ = If the event happened SOMETIMES (10-25% of the time).

Circle 4 = If the event happened A LOT (26-49% of the time).

Circle 5 = If the event happened MOST OF THE TIME (50-70% of the time).

Circle 6 = If the event happened ALMOST ALL OF THE TIME (more than 70% of the time).

- A. Had to travel more than five hundred miles on foot.
- B. Had to build a nuclear fallout shelter out of seashells.

In the Transgender Identity Survey (TIS; Bockting et al., 2019)

The following questions are about how you have felt *in the last 3 months* about being transgender. Please indicate to what extent you agree/disagree.

- 1 = strongly disagree
- $\mathbf{2} = disagree$
- **3** = somewhat disagree
- **4** = neither agree/disagree
- 5 = somewhat agree
- **6** = agree
- 7 = strongly agree
- A. I believe that all transgender people can shapeshift into cats at will.
- B. Participants were instructed to choose option 3 ('somewhat disagree') for this question.

In the Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1994)

Below is a list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, select one of the numbered descriptors that best describes HOW MUCH THAT PROBLEM HAS BOTHERED OR DISTRESSED YOU DURING THE PAST WEEK, INCLUDING TODAY. Circle the number in the space to the right of the problem and do not skip any items. Use the following key to guide how you respond:

Circle **0** if your answer is NOT AT ALL Circle **1** if A LITTLE BIT Circle **2** if MODERATELY Circle **3** if QUITE A BIT Circle **4** if EXTREMELY

A. Particpants were instructed to choose option 2 ('MODERATELY') for this question.

B. Receiving daily phone calls from celebrities