THESIS

TESTING TRANS IDENTITY PRIDE AS A MENTAL HEALTH RESILIENCE FACTOR AMONG TRANS AND GENDER DIVERSE ADULTS

Submitted by

Madison R. Egli

Department of Psychology

In partial fulfillment of the requirements

For the Degree of Master of Science

Colorado State University

Fort Collins, Colorado

Spring 2023

Master's Committee:

Advisor: Mark Prince

Rachel Brenner
Em Matsuno
Kari Dockendorff

ABSTRACT

TESTING TRANS IDENTITY PRIDE AS A MENTAL HEALTH RESILIENCE FACTOR AMONG TRANS AND GENDER DIVERSE ADULTS

Trans and gender diverse (TGD) people in the US report disproportionately higher rates of mental health concerns than cisgender heterosexual and LGB individuals, as well as the U.S. population more broadly (Borgogna et al., 2019; James et al., 2016; Su et al., 2016). This study tested part of the recently introduced Transgender Resilience Intervention Model (TRIM; Matsuno & Israel, 2018) to examine the moderation effects of identity pride on the relationships between two TGD minority stressors (rejection, negative expectations for the future) and mental health outcomes with a sample of 514 TGD adults in the United States. Originally, I tested a moderated mediation path model using PROCESS syntax in MPlus wherein rejection predicted depression and anxiety through negative expectations for the future, with identity pride moderating the relationship between negative expectations for the future and mental health outcomes. However, the model was not interpretable due to poor model fit indices. Post-hoc model revisions revealed a model wherein rejection predicted greater negative expectations for the future through increased depression and anxiety. In contrast with hypotheses, conditional indirect effects revealed a trend in which TGD individuals high in identity pride were more negatively impacted by experiences of rejection. These results suggest that identity pride, although important for promoting wellness among TGD individuals (Singh et al., 2013), may render TGD adults more vulnerable for developing depression

and anxiety following gender-identity-based rejection. Given the relatively small sample size in the current study for detecting moderation effects, future research should examine these relationships in larger studies of TGD individuals in the United States to further understand the impact of identity pride on minority stress in TGD communities.

ACKNOWLEDGEMENTS

First and foremost, thank you to my incredible advisors on this project, Rachel and Mark. This project would be nothing without your constant encouragement and support. To my committee members, Em and Kari, thank you for sharing your wisdom, expertise, community, and mentorship. To the amazing trans and gender diverse participants and contributers to this study, thank you for sharing a small piece of your stories with me. To my partner, Hannah, who taught me what it means to live proudly and unapologetically- I am forever thankful for you. Lastly, thank you to my family and friends for the limitless love, support, and encouragement you have given me throughout this process, I could not have done this without each and every one of you.

TABLE OF CONTENTS

Overview

Trans and gender diverse[1] (TGD) individuals experience disproportionately higher rates of mental health concerns in comparison to their cisgender peers (Borgogna et al., 2019; James et al., 2016). Namely, TGD individuals report significantly more depression and anxiety than their cisgender counterparts (Borgogna et al., 2019). Moreover, the United States Transgender Survey (2015) found that 40% of trans adults have attempted suicide at least once in their lifetime (James et al., 2016). This is alarming considering only 12-19% of cisgender LGB adults and 0.6% of general population U.S. adults have made one or more suicide attempts in their lifetimes (Haas et al., 2010; Lipari et al., 2015).

A large body of literature is dedicated to understanding the health disparities that exist for cisgender LGB individuals; however, less is known about the reasons behind these disparate rates of mental health concerns among TGD individuals. Research indicates that, like cisgender LGB individuals, TGD individuals are subject to *minority stress*–unique stress individuals endure as a result of their marginalized group membership (Meyer, 2003)–that often hinders one's mental health and well-being (Hendricks & Testa, 2012). Meyer's (2003) Minority Stress Model posits that cisgender LGB individuals endure unique *distal stressors*, or external stressors (e.g.,

[1] The terms trans and gender diverse, TGD, will be used to represent transgender, nonbinary, and gender diverse individuals across the gender spectrum. This terminology was chosen to honor the various gender identities represented within this study. This term was selected after consultation with experts in the field and is also in alignment with the upcoming APA guidelines for working with Trans and gender diverse individuals.

discrimination, rejection, and victimization), that send adverse messages about their identity. These stressors are often internalized and experienced on the individual level as *proximal stressors*, such as internalized heterosexism, expectations of stigma, and identity concealment (Meyer, 2003), which increases risk for negative mental health outcomes (e.g., psychological distress, depression, and anxiety; Hatzenbuehler, 2009).

Although the Minority Stress Model was originally conceptualized for cisgender LGB individuals, researchers have recently extended the model to TGD individuals (Hendricks & Testa, 2012). Matsuno and Israel (2018) expanded upon this Minority Stress Model application to propose individual and group-level resilience factors to buffer the relationship between minority stressors and mental health in the TGD community in a new model called the Transgender Resilience Intervention Model (TRIM). Similar to the Minority Stress Model, the TRIM posits that TGD individuals experience a similar process with distal and proximal stressors that are unique to the TGD experience and ultimately predict diminished mental health. The TRIM expands on the Minority Stress Model by proposing group and individual level resilience factors that buffer the unique distal and proximal stressors experienced by TGD individuals. Group level resilience factors (e.g., family support/acceptance) are hypothesized to mitigate the link between distal stressors (e.g., gender related discrimination, rejection, victimization, and non-affirmation of gender identity) and proximal stressors (e.g., internalized transphobia, negative expectations for the future, and non-disclosure of TGD identity). On the other hand, individual level resilience factors refer to individual traits and characteristics that may buffer the relationship between proximal stressors and mental health outcomes as well as the indirect effects of distal stressors on mental

health outcomes through proximal stressors. Both the individual and group level resilience factors proposed in the TRIM are based on previous literature; however, Matsuno and Israel call for future research to empirically test the resilience factors as they are situated in the model. Namely, they call for future research to examine the buffering effects of such resilience factors on the link between minority stressors and mental health outcomes in TGD samples.

One such individual-level resilience factor that has been identified as important in promoting mental health in the TGD community is *identity pride* or feeling as though one's TGD identity (as well as the TGD identities of others) is valuable, acceptable, and something to be proud of (Hendricks & Testa, 2012; Matsuno & Israel, 2018). Although identity pride has been highlighted as an important protective factor in the TGD community, no study to date has empirically tested the protective effects of identity pride on mental health outcomes following experiences of gender-based rejection. To address Matsuno and Israel's (2018) call to empirically test the TRIM, the current study tested the buffering effects of identity pride on the relationships between rejection, negative expectations for the future, and adverse mental health outcomes.

Literature Review

Trans individuals consistently report disparate rates of mental health concerns, suicidality, and psychological distress when compared to the general population as well as the cisgender LGB community writ large (Borgogna et al., 2019; James et al., 2016; Su et al., 2016). To mitigate these staggering health disparities, a burgeoning body of research is dedicated to understanding the mechanisms that contribute to adverse mental health outcomes among TGD people. Much of this work has been an extension of Meyer's (2003) Minority Stress Model (MSM). This model was originally created to conceptualize the identity-based social, structural, and internal stressors experienced by cisgender LGB individuals; however, researchers have more recently extended this work to TGD folks by tailoring the model to unique gender-based stressors (Testa et al., 2015). Two stressors that have garnered attention for their adverse effects on mental health outcomes among TGD individuals are rejection (Cawley et al., 2019; Klein & Galob, 2016) and negative expectations for the future (Rood et al., 2016).

In addition, research has highlighted potential protective factors that may mitigate the relationships between gender minority stressors and negative mental health outcomes (Matsuno & Israel, 2018). Thus, the current thesis aims to empirically test one minority stress pathway in this model and test whether a resilience factor—identity pride—may buffer the relationship between these stressors and mental health outcomes. Therefore, this literature review begins by providing background information on the MSM in its original context (i.e., applied to cisgender LGB individuals) and walks the reader through its extension to TGD individuals. Lastly, the current state of the

literature will be described on the protective factor– identity pride– I propose to examine as a moderator between experiences of rejection, negative expectations for the future, and negative mental health outcomes.

History of the Minority Stress Model

A systematic review of the literature highlighted the mental health disparities present in LGB individuals when compared to heterosexual individuals (Plöderl & Tremblay, 2015). Namely, a review of 199 studies indicated that LGB adults are at elevated risks for anxiety, depression, and suicide relative to heterosexual adults. Indeed, these disparities are well-documented (e.g., Mongelli et al., 2019; Keeley et al., 2020; Baptiste-Roberts et al., 2017). Brooks (1981) posited that these mental health disparities are due to *minority stress*, social and internal stressors experienced by LGB adults based on their identity (e.g., sexual orientation). Specifically, Brooks discussed minority stress in the context of lesbian women. Brooks highlights the complexity of minority stress in lesbian samples due to the unique intersectionality of both sexual orientation and gender. This was the first academic work to attribute the mental health disparities in an LGB sample (i.e., lesbian women) to minority stress.

Meyer (2003) extended this framework to include not only lesbian women, but also gay and bisexual individuals in his creation of the Minority Stress Model. This provided the first conceptual model for comprehensively understanding the minority stress and subsequent mental health disparities experienced by lesbian, gay, and bisexual individuals. Specifically, this Minority Stress Model asserts that cisgender LGB adults are subject to harmful *distal stressors*, or stressful events or circumstances that happen outside of the individual, on the interpersonal or societal level that send adverse

messages about lesbian, gay, bisexual, and other non-heterosexual identities (Meyer, 2003; Meyer, 2013). Central distal stressors described in the Minority Stress Model are rejection, discrimination, and victimization based on one's queer identity (Meyer, 2003). *Rejection* is interpersonal and institutional ostracization by family, friends, religious groups, peers, etc. based on stigma surrounding one's sexual orientation. *Heterosexist discrimination* is unjust treatment (i.e., systemic, interpersonal, and intrapersonal) of LGB individuals due to heterosexist stigma against one's sexual orientation (Herek et al., 1999), such as when a person is fired from their job based on their LGBTQ identity or denied housing or services due to stigma held against one's sexual orientation. *Victimization* refers to physical, sexual, emotional abuse, or other hate crimes targeting LGB people (D'Augelli, 1992).

The Minority Stress Model also posits that distal stressors are internalized and experienced on the individual level as *proximal stressors*, such as *negative expectations for the future* (i.e., the internalized belief that one will experience rejection in the future), *internalized heterosexism* (i.e., the internalized stigma that being LGBTQ is inherently wrong that a person holds towards themselves), and *identity concealment* (i.e., the act of hiding one's identity (Jackson & Mohr, 2016; Meyer, 2003). The Minority Stress Model asserts that these proximal stressors are also linked to worse mental health outcomes. Consistent with this, negative expectations for the future among cisgender LGB and TGD individuals are linked to hypervigilance, anxiety, psychological distress and decreased willingness to engage socially (Baams et al., 2020; Timmins et al., 2017). Concealment also has deleterious effects on mental health outcomes, such as

increasing one's risk for psychological distress and other mental health concerns (Flynn & Smith, 2021).

Hatzenbuehler (2009) further developed the conceptualization of minority stress by introducing the Psychological Mediation Framework (PMF), which asserts that distal stressors negatively impact mental health in part through proximal stressors. For example, when a queer person experiences heterosexist discrimination, such as being fired from a job because of their sexual identity, they might internalize the belief that it is wrong to be queer, which is known as internalized heterosexism (Meyer, 2013). This process will likely result in depression, anxiety, or other deleterious mental health outcomes, both from the experience of being fired due to public stigma against one's identity, and through the resulting internalized stigma. Indeed, empirical evidence supports this model wherein distal stressors such as experiences of rejection endured by sexual and gender minority individuals predict negative mental health outcomes independently and through proximal stressors (for review see Hatzenbuehler, 2009).

A large body of literature has provided empirical support for the distal-proximal-mental health link among cisgender LGB people (for review, see Hatzenbuehler, 2009; Meyer, 2013). For example, in a sample of 474 LGB adults, internalized heterosexism (proximal stressor) mediated the relationship between discrimination (distal stressor) and adverse mental health outcomes (Ngamake et al., 2016). However, less is known about the stressors that impact TGD individuals. Thus, recent research has extended this model to Trans and Gender Diverse (TGD) samples (Hendricks & Testa, 2012).

Minority Stress in TGD populations

As established, studies increasingly demonstrate that TGD individuals report significantly more mental health concerns and suicidal ideation than cisgender heterosexual and LGB individuals, as well as the general populations at large (Borgogna, 2019; James et al., 2016; Su et al., 2016). These health disparities are not a result of holding a TGD identity; rather, researchers assert they are a direct result of the minority stress TGD folks are subject to due to oppressive and discriminatory systems and interpersonal experiences (Testa et al., 2015; Matsuno & Israel, 2018). Though the Minority Stress Model was originally conceptualized for cisgender LGB individuals, researchers have extended this work to TGD individuals. Hendricks and Testa (2012) applied the Minority Stress Model in a conceptual article on psychotherapy with TGD clients, suggesting that TGD adults experience a similar pattern of distal stressors, proximal stressors, and worse mental health outcomes; however, they emphasized how the experiences of gender-based distal and proximal stressors faced by trans and nonbinary individuals are unique from those experienced by cisgender LGB individuals. For example, TGD individuals experience unique forms of discrimination, such as lack of safety in accessing public restrooms (Scheim et al., 2014), limited access to medical records due to discrepancies in one's gender and recorded sex assigned at birth or legal name changes (Bauer, 2012), and discrimination at the hands of medical professionals (James et al., 2016). This can have major consequences; in study of 417 TGD individuals in the Rocky Mountain region of the United States, TGD individuals who delayed health care treatment due to fear of discrimination reported worse overall health compared to TGD individuals that were able to access healthcare as well as those who delayed healthcare for reasons other than discrimination (ß=–0.26, $p<.05$;

Seelman et al., 2017). Moreover, TGD individuals that delayed care due to discrimination had greater odds of depression (OR 3.08, 95% CI = [1.59-5.95]), suicide attempts (OR 3.81, 95% CI = [1.78-8.15]), and suicidal ideation (OR 2.93, 95% CI = [1.71-5.02]).

Indeed, consistent with sexual minority stress, distal minority stressors for TGD individuals can have detrimental effects on mental health. A systematic review of 77 articles published on mental health outcomes and minority stress among TGD samples from 1997-2017 found that distal stressors, such as rejection, discrimination, victimization, and non-affirmation (i.e., when TGD individuals do not receive support or social recognition for their gender expression or identity; Testa et al. 2015) are linked to depression, anxiety, general distress, and suicidality (Valentine & Shephard, 2018). In addition, even among distal minority stressors that are similar in presentation across cisgender LGB and TGD individuals experience, research suggests that TGD individuals may experience a greater prevalence. For example, sexual and gender minorities may both experience rejection and violence, however, TGD individuals are thought to experience higher rates of violence and rejection than their cisgender LGB peers (Hendricks & Testa, 2012). TGD people also experience physical and sexual violence at markedly higher rates than cisgender individuals (Boza & Perry, 2014).

Research also outlines three major proximal stressors experienced by TGD individuals–1) *negative expectations for the future* (i.e., anticipating physical or emotional harm because of one's TGD identity), 2) *internalized transphobia* (e.g., feeling as though one is an outcast or doing something wrong if their gender expression matches their gender identity as opposed to their sex assigned at birth), and 3)

concealment of TGD identity (i.e., act of hiding one's trans identity; Flynn & Bhambhani, 2021). Whereas internalized transphobia mirrors internalized homophobia, and negative expectations for the future are similar across TGD and cisgender LGB samples, research indicates that certain proximal stressors, such as concealment, operate differently among TGD samples than in cisgender LGB samples. For example, gender identity is frequently expressed through physical cues (e.g., hair styles, clothes, body size/shape) rather than verbal disclosures. It may be uniquely difficult for TGD folks to conceal their identities in harmful social circumstances due to the ways in which gender identity is expressed through physical appearance (Hendricks & Testa, 2012). Though sexual orientation can be expressed through physical appearance (i.e., challenging traditional gender norms through clothing or haircut), gender expression is often more overt (i.e., facial hair following hormone replacement therapy) and thus more difficult to conceal in unsafe or non-affirming environments. Therefore, decisions around gender identity concealment or disclosure are often guided by gender affirmation surgeries, access to medical care, genetics, or a person's age at which they transition (Hendricks & Testa, 2012).

Although research with TGD mental health is in its nascent stages, emerging research shows evidence that each of these proximal stressors is linked to adverse mental health outcomes. For example, negative expectations for the future and internalized transphobia have been linked with greater psychological distress (Timmins et al., 2021). TGD youth who report high rates of internalized transphobia are also significantly more likely to meet diagnostic criteria for Major Depressive Disorder and Generalized Anxiety Disorder (Chodzen et al., 2018). Internalized transphobia has also

been significantly positively linked with sleep disturbances (r=.29), depression (r=.47), and anxiety (r=.47, p's <.001; Kolp et al., 2020). Similarly, nondisclosure of gender identity has been linked to less life satisfaction (Flynn & Bhambhani, 2021). Proximal stress (i.e., combined total scores of the negative expectations for the future, internalized transphobia, and nondisclosure of TGD identity subscales) more broadly has also been linked with higher levels of depression among TGD individuals (r=.26, p<.05; Brennan et al., 2017).

Extending upon the conceptual work of Henricks and Testa (2012), Testa et al. (2015) provided initial support for the application of the MSM to TGD individuals' experiences through the development of the Gender Minority Stress and Resilience Measure (GMSR; Testa et al., 2015). In this study, 844 TGD participants in the U.S. responded to proposed GMSR items, generated to measure the distal stressors, proximal stressors, and resilience factors Hendricks and Testa (2012) suggested, as well as other similar or theoretically related measures. In support of the distinction between distal and proximal stressors as theorized in the Minority Stress Model (Meyer, 2003), a confirmatory factor analysis on the GMSR items supported the proposed nine-factor structure (CFI = .93, RMSEA = .058), comprising four distal stressor subscales (discrimination, victimization, rejection, and non-affirmation of gender identity), three proximal stressor subscales (negative expectations for the future, internalized transphobia, and non-disclosure of TGD identity), and two resilience subscales (group connectedness and identity pride). Thus, this provided support for the unique conceptual distinction between distal and proximal stressors, as well as the distinction

from resilience factors, the latter of which I will expanded upon in subsequent sections of this literature review.

Transgender Resilience Intervention Model

Matsuno and Israel (2018) expanded upon the Minority Stress Model (Meyer, 2003) and Hatzenbuehler's (2009) Psychological Mediation Model, as well as the work of Testa and colleagues (Hendricks & Testa, 2012; Testa et al., 2015; Testa et al., 2017) to comprehensively tailor the unique distal and proximal stressors endured by TGD individuals in a new model called the Transgender Resilience Intervention Model (TRIM). The TRIM and the work of Testa and colleagues assert that distal stressors lead to greater proximal stressors and worse mental health, and that proximal stressors partially mediate the relationship between the distal and mental health.

In a study of 816 TGD adults in the United States, Testa et al. (2017) applied Hatzenbuehler's (2009) Psychological Mediation Framework to empirically test this model by examining the ways in which distal gender minority stressors are linked to suicidal ideation through proximal gender minority stressors. Testa et al. (2017) examined this through a structural equation model that linked victimization, rejection, and nonaffirmation (distal stressors) with suicidal ideation through negative expectations for the future, internalized transphobia, and non-disclosure of TGD identity (proximal stressors). Model fit indices were good for this model, despite the significant chi-square test. Results revealed that rejection was significantly and positively linked with negative expectations for the future (B= .58), internalized transphobia (B= .34), and nondisclosure (B= .53, p's <.05). Likewise, rejection was indirectly linked with suicidal ideation through negative expectations for the future and internalized transphobia, but

not significantly through non-disclosure. Nonaffirmation was significantly linked to negative expectations for the future (*B*= .22, *SE*= .02, *p*<.01), internalized transphobia (*B*= .26, *SE*= .03, *p*<.01), and nondisclosure (*B*= .09, *SE*= .03, *p*=.01). The indirect effects of nonaffirmation on suicidal ideation through negative expectations and internalized transphobia were significant, although the indirect path through nondisclosure was not significant. Victimization was significantly positively linked with negative expectations for the future (*B*= .36, *SE*= .13, *p* < .01), but not with the other proximal stressors in the model (i.e., nondisclosure and internalized transphobia). The indirect effects of victimization on suicidal ideation through negative expectations for the future were significant, but all other indirect paths were non-significant. Findings from this model also revealed that discrimination was not significantly linked with proximal stressors. Similarly, discrimination was not significantly indirectly related to suicidal ideation through proximal stressors. Lastly, negative expectations for the future (*B*= .20, *SE*= .03, *p*<.01) and internalized transphobia (*B*= .23, *SE*= .03, *p*<.01) were significantly positively linked with suicidal ideation. However, nondisclosure was not significantly linked with suicidal ideation (*B*=–.01, *SE*= .03, *p*=.84).

Testa et al. (2015) and the TRIM also propose resilience factors that uniquely moderate the relationships between distal stressors, proximal stressors, and mental health outcomes. Therefore, this study will test the TRIM through examining the relationships interplay of rejection (distal stressor), negative expectations for the future (proximal stressor) and identity pride (individual level resilience factor) as it relates to mental health outcomes. Though there are some divergences from the minority stress model when the model is expanded to TGD individuals, such as the distal stressors

previously described that are unique to TGD individuals, studies hypothesize that the ways in which distal stressors predict negative mental health outcomes—independently and through proximal stressors—is similar in TGD and cisgender LGB samples (Testa et al., 2015; Matsuno & Israel, 2018).

Resilience. The TRIM's (Matsuno & Israel, 2018) major contribution to the empirical literature was to synthesize previous literature on gender minority stressors and to propose group level (e.g., community connectedness, family acceptance) and individual level resilience factors (e.g., identity pride) that researchers (Hendricks & Testa, 2012; Testa et al., 2015) suggest may buffer the link between gender minority stressors and diminished mental health, mitigating the deleterious effects of these minority stressors. *Group-level resilience factors* are community or group-based resources that enable TGD individuals to cope with harmful social situations or damaging interpersonal interactions based on one's TGD identity. These factors include family acceptance, being a role-model, community belonging, social support, positive role models, and transgender activism (Matsuno & Israel, 2018). On the other hand, *individual level resilience factors* refer to individual traits and characteristics that allow TGD folks to cope with minority stress (Matsuno & Israel, 2018). The individual-level resilience factors in the model include identity pride, hope, self-definition, self-worth, and transition. These factors are hypothesized to buffer the relationship between proximal stressors and mental health outcomes. Individual-level resilience factors are similarly hypothesized to mitigate the indirect effects of distal stressors on mental health outcomes. The TRIM expects group resilience factors to buffer the relations of distal stressors with both proximal stressors and mental health outcomes, and individual-level

resilience factors to moderate the relations of distal and proximal stressors to mental health outcomes.

Rejection. Overwhelmingly, the literature on gender minority stress thus far has focused on distal stressors, such as discrimination and victimization. For example, the effects of discrimination and victimization have been studed with TGD adults, adolescents, and individuals with multiple intersecting marginalized identities (Puckett et al., 2020; Peitzmeier et al., 2020). However, one particularly harmful distal stressor that TGD individuals face that has garnered significantly less attention in the minotiry stress literature, and is the focus of this thesis, is rejection. As previously stated, rejection relates to the interpersonal and systemic ostracization of TGD individuals due to stigma against their gender identity (Hatzenbuehler & Prochankis, 2016). Although fewer studies have focused on the insidious effects of experiences of rejection on TGD individuals, studies have highlighted the importance of protective factors rooted in relationships, such as family support, social support from friends/peers, and community connectedness (Bowling et al., 2020; Puckett et al., 2019). Thus, it follows that if these same groups are rejecting TGD individuals due to stigma against their gender identitiy, individuals will likely experience detrimental mental health outcomes as a result of such experiences.

Rejection has deleterious effects on TGD individuals and can erode mental health. For example, in a study of 6,456 TGD adults who partook in the National Transgender Discrimination Survey, 42.3% of participants who endorsed experiencing rejection from family members had attempted suicide at least once (Klein & Galob, 2016). This study also found that of the participants who experienced rejection from

family members due to stigma surrounding their gender identity, 23.6% reported drug and/or alcohol misuse as a way to cope with the rejection they experienced. Results from this study highlight the impact experiences of rejection- particularly from family members has on TGD individuals.

Evidence also suggests that rejection from friends and peers can have similar adverse effects on mental health. A recent study of 49 TGD children found that those who experience familial rejection as well as peer rejection report high levels of social withdrawal, worrying, truancy, and physical fighting (Munroe, 2018). In addition, TGD children who experienced rejection from their peers due to their TGD identity exhibited high rates of social withdraw and worrying regardless of the amount of discord in their family (Munroe, 2018). Similarly, a systematic review of the literature on the impact of experiences of rejection on self-harm behaviors found that 15 of the 18 total studies reviewed found a positive association between experiences of rejection and reported self-injurious behavior (Cawley et al., 2019). These results reveal the harmful impact of experiencing rejection by demonstrating the real effects such rejection can have on self-harm behaviors for individuals. Cawley et al.'s (2019) review was not limited to the TGD community; however, several of the studies included in the review reported TGD individuals among their sample population.

As previously discussed, Testa et al. (2017) used Structural Equation Modeling to show that distal stressors, such as rejection, were positively indirectly linked to suicidal ideation through proximal minority stressors– negative expectations for the future and internalized transphobia (Testa et al., 2017). Rejection was also significantly positively correlated with negative expectations for the future (r=.31, p<.001) and

suicidal behavior (r=.18, p<.001). However, the indirect effects of rejection with other mental health outcomes common to TGD individuals, such as depression and anxiety (James et al., 2016) have yet to be examined. Experiences of rejection have also been linked to greater expectations of future rejection, which can lead to hypervigilance, defensiveness, and anxiety (Feinstein, 2020). As demonstrated, studies that examined the impact of rejection on mental health outcomes highlight the importance of these experiences in understanding the disparate rates on mental health concerns among TGD individuals. However, this is one minority stressor that is grossly underexamined in the literature. Thus, the current study expands upon previous literature to examine the impact of experiences of rejection on depression and anxiety through negative expectations for the future.

Negative Expectations for the Future. *Negative expectations for the future* denote the internalized anxiety TGD individuals feel in anticipation of future rejection based on prior experiences of distal minority stressors (Hatzenbuehler & Pachankis, 2016). In a systematic review of the literature on negative expectations for the future (otherwise known as rejection sensitivity) among adults in the North America, Europe, Asia, and Australia, Gao et al. (2017) found that negative expectations for the future can cause significant anxiety, poor academic performance, alter life goals through fear of discrimination and victimization, and decrease one's sense of personal power and agency in interpersonal relationships. Although this review did not center upon negative expectations for the future in the TGD community, it highlights the negative effects of negative expectations for the future on mental health, well-being, and social functioning. The studies in this systematic review included participants who hold marginalized

identities (e.g., racial/ethnic minorities, women, etc.); thus, it follows that negative expectations for the future would likely operate similarly in TGD samples.

Indeed, initial research suggests the deleterious impact of mental health outcomes for TGD people. A qualitative study conducted with 30 TGD individuals found that expectations of rejection permeated participants everyday lives and caused adverse mental health outcomes (Rood et al., 2016). Throughout the interview, participants discussed the impact of expecting to be rejected by peers, strangers, and institutions (e.g., churches and businesses). Participants shared that these negative expectations for the future caused significant anxiety, fear, depression, anger, physical exhaustion, and many other distressing emotions and mental states.

The TRIM and related models posit that proximal stressors such as negative expectations for the future would develop from related distal stressors, such as experiences of rejection. In other words, a person who experiences rejection due to their trans identity would be more likely to internally anticipate rejection, discrimination, and other distal minority stressors by others in the future. Indeed, rejection has been linked with negative expectations for the future among TGD adults (r=.31, p<.05; Testa et al., 2015). Also consistent with the application of the MSM to TGD individuals, this proximal stressor has been linked with worse mental health such as perceived burdensomeness (r=.41, p<.05) and perceived general life stress (r=.40, p<.05; Testa et al., 2015). Additionally, negative expectations for the future can lead to hypervigilance, anxiety, and other adverse mental health outcomes (Rood et al., 2016).

Testa et al.'s (2017) study demonstrated how negative expectations of the future can mediate the link between rejection and suicidal ideation. Thus, although

examination of this indirect effect with other mental health outcomes is needed, these findings suggest that this is a meaningful pathway through which TGD individuals experience adverse mental health outcomes. This coupled with previously discussed findings highlighting the impact of negative expectations for the future on hopelessness (i.e., a key element of depression) and hypervigilance (i.e., an important aspect of anxiety). Therefore, it follows that negative expectations may be an essential mechanism through which rejection effects depression and anxiety in TGD individuals.

Additionally, research is needed to assess potential protective factors that could buffer this impact and potentially lead to meaningful clinical intervention. Therefore, the current study aims to examine the protective effects of one hypothesized individual resilience factor –identity pride–on the indirect effect of rejection to depression and anxiety through negative expectations for the future.

Identity Pride. Though this model is based in previous literature with TGD individuals, Matsuno and Israel (2018) called for researchers to empirically test the proposed pathways in the model. One factor that has been identified as a key element in promoting mental health and well-being among TGD individuals and will be examined in the current thesis is *identity pride*–holding a favorable view towards one's TGD identity as well as other members of the TGD community (Matsuno & Israel, 2018; Testa et al., 2015). Identity pride consists of an individual accepting their TGD identity, feeling proud of their identity, acknowledging the uniqueness of being a part of the TGD community, as well as celebrating their own and other people's TGD identities (Matsuno & Israel, 2018).

Having pride in one's identity is central to protecting minoritized individuals against harmful and oppressive societal messages. In a phenomenological study of 11 trans people of color in the U.S., Singh and Mckleroy (2011) found that identity pride was an essential component in promoting resilience following traumatic life events. Namely, participants discussed the importance of pride in both their racial and trans identities when facing barriers such as transphobia and racism. Participants expressed that having pride in their identities empowered them to endure such barriers and engage with life as an act of resistance toward systems of oppression. Thus, this study highlights the empowering effects of identity pride as resilience in the face of harmful social stressors and systematic barriers.

In a qualitative examination of resilience- operationalized as "one's ability to bounce back" from adversity- in a sample of 13 trans youth of color, researchers found that identity pride was an essential theme in promoting wellness and minimizing psychological distress (Singh, 2013). This study utilized a phenomenological qualitative approach with an intersectional feminist framework to guide their analysis and interpretation. This study found that the more participants were able to feel pride in their identities (e.g., gender identity and racial/ethnic identity), the more they were able to engage in a process of healing through expressing their authentic selves.

A clinical case study conducted by Poquiz et al. (2021) demonstrated the importance of identity pride in a clinical sample of trans and nonbinary black, indigenous, and people of color (BIPOC) seeking mental health services. Given the intersecting identities and subsequent systems of oppression endured by BIPOC TGD individuals, this study sought to provide a group therapy intervention to support identity

pride, resilience, activism, and connectedness. Participants in the study reported favorable outcomes, suggesting that identity pride among other resilience factors are essential for promoting well-being in psychotherapy.

There is also emerging quantitative evidence for the importance of identity pride with TGD adults. For example, Testa et al. (2015) revealed that identity pride was significantly negatively linked with perceived general life stress (r=–.19, p<.05), perceived burdensomeness (r=–.18, p<.05), depressive symptoms (r=–.19, p<.05), and social anxiety symptoms (r=–.20, p<.05). Results also indicated that identity pride was significantly positively related to perceived social support (r=.21, p<.05) and perceived belongingness (r=.26, p<.05). Likewise, in an online study of 1,093 trans individuals, identity pride played a meaningful role in promoting mental health and well-being. This study, consisting of Male-to-Female (MTF) and Female-to-Male (FTM) participants aimed to identify factors unique to the trans community that contributed to resilience and well-being despite social stigma. Findings supported identity pride as one such factor. Specifically, identity pride was uniquely negatively linked to psychological distress (ß= –0.068; p < .05; Bockting et al., 2013). In another study of 191 TGD individuals, Kolp et al. (2020) revealed that identity pride was linked with less depressive symptoms (r=–.19, p<.01) and less internalized transphobia (r=–.40, p<.01).

As mentioned earlier, the TRIM posits that individual level resilience factors buffer the relationship between distal stressors and mental health outcomes, as well as between proximal stressors and mental health outcomes. That is, a person with high identity pride who experiences rejection or anticipates rejection may be less likely to be impacted by these experiences because they are proud of their identity. Thus,

experiences of rejection or expectations that one might experience rejection would have less of an impact on their mental health because they are grounded in their own pride in their identity rather than others' rejections of it. Despite the importance of identity pride in promoting well-being and resilience highlighted in the qualitative literature, and nascent support for its importance within the quantitative literature, examinations of identity pride as a moderator is limited. One study (Kolp et al., 2019) tested identity pride as a moderator of the relationship between sexual victimization (i.e., unwanted sexual encounters, such as sexual coercion and assault) and sleep disturbance. Results from this tested moderation were not significant; however, this may be due to the fact that the majority of participants in the study did not report an experience of sexual victimization in the past year, which indicates that this moderation could be time sensitive. Importantly, of relevance to the current thesis, this moderation did not directly test the TRIM, as sexual victimization is not a distal stressor specific to TGD samples. Therefore, to fill this gap in the literature, the current study proposes identity pride as a moderator of the relationships between rejection, negative expectations for the future, and mental health outcomes.

The Present Study

As discussed, TGD individuals report disproportionate rates of mental health concerns in comparison to their cisgender LGB and heterosexual peers (Borgogna et al., 2019; Su et al., 2016). To understand these disparities, researchers (e.g., Brennan et al., 2017; Testa et al., 2017; Valentine & Shephard, 2018) have started to apply Minority Stress Model to TGD adults, asserting that distal stressors (e.g., discrimination, rejection) may lead to proximal stressors (e.g., negative expectations for the future,

internalized transphobia), which erode mental health. Thus, one such reason behind such mental health disparities in the TGD community might be experiences of rejection reported by TGD people, which may lead to negative expectations for the future that, in turn, may negative impact mental health.

Given that rejection is a near ubiquitous and deleterious experience for those in the TGD community (Cawley et al., 2019), it is imperative to elucidate factors that buffer against the effects of rejection, negative expectations for the future, and adverse mental health outcomes. According to the TRIM, identity pride may be one such factor (Matsuno & Israel, 2018). Though the emerging evidence suggests the importance of identity with TGD adults specifically in promoting mental health, no study to date has empirically tested the moderating effects of identity pride on the relationship between rejection, negative expectations for the future, and mental health outcomes among TGD adults. To fill this gap in the literature and to address Matsuno and Israel's (2018) call to empirically test the TRIM, the current study examines the individual-level resilience factor—identity pride—as a moderator of the direct effects of negative expectations for the future on depression and anxiety, and indirect effects of rejection on these outcomes through negative expectations for the future. In doing so, we provide an empirically supported target for clinical intervention (e.g., trans identity pride) for psychologists working with TGD individuals. In understanding the ways in which identity pride buffers against the effects of discrimination on mental health, clinicians can focus on increasing identity pride and self-acceptance within TGD clients.

Research Questions

(1) Do rejection and negative expectations for the future negatively relate to mental health outcomes (i.e., depression and anxiety)?

(2) Does identity pride buffer the relationship between rejection and mental health outcomes (i.e., depression and anxiety)?

(3) Does identity pride buffer the relationship between negative expectations for the future and depression and anxiety?

Hypotheses

H_1= Experiences of gender-related rejection will be positively and significantly associated with negative expectations for the future.

H_2= Negative expectations for the future will be positively and significantly associated with anxiety and depression.

H_3=Identity pride will moderate the direct relationship between negative expectations for the future and mental health outcomes (i.e., anxiety and depression), such that as identity pride increases the relationship between negative expectations for the future and mental health outcomes decreases.

H_4 = Experiences of gender-related rejection will be indirectly and positively associated with depression and anxiety through negative expectations for the future.

H_5 = Identity pride will moderate the indirect effect of experiences of gender-related rejections through negative expectations for the future, such that as identity pride increases the indirect effects between gender-related rejection and mental health outcomes decreases.

H_6 = Experiences of gender-related rejection will be positively and significantly associated with mental health outcomes.

H_7 = Identity pride will moderate the direct relationship between rejection and mental health outcomes, such that as identity pride increases the relationship between rejection and mental health outcomes will decrease.

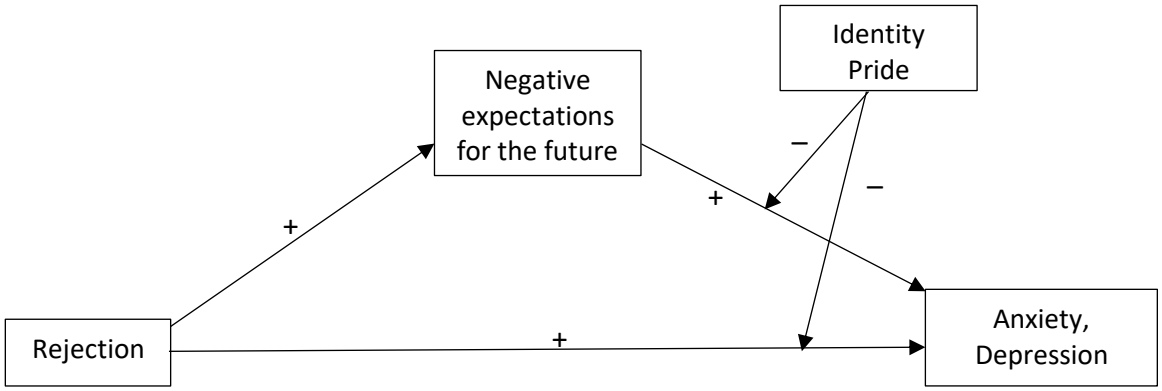

Figure 1
Hypothesized Moderated Mediation Model.

Method

Participants and Procedure

514 Trans and Gender Diverse adults in the US completed the survey. The mean age of the sample was 26.5 years old (SD= 7.1; range 18-71 years). Participants were allowed to select multiple gender identities, and most participants self-identified as nonbinary (71.9%), followed by trans (28.3%), genderqueer (24.9%), and/or trans men (23.8%)[2]. Trans women represented a much smaller percentage (7.8%) of participants in the study sample. A full breakdown of the gender identities represented in the sample is in Table 1. Regarding sex assigned at birth, 80.5% of the sample were assigned female at birth, .2% of the sample were assigned intersex at birth, and 15.5% of the sample were assigned male at birth. 2.5% of the participants declined reporting their sex assigned at birth. The majority of the sample identified as White (82.3%), and most had an income below $40,000 per year (48.7%). Like gender identity, participants were allowed to select multiple sexual identities that describe their sexual orientation. The largest percentage of participants identified as queer (41.4%), followed by bisexual (34.8%), asexual (21. 1%), pansexual (19.4%), and gay (13.1%). See Table 1 for a full breakdown of participants' demographic information.

[2] Originally, I planned to utilize stratified sampling via prolific to ensure equal numbers of binary and nonbinary TGD participants. However, due to the low number of trans men and women actively participating in studies on Prolific at the time of data collection, I was not able to collect equal groups. After consultation with experts, I decided to expand the number of nonbinary individuals in my sample since this was the largest group of TGD individuals that were active on Prolific during data collection.

Trans and Gender Diverse adults in the US were recruited through Prolific, a study management website in which participants are ethically compensated for their voluntary participation in research projects. In an evaluative study on research management platforms, data collected through Prolific was higher quality, participants were more honest in comparison to other platforms, and the available participant samples were more diverse compared to Mechanical Turk and CrowdFlower (Peer et al., 2017). Moreover, Prolific offers screening tools, which allows researchers to access hard to reach participants (Palan & Schitter, 2018). This is particularly important for the current study considering TGD individuals can be difficult to recruit for research studies (Chen et al., 2019). For this study, participants were eligible to partake in the study if they 1) were 18 years or older, 2) identified as trans, nonbinary, or gender diverse, 3) were currently residing in the United States, and 4) were fluent in English.

Eligible participants voluntarily elected to participate in the online study via Qualtrics by choosing from a long list of applicable studies provided through Prolific. Interested participants were directed to the study where, upon consenting to partake in the study, were administered a series of measures related to transgender minority stressors, resilience factors, and mental health (see Appendix A). Each participant was given the same measures, expanded upon below. Participants had autonomy to not answer any question that they did not feel comfortable answering. At the end of the survey, participants were directed to a debriefing page in which they were given more information about the purpose of the study. The debrief also included mental health resources in case they experienced any distress while answering the questions included in the study (e.g., questions about their personal experiences of rejection). Participants

provided their Prolific identification number in the beginning of the survey in order to receive compensation for their engagement in the study. I inserted code in Qualtrics to auto-populate participants' Prolific ID, as recommended by Prolific (Prolific, 2021). Each participant was compensated at an hourly rate of approximately $8.66.

Table 1

Participants' Demographic Information (n= 514)

Demographic Variable	Categories	*N*	%
Gender Identity	Transgender (trans)	149	28.3
	Transgender (trans) man	125	23.8
	Transgender (trans) woman	41	7.8
	Nonbinary	378	71.9
	Genderqueer	131	24.9
	Genderfluid	99	18.8
	Agender	78	14.8
	Two-spirit	4	0.8
	Bigender	8	1.5
	Demi-boy	13	2.5
	Demi-girl	32	6.1
	Cisgender man	5	1.0
	Cisgender woman	21	4.0
	Cisgender (cis)	4	0.8
	Questioning	50	9.5
	Another Identity	44	8.4
Sex Assigned at Birth	Female	421	80.5
	Intersex	1	0.2
	Male	81	15.5
	Decline to state	13	2.5
Pronouns	They/them/theirs	370	70.3
	She/her/hers	202	38.4
	He/him/his	203	38.6
	Per/per/pers	2	0.4
	Xe/xem/xyr	7	1.3
	Ze/hir/hirs	3	0.6
	Ze/zim/zirs	4	0.8
	Zie/zir/zirs	1	0.2
	It/it/its	22	4.2
	No pronouns	11	2.1
	Any pronouns	62	11.8
	Depends on context	78	14.8
	Different pronouns	24	4.6

Sexual Identity	Asexual	111	21.1
	Bisexual	183	34.8
	Gay	69	13.1
	Heterosexual/Straight	17	3.2
	Lesbian	61	11.6
	Pansexual	102	19.4
	Queer	218	41.4
	Questioning	29	5.5
	Another Identity	34	6.5
Race/Ethnicity	Asian	35	6.7
	Black or African American	43	8.2
	Hispanic or Latinx	61	11.6
	Middle Eastern	6	1.1
	Native American or Alaskan Native	20	3.8
	Native Hawaiian or Pacific Islander	5	1.0
	White	433	82.3
	Another race/ethnicity	13	2.5
Geographic Location	Rural	90	17.1
	Suburban	247	47.0
	Urban	165	31.4
Socioeconomic Status	Very Poor	20	3.8
	Poor	66	12.6
	Getting by	228	43.6
	Living comfortably	134	25.6
	Well off	52	9.9
	Very well off	13	2.5
	Prefer not to answer	3	0.6
Household Income	Under $20,000	121	23.1
	$20,001-$40,000	134	25.6
	$40,001-$60,000	72	13.8
	$60,001-$80,000	59	11.3
	$80,001-$100,000	48	9.2
	$100,001-$120,000	16	3.1
	$120,001-$140,000	9	1.7
	$140,001-$160,000	10	1.9
	$160,001-$180,000	7	1.3
	$180,001-$200,000	5	1.0
	$200,001 and above	10	1.9
	Prefer not to answer	25	4.8
Highest Degree Obtained	Less than high school	12	2.3
	High school diploma or GED	73	14.0
	Some college	243	46.5
	College degree (e.g., B.A., B.S.)	127	24.3
	Some graduate school	18	3.4
	Graduate Degree (e.g., Master's or Doctorate)	43	8.2
Age		*M*=	26.5

SD=	7.1
Min=	18
Max=	71

Note. Participants were allowed to select multiple identities on questions assessing gender and sexual identities; therefore, percentages do not add up to 100 for these demographic variables.

Power Analysis

An a priori power analysis was run using G*Power to determine the approximate number of participants needed to detect a small interaction effect size (R^2 = .02; Lorah & Wong, 2018) when added to a fixed effects linear multiple regression. With a small effect size (0.02), power of .8, alpha level of .05, 1 tested predictor (interaction effect), and 5 total predictors (rejection, negative expectations for the future, two interaction effects, depression, and anxiety), the power analysis determined a minimum sample size of 387 TGD individuals. If, however, I decided to use a medium interaction effect size (0.15) instead of a small interaction effect size (0.02), with the same parameters as previously listed, the power analysis yielded a minimum sample size of 55 participants. A power analysis using G*Power and the same parameters listed above was also run using an effect of .04 per Ferguson's (2009) recommendation of .04 as a small effect, which yielded a minimum sample size of 191. I decided to utilize a sample size of 387 because it is most conservative and will thus be most likely to detect an effect if in fact there is one in existence.

Measures

See Appendix A for all measures included in this study.

Rejection

The Rejection subscale of the Gender Minority Stress and Resilience Measure (GMSR; Testa et al., 2015) was used to assess the extent to which participants

experienced rejection in the past six months. This six-item subscale asks participants to rate how often they experienced rejection in the past six months in a variety of domains (i.e., work, school, familial, interpersonal, etc.) using a 6-point Likert Scale from 0 (*I did not experience this event in the past six months*) to 5 (*I experienced this event 5 or more times in the past six months*). Items were averaged to create a composite score, with higher scores indicating more experiences of rejection over the past six months. This scoring differs slightly from the original scoring suggested by Testa et al. (2015), who recommended scoring any responses other than 0 (*I did not experience this event in the past six months)* as a 1 prior to calculating the overall score. The choice to retain the original anchor values for scoring is based on Barr's (2021) study in which researchers found that with the original response options suggested by Testa et al. (2015), a person who experienced one experience of rejection in the past year would receive the same score as someone who experienced rejection every day for the past six months. Example items include, "I have been rejected or made to feel unwelcome by a religious community because of my gender identity or expression," and "I have been rejected or distanced from family because of my gender identity or expression." This subscale has previously demonstrated validity via positive correlations with depression (r=.15, p<.05), social anxiety (r=.08, p<.05), and perceived life stress (r=.14, p<.05) (Testa et al., 2015). Internal consistency for this rejection subscale was demonstrated (α = .71) in a sample of 844 TGD individuals suggesting reliability of this measure (Testa et al., 2015). The internal consistency for this subscale in the current study was α = .75.

Negative expectations for the future

The Negative Expectations for the Future subscale of the GMSR (Testa et al., 2015) was used to measure participants' negative expectations for the future. This nine-item subscale measured the extent to which participants anticipate rejection as a trans, nonbinary, or gender diverse person, using a 5-point Likert Scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores indicate greater negative expectations for the future. This subscale utilizes the acronym TNB to represent trans, nonbinary, and gender diverse identities. Example items include, "If I express my TNB identity, others wouldn't accept me," and "If I express my TNB identity, I could be denied good medical care." Responses were averaged to create a composite score, with higher scores indicating greater expectation of being rejected because of stigma against their TGD identity. This subscale previously demonstrated validity through positive correlations with depression (r=.40, p<.05), social anxiety (r=.38, p<.05), and perceived life stress (r=.40, p<.05) (Testa et al., 2015). In a previous study with a sample of 844 TGD adults, this subscale demonstrated good internal consistency (α = .89) (Testa et al., 2015). In the current study, this subscale demonstrated good internal consistency (α = .87).

Identity Pride

The 8-item Pride subscale of the GMSR (Testa et al., 2015) was utilized to measure participants' identity pride. Participants rate their agreement of the extent to which each item applies to them on a 5-point Likert-type scale from 0 (*Strongly Disagree*) to 5 (*Strongly Agree*). Items in this subscale were averaged to create a total score with high scores indicating greater levels of pride in one's identity as a TGD person. An example item includes, "I am proud to be a person whose gender identity is different from my sex assigned at birth." This subscale previously demonstrated validity

through a positive correlation with perceived social support (r=.21, p<.05) (Testa et al., 2015). This measure has shown high internal consistency (α = .90) in a previous study among TGD adults (Testa et al., 2015).This measure demonstrated good internal consistency (α = .84) in the current study.

Depression and Anxiety

The DASS-21 (Henry & Crawford, 2005), a short-form of the Depression, Anxiety, and Stress Scale (DASS; Lovibond & Lovibond, 1995), consists of three 7-item subscales: Depression, Anxiety, and Stress. For this study, I used the depression and anxiety subscales. Participants rated the extent to which each statement applied to them in the past two weeks on a 4-point Likert scale from 0 (Did not apply to me at all) to 3 (Applied to me very much, or most of the time). Higher scores indicated greater levels of depression or anxiety, respectively. Items were averaged such that higher scores reflect greater depression, or anxiety symptoms. Sample items included “I felt I wasn’t worth much as a person,” (depression), and “I was aware of dryness in my mouth,” (anxiety). The depression subscale has previously demonstrated convergent validity with the Beck Depression Inventory (0.84) and the anxiety subscale demonstrated convergent validity with the Beck Anxiety Inventory (0.87) among adults in the United States (Ahmet & Bayram, 2007). In a study with a sample of 1,115 college students, the DASS-21 demonstrated internal consistency for the depression (α = .90) and anxiety (α = .81) subscales (Brenner et al., 2017). In the current study, the DASS-21 demonstrated good internal consistency for the depression (α = .92) and anxiety (α = .84) subscales.

Attention Check

To ensure thorough participant engagement with the study measures, attention checks were dispersed randomly throughout the survey. For example, participants were directed to endorse a certain response (e.g., “please select “do not agree”) to confirm that participants were appropriately responding to items. The study also included four random response items from the Infrequency Scale (Chapman & Jean, 1976), which were randomly dispersed throughout the survey (e.g., Driving from New York to San Francisco is generally faster than flying between the cities.). This scale provided information on the extent to which participants thoughtfully answered survey questions. Three participants failed the attention check and did not respond appropriately to 2 or more of the infrequency scale items and were removed from further analysis. Less than five percent of my data was missing, so no further missing data analysis or reporting was needed (Schaffer & Graham, 2002).

Analytic Plan

Prior to analyzing my data, I used SPSS to check regression assumptions in order to proceed with data analysis. All variables were scored on a continuous scale. However, upon checking assumptions, I discovered that the rejection variable was not normally distributed. To correct for this, I utilized a log transformation (M. Prince, personal communication, May 26, 2022) and proceeded with data analysis. To analyze my data, I used a moderated mediation model via Stride et al.’s (2015) PROCESS in Mplus 7.4 (Muthén & Muthén, 1998–2012) with bias corrected bootstrapping of the product of coefficients. One obstacle in determining the strength of indirect effects is that the product of two regression slopes is not normally distributed, which violates the assumption of normality. This poses an issue because traditional methods of

determining the strengths of statistical relationships, such as Sobel's Test, is underpowered and therefore unable to accurately detest mediation relationships (Fritz & MacKinnon, 2007). Therefore, asymmetrical confidence intervals (ACIs) were used to better represent the distribution of the product of coefficients. ACI's that did not contain zero indicated a statistically significant relationship was present. 95% Bias-corrected bootstrapped confidence intervals with 10,000 bootstrapped samples were utilized to test the indirect effects of each predictor variable on outcome variables (Efron & Tibshirani, 1993; Fritz & MacKinnon, 2007). I used Model 15 (see Figure 2) to test the predicted mediation indirect effect from rejection (X) to depression and anxiety (Y) through negative expectations for the future (M). In this model, I also tested whether identity pride (V) moderated the direct effect of negative expectations for the future and the indirect effect of rejection on depression and anxiety.

Direct Effects

Direct relationships in the model were examined to asses H_1 (Experiences of gender-related rejection positively and significantly linked with negative expectations for the future) and H_2 (Negative expectations for the future positively and significantly related to anxiety and depression).

Moderation of Negative expectations for the future

To examine whether H_3 was supported (i.e., identity pride moderates the direct effects of negative expectations for the future to anxiety and depression such that as identity pride increases, the direct effect decreases), I first examined whether each interaction term was significant. I then probed the interaction by examining and

comparing the simple slopes at + or – 1 standard deviation of identity pride, taking significance and confidence intervals of each effect into consideration.

Mediation and Moderated Mediation of Rejection

To examine whether rejection indirectly related to depression and anxiety through negative expectations for the future (i.e., H_4), I conducted 10,000 bootstrap samples to adjust for bias on the highest level of statistical power (MacKinnon et al., 2004). Significant indirect effects were shown if the 95% bias-corrected bootstrapped confidence interval did not include zero.

In addition I probed the interaction terms to determine whether identity pride moderates the indirect effect of rejection through negative expectations for the future with each respective outcome by examining the indirect effect at + or – 1 standard deviation of identity pride. This tested H_5, that the indirect effect will be stronger for those with high self-reported identity pride relative to those who report low identity pride.

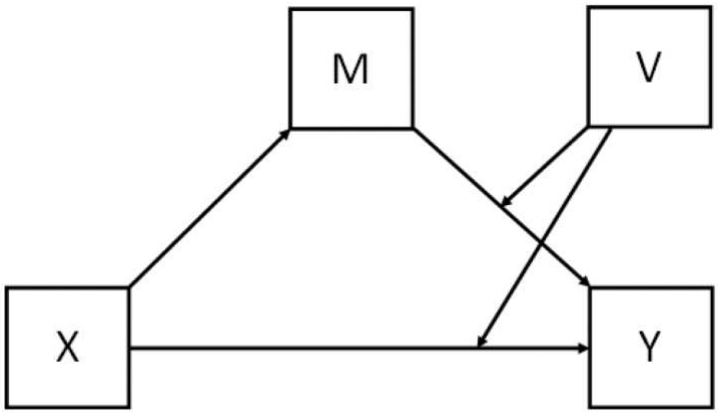

Figure 2
Conceptual Model 15
Note. This figure demonstrates PROCESS model 15 *via Stride et al.'s (2015) PROCESS in Mplus*.

Results

Overall Model Fit

The path analysis for the proposed model resulted in poor model fit. The Chi-Square test of model fit was significant ($\chi^2(9) = 1552.33$, $p < .01$). The model fit indices were also poor (RMSEA = 0.58 [.55, .60], $p < .01$; CFI = 0.17; TLI = 0.00; SRMR = 0.19). For further information on the original model results, see Appendix B. However, this information should not be used to draw conclusions about model relationships since the model fit indices were poor.

Post Hoc Revised Model

Given the poor model fit, the original hypothesized model is not interpretable. As such, I modified the model to better represent the unique experiences of the TGD adults in this study. The revised model was created by respecifying the model constraints via Mplus in conjunction with previous literature and theorizing (Bentler & Chou, 1992). This led to a new, revised model where the mental health outcome measures (e.g., depression and anxiety) mediated in the relationship between experiences of rejection and negative expectations for the future, and identity pride moderated the relationship between rejection and each mental health outcome. This revised model demonstrated an excellent fit to the data. The Chi-Square test of model fit was non-significant ($\chi^2(1) = 0.89$, $p > .05$). The model fit indices were also all in the excellent range (RMSEA = 0.00 [.00, .11], $p < .01$; CFI = 1.00; TLI = 1.00; SRMR = .003).

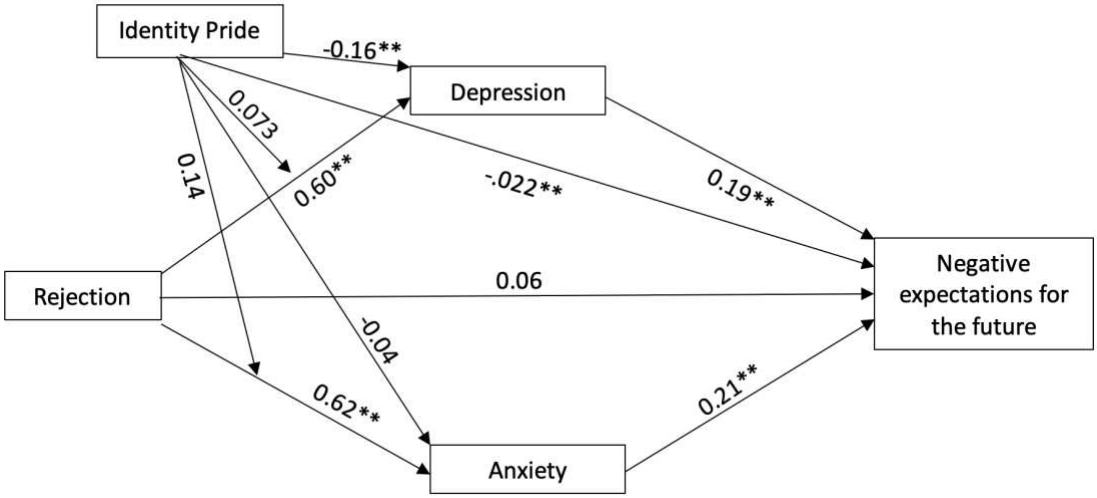

Figure 3
Post-Hoc Revised Model (7) with Standardized Betas
Note. This figure demonstrates the final path model. ** represents statistical significance at the $p<.01$.

Analysis Plan

A path analysis via Stride et al.'s (2015) PROCESS in Mplus 7.4 (Muthén & Muthén, 1998–2012) was conducted to test the following study hypotheses:

H_1: Experiences of rejection are significantly positively related to negative expectations for the future among TGD adults, such that as experiences of rejection increase, negative expectations for the future will also increase.

H_2: The effect of experiences of rejection impacts negative expectations for the future through mental health outcomes (e.g., depression and anxiety). (Mediation)

H_3: The pattern of findings is different at varying levels of trans identity pride. (Moderation)

All variables were scored on a continuous scale and were normally distributed, apart from rejection which was positively skewed. To account for this violation of the assumption of normality, I utilized a log transformation to proceed with data analysis. A

path model is presented in Figure 3. Analyses were conducted using Mplus 7.4 (Muthén & Muthén, 1998–2012).

The moderation hypothesis (i.e., H_3) was tested by including identity pride as a moderator of the a paths (i.e., the direct effects from rejection to depression and anxiety). This was done by creating product terms between the predictor and moderator variable and including those paths in the overall model. This moderation was tested by examining the significance of the product term at the $p<.05$ level as well as examining the 95% asymmetrical confidence intervals of the conditional indirect effects– significance is determined if the asymmetric confidence intervals do not contain zero.

Revised Model Results

Direct Effects

A path model with standardized direct effects is shown in Figure 3. See Table 2 for standardized model results. Rejection was significantly positively related to depression ($ß = .60$, $SE = .08$, $p < .01$) and anxiety ($ß = .62$, $SE = .07$, $p < .01$). Depression significantly positively predicted negative expectations for the future ($ß = .19$, $SE = .05$, $p < .01$), such that as depression increased, negative expectations for the future also increased. Similarly, anxiety significantly positively predicted negative expectations for the future ($ß = .21$, $SE = .06$, $p < .01$) such that as anxiety increased, negative expectations for the future also increased. Rejection did not significantly predict negative expectations for the future ($ß = .06$, $SE = .06$, $p = .32$), which indicates full mediation occurred in the model.

Identity Pride was significantly negatively linked to depression ($ß = -.16$, $SE = .05$, $p < .01$), such that as identity pride increased, depression decreased. Identity Pride

was also significantly negatively related to negative expectations for the future ($ß$ = -.22, SE = .04, p < .01), such that as identity pride increased, negative expectations decreased. However, identity pride was not significantly linked to anxiety ($ß$ = -.04, SE = .03, p = .25).

Moderation Effects

The product terms in the model did not statistically significantly predict depression or anxiety. Namely, rejection x pride did not significantly predict depression ($ß$ = .07, SE = .09, p = .41) or anxiety ($ß$ = .14, SE = .08, p = .07). However, to test all a priori hypotheses in the model, I examined the conditional indirect effects of the effects of rejection on negative expectations for the future through depression and anxiety at varying levels of identity pride.

Conditional Direct Effects

To test the hypotheses about conditional indirect effects, I calculated the slope of the Rejection → Anxiety and the Rejection → Depression relationships at varying levels of pride (e.g., one standard deviation above the mean, the mean, and one standard deviation below the mean). For TGD individuals low in pride, the slope was b = .55, SE = .09, p < .001 for anxiety, and b = .71, SE = .13, p < .001 for depression. For TGD individuals with average pride, the slope was b = .56, SE = .07, p < .001 for anxiety, and b = .74, SE = .10, p < .001 for depression. For TGD individuals high in pride, the slope was b = .64, SE = .05, p < .001 for anxiety, and b = .76, SE = .07, p < .001 for depression.

This suggests that the relationship between rejection and anxiety is stronger for TGD individuals high in identity pride than for those low in identity pride. Additionally,

the relationship between rejection and depression is stronger for TGD individuals high in identity pride than for those low in identity pride. Although the product term was nonsignificant, these results demonstrate important trends in understanding the ways in which pride effects the link between rejection and depression/anxiety. As described by Cumming (2017) it is important to move away from traditional methods, such as null hypothesis significance testing (NHST), which offer a stringent- often incomplete understanding of statistical findings. Instead, researchers should adopt methodology in which effect sizes and confidence intervals are examined to offer more complete information. Indeed, this methodology is advantageous in comparison to NHST since effect sizes are on a continuum and NHST leads to dichotomous decision making. As such, the asymmetric confidence intervals of conditional indirect effects were interpreted to further understand the findings in the current study.

Conditional Indirect Effects

Anxiety. Upon examining the bias-corrected bootstrapped confidence intervals, I found that the indirect effects of (rejection→ anxiety→ negative expectations) for individuals low in identity pride were statistically significant (b = 0.12 [0.05, 0.22]). For individuals with a medium level of identity pride, the indirect effects of (rejection→ anxiety→ negative expectations) was also statistically significant (b = 0.13 [0.05, 0.22]). Finally, for individuals with high identity pride, the indirect effects of (rejection→ anxiety→ negative expectations) was also statistically significant (b = 0.14 [0.05, 0.23]).

Depression. Upon examining the bias-corrected bootstrapped confidence intervals, I found that the indirect effects of (rejection→ depression→ negative expectations) for individuals low in identity pride were statistically significant (b = 0.11

[0.05, 0.19]). For individuals with a medium level of identity pride, the indirect effects of (rejection→ depression → negative expectations) was also statistically significant (*b* = 0.12 [0.05, 0.19]). Finally, for individuals with high identity pride, the indirect effects of (rejection→ depression→ negative expectations) was also statistically significant (*b* = 0.12 [0.05, 0.19]).

Table 2

Standardized Model Results for Post-hoc Revised Model (7)

Outcome	***Predictor***	***B***	***SE***	***t***	***p***
Negative Expectations ON					
	Depression	.19	.05	3.47	.00
	Anxiety	.21	.06	3.32	.00
	Rejection	.06	.06	1.01	.32
	Pride	-.22	.04	-5.72	.00
Depression ON					
	Rejection	.60	.08	7.62	.00
	Pride	-.16	.05	-3.02	.00
	RejectionXPride	.07	.09	.82	.41
Anxiety ON					
	Rejection	.62	.07	9.04	.00
	Pride	-.04	.03	-1.15	.25
	RejectionXPride	.14	.08	1.82	.07
Depression WITH					
	Anxiety	.21	.04	4.92	.00
Intercepts					
	Depression	1.18	.16	7.44	.00
	Anxiety	.63	.10	6.30	.00
	Negative Expectations	-.13	.14	-.96	.34

Residual Var					
	Depression	.54	.03	16.23	.00
	Anxiety	.47	.03	14.96	.00
	Negative Expectations	.77	.03	22.67	.00
R-Squared					
	Observed Variable	Estimate	*SE*	st/*SE*	*p*
	Depression	.46	.03	13.88	.00
	Anxiety	.53	.03	17.16	.00
	Negative Expectations	.23	.03	6.82	.00

Note. P-values in the table represent two-tailed *p*-values.

Table 3

Item-Level Descriptive Statistics For Rejection

Rejection Item	***M***	***SD***
1. I have had difficulty finding a partner or have had a relationship end because of my gender identity or expression.	.42	1.03
2. I have been rejected or made to feel unwelcome by a religious community because of my gender identity or expression.	.91	1.50
3. I have been rejected by or made to feel unwelcome in my ethnic/racial community because of my gender identity or expression.	.62	1.28
4. I have been rejected or distanced from friends because of my gender identity or expression.	.59	1.08
5. I have been rejected at school or work because of my gender identity or expression.	.56	1.15
6. I have been rejected or distanced from family because of my gender identity or expression.	1.34	1.64

Table 4

Descriptive Statistics and Correlations for Study Variables

Variable	*M*	*SD*	1	2	3	4	5

1. Rejection	.45	.42	–				
2. Negative Expectations	3.47	.72	.41**	–			
3. Pride	3.16	.77	.02	-.26**	–		
4. Depression	1.40	.86	.33**	.39**	-.17**	–	
5. Anxiety	1.00	.68	.38**	.37**	-.01	.59**	–

Note. P-values in the table represent two-tailed *p*-values. *Significance at the p<.01 is denoted by **.*

Discussion

This research sought to examine a moderated mediation model wherein rejection predicted worse mental health (e.g., depression and anxiety) through increased negative expectations at varying levels of identity pride. However, this model demonstrated a poor fit to the data, and therefore the relationships within the model were not interpretable. To investigate the cause of poor model fit, and better understand the data, I respecified the model and developed a post-hoc model to more accurately represent the experiences of the TGD individuals in this study. Results from the post-hoc model supported a path model wherein experiences of rejection in the past six months predicted negative expectations for the future through depression and anxiety. This model accounted for nearly half of the variance in depression and anxiety. Trans identity pride was also included as a moderator in the relationship between rejection and anxiety/depression. The product term for this moderation was not significant; however, to fully understand the results of this study, conditional indirect effects of this moderation were examined.

Contrary to study hypotheses, conditional indirect effects demonstrated a trend in which as identity pride increased, the association between rejection and depression/anxiety increased. This suggests that identity pride, albeit important for promoting resilience (Singh et al., 2011; 2013) and wellness (Poquiz et al., 2021) among TGD individuals, when examined in isolation (i.e., without accounting for other resilience factors such as community connectedness) may increase one's susceptibility

to depression and anxiety following experiences of rejection. I explore these findings and their implications below.

Understanding the Revised Model

A major unexpected finding was that rejection was positively indirectly linked to negative expectations for the future through depression and anxiety. This contrasts extant theory, such as Meyer's (2013) Minority Stress Theory and the Trans Resilience Intervention Model (TRIM; Matsuno & Israel 2018), which theorized that the distal stressor (negative expectations) would affect mental health through the proximal stressor (rejection). However, there are plausible explanations for the lack of fit with the hypothesized model, such as negative expectations for the future may be a mental health outcome rather than a mediator, or proximal stressor, as the Psychological Mediation Framework (Hatzenbuehler, 2009) and Minority Stress Theory (Meyer, 2003) suggest. Negative expectations for the future are related to anxiety and depression through similarities such as hypervigilance and hopelessness respectively. Therefore, future research is needed to further- and more comprehensively- test the minority stress model among TGD individuals since the path model that was represented in this study did not find evidence for the distal-proximal-mental health model. Future research should also consider negative expectations for the future as an outcome rather than a proximal minority stressor as evidenced by the results of this study.

Another plausible explanation for the lack of fit with the hypothesized distal-proximal-mental health model are limitations or nuances in how I measured the study constructs. For example, I utilized an adjusted response scale to the Rejection subscale per Barr et al. (2021) to assess rejection in the past six months. Specifically, participants

reported their experiences of rejection on a scale of 0 (*I did not experience this event in the past six months*) to 5 (*I experienced this event 5 or more times in the past six months)* instead of the original response scale, “Never,” “Yes, before age 18,” “Yes, after age 18,” and “Yes, in the past year.” This adjustment was made to understand the impact of recent experiences of rejection. Notably, in the original measure individuals who had experienced numerous instances of rejection in the past six months would receive the same score as individuals who had only experienced rejection one time in the past six months. Therefore, Barr et al. (2021) suggested an adjustment that would rely on scale response anchors to assess the number of times TGD individuals experienced rejection within the past six months.

Due to the change in the response scale, this study accounted for instances of rejection experienced by participants in the past six months rather than across the lifespan. This change likely altered the relationships within the original TRIM and minority stress models given previous literature accounted for the impact of rejection across the lifespan rather than recent occurrences of rejection (Testa et al., 2015; 2017). Using this timeframe, data supported a model wherein depression and anxiety explained the relationship between rejection and anticipated future minority stress (i.e., negative expectations for the future). This shorter timeframe may not have allowed for enough time for participants to develop the cognitive schema underlying the distal-proximal-mental health model published in previous literature (e.g., Hatzenbeuhler, 2009).

These findings suggest that symptoms of depression and anxiety would be more likely to be directly impacted by rejection within the past six months than rejection

experienced years ago. For context, the Depression Anxiety Stress Scale-21 (DASS-21; Lovibond & Lovibond, 1995), used to assess depression and anxiety in this study, prompted participants to report their symptoms of anxiety and depression within the past two-weeks. Thus, recent experiences of rejection are likely experienced in the present through increased depression and anxiety symptoms, which ultimately predicts TGD individuals expectations for future minority stress as reflected in study findings. To clarify and further explore these findings, researchers should test this model with TGD adults longitudinally. For example, researchers could examine rejection, negative expectations for the future, and depression/anxiety at two time-points six months apart to test whether experiences of rejection over the past six months predicts negative expectations through depression and anxiety longitudinally.

Results may also be impacted by measurement issues with the Rejection subscale beyond the scoring. This subscale utilized a structure wherein each item of the scale measured experiences of rejection over the past six months with a different group. This approach implies that if someone endorses one item on the rejection measure, they will endorse other items, and thus would have a total score that represents one latent construct (e.g., rejection). Yet a person's experiences of rejection within one group (e.g., family) does not belay experiences of rejection from other groups as well (e.g., friends).

Thus, this subscale should be treated as an inventory and not an individual scale. For example, item 1 stated, "I have had difficulty finding a partner or have had a relationship end because of my gender identity or expression," whereas item 4 described, "I have been rejected or distanced from friends because of my gender

identity or expression." As mentioned, this subscale may not measure a unidimensional rejection construct. Indeed, in conducting statistical analyses with this scale, the data was skewed such that many of the participants only endorsed one item of the measure, which made it difficult to draw statistical conclusions with this data. Previous research suggested using a total score for this measure (Testa et al., 2015), which likely minimizes the real and impactful effects of experiences of rejection with a particular group if that person had not experienced rejection from multiple groups (i.e., thus endorsing multiple items on this scale).

To address these measurement issues, future research should focus on developing a measure of rejection that captures the impact of rejection on TGD adults similar to the Daily Heterosexist Experiences Questionnaire (DHEQ; Balsam et al., 2013), which measured various sexual minority stress experiences on a six-point likert-type scale from 1 *Did not happen* to 6 *It happened and it bothered me extremely* (Ramirez & Galupo, 2019). To circumvent this issue, researchers could also create a measure that focuses on the depth of rejection experiences within each group (e.g., family, friends) rather than relying on a single item per group to capture rejection experiences such as the GMSR (Testa et al., 2015).

Given that no measure currently exists to capture the depth of rejection experiences within each group, if using the GMSR, future researchers should consider separating out each of the individual rejection items and utilizing single item indicators to measure experiences of rejection over the past six months with separate groups rather than compute an average across all the items and thus across several different groups. Meaning that experiences of rejection at the hands of each of the groups

represented in the scale (e.g., religious community, racial/ethnic community, romantic interests, family, friends) would serve as independent predictors in the model. Results from this study in conjunction with previous literature (e.g., Puckett et al., 2019) suggest that experiences of rejection from family may be particularly detrimental to mental health outcomes in comparison to rejection from other groups. Thus, future researchers should focus on the detrimental effects of rejection experiences at the hands of family members on TGD mental health and well-being.

The unexpected model fit could also reflect a legitimate challenge to the distal-proximal-mental health model itself. Hatzenbuehler's (2009) psychological mediation framework suggest that distal stressors (e.g., rejection) predict mental health outcomes through proximal minority stressors (e.g., hypervigilance for future rejection). This model has garnered substantial empirical support with cisgender LGB samples, yet, only one study has empirically tested this model with TGD adults. Findings from this study indicated that rejection was positively indirectly linked to suicidal ideation through negative expectations for the future (Testa et al., 2017). The lack of quantitative studies testing the psychological mediation framework among TGD adults, coupled with the poor model fit indices when testing the distal-proximal-mental health path model in the current study, suggests that these pathways may operate differently among TGD individuals in comparison to cisgender LGB samples.

Additionally, despite previous support for the psychological mediation framework, recent research challenges this model. In a longitudinal study of sexual minority stress, Douglass and Conlin (2022) found no distinction between distal and proximal stressors longitudinally. This suggests that there may be extraneous variables that explain the

relationships among minority stress variables. Further, the current understanding of minority stress pathways may be limited and other factors, such as mental health outcomes (e.g., depression and anxiety), may explain the relationships among minority stressors.

Supporting Previous Literature and Theory

Conversely, some study findings do align with theory and previous literature. This study was the first to test the effects of rejection on depression and anxiety within TGD adults. Study results supported a model wherein rejection significantly predicted depression and anxiety. Previous literature has demonstrated the negative effects of experiences of rejection, such as increased attempted suicide, drug and alcohol misuse (Klein & Galob, 2016), social withdrawal and worrying (Munroe, 2018), self-injurious behavior (Cawley et al., 2019), and suicidal ideation (Testa et al., 2017). These findings also align with theorizing in the TRIM, which predicted that rejection would be significantly positively associated with mental health outcomes.

In addition, findings from the current study revealed that rejection was indirectly linked with negative expectations for the future through depression and anxiety. This path model is novel and addresses a gap in the literature in understanding the ways in which rejection quantitatively effects depression, anxiety, and negative expectations for the future among TGD individuals. This model was supported by qualitative research that demonstrated the impact of anxiety on negative expectations for the future. Namely, Rood et al. (2016) found that in a sample of 30 TGD individuals, all participants described experiencing stress and anxiety in association with their negative expectations for the future. Rejection, however, was not directly associated with

negative expectations for the future. This finding is not consistent with previous literature, which found that rejection was significantly positively correlated with negative expectations for the future (Testa et al., 2017).

Results indicated that depression and anxiety significantly positively predicted negative expectations for the future. Given that rumination is a symptom of depression and anxiety, it makes sense that these constructs were significantly associated with negative expectations for the future. If TGD individuals experience depression or anxiety, they may be more likely to ruminate on minority stress experiences and thus endorse higher rates of anticipated minority stress in the future. Research on psychological interventions for depression suggest that a person's expectations are the key mechanism between their current psychological state and future wellbeing (Rief & Joormann, 2019). This research found that interventions can shift well-being through changing one's expectations for the future. Meaning that when someone suffers from depression, their expectations for the future are a vital part of determining their mental health and well-being in the future. Given the findings from the current study, it is vital for future researchers and mental health providers to target interventions aimed at changing one's expectations for the future.

Identity Pride

In contrast to study hypotheses, theoretically rooted in the Trans Resilience Intervention Model (TRIM; Matsuno & Israel, 2018), which predicted that resilience factors (e.g., identity pride) would significantly buffer the relationship between minority stress (e.g., rejection) and mental health (e.g., depression/anxiety), identity pride did not buffer the effect of rejection on depression and anxiety. However, upon probing the

interaction to examine the direct effects of rejection on depression and anxiety at low, medium, and high levels of identity pride, findings suggested that this relationship may get stronger for individuals with high levels of identity pride than individuals with low pride. This is counter to study hypotheses, which predicted these relationships would be stronger at low levels of pride. This method of probing conditional indirect effects despite the non-significant interaction was informed by Cumming's (2017) new statistical methods and allowed me to further understand the moderating role of identity pride among TGD adults. Specifically, this new statistical method encourages researchers to move beyond null hypothesis significance testing, which lead to dichotomous decision making, and explore effect sizes, which exist on a continuum and offer more information on statistical findings.

Despite the overlapping confidence intervals between these effects (at low, medium, and high levels of pride), this may indicate a general trend holding important implications for future research. Namely, TGD individuals with high levels of identity pride may be more negatively impacted by experiences of rejection and thus more likely to develop symptoms of depression and anxiety. Although previous research, particularly qualitative studies, have demonstrated the importance of identity pride in promoting resilience and well-being (Singh et al., 2011; 2013; Poquiz et al., 2021), recent studies suggest that identity pride in isolation does not in fact protect against mental health outcomes. For example, a longitudinal study of the impact of discrimination and victimization on TGD adults found that identity pride did not significantly moderate the change in suicidal ideation from baseline to follow up 30 days later (Rabasco & Andoverk, 2021).

Given the mixed findings on the protective impact of identity pride amongst TGD individuals, future research should investigate which factors in conjunction with identity pride may serve to protect against experiences of minority stress. For example, does social support in conjunction with identity pride protect against experiences of minority stress? Poquiz et al. (2021) suggests that factors, such as resilience, activism, and connectedness, in conjunction with identity pride promoted well-being. Thus, future research should replicate and extend the current model to include these factors to see if they might strengthen the protective components of identity pride when bolstered by other resilience promoting constructs unique to the TGD community.

Consistent with previous literature, which found that identity pride was significantly negatively linked with depression (Testa et al., 2015; Kolp et al., 2020), the current study found that identity pride was directly negatively linked with depression. Additionally, identity pride was significantly negatively linked with negative expectations for the future. This suggests that identity pride may be an important factor for reducing depression symptoms as well as one's expectations for future minority stress. Indeed, depression is considered a mood-based disorder and is greatly impacted by one's self-esteem (Sowislo & Orth, 2013); thus, having pride in one's identity is likely helpful in bolstering self-esteem and subsequently decreasing depression. However, findings suggest that identity pride alone, without accounting for other resilience-promoting factors, does not protect TGD adults from the impact of minority stress.

Interestingly, identity pride was not significantly associated with anxiety. One reason for this non-significant relationship may be that, unlike the low mood associated with depression, anxiety is a natural heightened response to perceptions of danger.

Therefore, one can have increased mood without having increased certainty in their safety.

Implications

Findings from this study have important implications for both mental health professionals working with TGD clients as well as research dedicated to understanding mental health among TGD adults. Although identity pride was not found to buffer the relationship between rejection and depression/anxiety, direct effects from the model suggest that bolstering a sense of identity pride among TGD clients may directly reduce depression and hypervigilance directed towards future experiences of minority stress. Future research could develop interventions aimed at increasing one's trans identity pride to assess whether increased identity pride reduces depression and anxiety symptoms. Such interventions could mirror the BIPOC pride intervention created by Poquiz et al. (2021) which included other resilience factors in conjunction with identity pride in order to bolster the protective effects of identity pride.

Additionally, given the detrimental effects of experiences of rejection on mental health outcomes (i.e., depression and anxiety) as well as one's negative expectations for the future, researchers and mental health professionals should develop interventions to decrease rejection amongst TGD individuals. These interventions could target increasing acceptance of trans identity and decreasing transnegativity among family, friends, and colleagues in order to decrease rejection of TGD individuals at the hands of these groups. Matsuno and Israel (2021) created an online intervention aimed at increasing supportive behaviors among parents of trans youth. Interventions such as this may serve to decrease the experiences of rejection reported by TGD individuals,

which would disrupt the harmful effects of these experiences on one's mental health. Future research should develop further interventions aimed at decreasing rejection of TGD individuals by increasing support, acceptance, and decreasing transnegativity. Future research should also test whether increasing one's knowledge and education on gender identity and related concerns (e.g., gender minority stress) may decrease instances of rejection and other distal gender minority stressors. Mental health professionals should also utilize clinical interventions, such as family therapy, to help decrease the experiences of rejection TGD individuals encounter.

Results also suggest that the timing of experiences of rejection may be important for clinical interventions. For example, if a TGD client experiences rejection within the past six months, clinical interventions may be important to disrupt the impact that this has on developing anxiety and depression symptoms as well as their negative expectations for the future. This is important because if TGD individuals anticipate future rejection and other minority stress due to past experiences, they may be more likely to self-isolate or engage in damaging coping strategies, which could in turn exacerbate their symptoms of depression and anxiety (Monroe, 2018). Accordingly, psychologists and other mental health practitioners should assess the extent to which TGD clients anticipate future minority stress and intervene when clients display signs of self-isolation in order to protect against deleterious mental health outcomes.

Additional Limitations and Future Directions

One limitation of the current study was the relatively small sample size (n=514) of TGD adults who participated in this research. This is an issue because moderation effects are very sensitize to sample size, meaning that if the study does not have

adequate statistical power the likelihood of a type II error increases. Future research should test this model using a larger sample size to assess whether moderation results in the current study were due to inadequate statistical power. A second limitation of the study is that the model utilized cross-sectional data, which limited the ability to make causal predictions in the mediation analyses. Future research should test this mediation model longitudinally. This is particularly important considering the central contradictory finding in this research was the order by which the constructs related to each other within the path model. Another limitation of the study was the lack of racial diversity represented within the study sample. This limits our understanding of the ways in which rejection operates empirically within TGD communities of color. To address this issue, future research should test this model within TGD communities of color. Future research could also explore the nuanced experiences of TGD identity pride within samples of individuals who hold multiple intersecting marginalized identities.

As previously discussed, I attempted to utilize stratified sampling via Prolific in order to understand the moderating roll of identity pride as well as the impact of rejection on mental health within binary and nonbinary trans communities. However, this sampling procedure was not possible due to the low numbers of trans women and men active on Prolific during data collection for this study. To circumvent this limitation, future research should replicate this study within samples of trans women and trans men.

The historical timing in which this data was collected may also impact the results of this study. For example, during the time of data collection (i.e., March/April 2022) there was a barage of anti-transgender legislation within the United States. Given the self-report nature of the psychosocial measures and concepts included in this study,

participants' level of identity pride, rejection, negative expectations for the future, depression, and anxiety may have been effected by this historical timing. Thus, future research should replicate this model at different timepoints in order to further investigate whether the historical timing of this data collection influenced study results.

The current study also utilized a general sample of TGD adults, which limits our understanding of the influence of identity pride and experiences of minority stress among clinically distressed TGD individuals. This limitation has important clinical implications considering that many TGD clients that seek mental health services are clinically distressed. Future research should replicate this study with a sample of clinically distressed TGD adults to extend these findings to TGD communitites who may be undergoing mental health treatment. This would provide additional clinical evidence and inform subsequent mental health treatment for TGD individuals experiencing distress.

Future researchers could also experimentally test whether the timeframe through which rejection is experienced truly impacts the minority stress process by manipulating the timeframe of rejection experiences. Researchers would then test model fit and compare relationships to deepen our understanding of the difference between the effects of recent rejection versus rejection that occurred long ago (i.e., several years ago). Future research should also consider contextual or other important factors not within the scope of the current study, such as level of outness.

Conclusion

The current study served as the first empirical test of one pathway in the TRIM—how identity pride may buffer against experiences of rejection on mental health

outcomes within the TGD community. Contrary to study hypotheses and the TRIM theorizing, findings indicated that identity pride did not protect against experiences of rejection on mental health outcomes. Conditional moderation was non-significant, and probing conditional indirect effects revealed a trend in which the positive indirect effect of rejection on negative expectations for the future may be stronger as identity pride increases. However, results suggest that identity pride alleviates depression symptoms directly. Thus, identity pride may be an important resilience factor by directly alleviating depression for TGD individuals, even if it does not mitigate the impact of rejection experiences on depression. Taken together, findings suggest identity pride may be an important factor for reducing depression symptoms once they arrive, though it may not protect TGD adults from the impact of minority stress. This lends important clinical implications, though future research is needed to validate and explore these unexpected findings.

References

Ahmet, A., Bayram, C., (2007). The Depression Anxiety and Stress Scale (DASS): The study of validity and reliability. *Educational Consultancy, 7(1),* 260-268.

Baams, L., Kiekens, W. J., & Fish, J. N. (2020). The Rejection Sensitivity Model: Sexual Minority Adolescents in Context. *Archives of sexual behavior*, *49*(7), 2259-2263.

Balsam, K. F., Beadnell, B., & Molina, Y. (2013). The Daily Heterosexist Experiences Questionnaire: Measuring minority stress among lesbian, gay, bisexual, and transgender adults. *Measurement and Evaluation in Counseling and Development*, *46*(1), 3-25.

Baptiste-Roberts, K., Oranuba, E., Werts, N., & Edwards, L. V. (2017). Addressing health care disparities among cisgender LGB individuals. *Obstetrics and Gynecology Clinics*, *44*(1), 71-80.

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*.

Bauer, G. R. (2012). Trans Ontarians' sex designations on federal and provincial identity documents: A report prepared for the Canadian Human Rights Commission. Trans PULSE Project.

Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. American Journal of Public Health, 103, 943–951. https://doi.org/10.2105/ajph.2013.301241

Borgogna, N. C., McDermott, R. C., Aita, S. L., & Kridel, M. M. (2019). Anxiety and depression across gender and cisgender LGB individuals: Implications for transgender, gender nonconforming, pansexual, demisexual, asexual, queer, and questioning individuals. *Psychology of sexual orientation and gender diversity*, *6*(1), 54.

Boza, C., & Perry, K. N. (2014). Gender-related victimization, perceived social support, and predictors of depression among transgender Australians. International Journal of Transgenderism, 15(1), 35–52.

Brooks, Virginia R. (1981). *Minority stress and lesbian women*. Lexington, Mass: Lexington Books

Stephanie L. Brennan, Jay Irwin, Andjela Drincic, N. Jean Amoura, Amanda Randall & Megan Smith-Sallans (2017) Relationship among gender-related stress, resilience factors, and mental health in a Midwestern U.S. transgender and gender-nonconforming population, *International Journal of Transgenderism*, 18:4, 433-445. http://dx.doi.org/10.1080/15532739.2017.1365034

Bowling, J., Barker, J., Gunn, L. H., & Lace, T. (2020). “It just feels right”: Perceptions of the effects of community connectedness among trans individuals. *PloS one*, *15*(10), e0240295.

Brenner, R. E., Heath, P. J., Vogel, D. L., & Credé, M. (2017). Two is more valid than one: Examining the factor structure of the Self-Compassion Scale (SCS). *Journal of counseling psychology*, *64*(6), 696.

Budge, S. L., & Moradi, B. (2019). Gender identity. *Psychotherapy. Relationship. Work*, *2*, 133.

Burns, M., Kamen, C., Lehman, K., & Beach, S. (2012). Minority stress and attributions for discriminatory events predict social anxiety in gay men. Cognitive Therapy and Research, 36, 25–35. http://dx.doi.org/10.1007/s10608-010-9302-6

Cawley, R., Pontin, E. E., Touhey, J., Sheehy, K., & Taylor, P. J. (2019). What is the relationship between rejection and self-harm or suicidality in adulthood?. *Journal of affective disorders*, *242*, 123-134.

Chapman, L., & Jean, P. (1976). The Infrequency Scale (Unpublished Test).

Chen, B., Jin, H., Yang, Z., Qu, Y., Weng, H., & Hao, T. (2019). An approach for transgender population information extraction and summarization from clinical trial text. *BMC medical informatics and decision making*, *19*(2), 159-170.

Chodzen, G., Hidalgo, M. A., Chen, D., & Garofalo, R. (2019). Minority stress factors associated with depression and anxiety among transgender and gender-nonconforming youth. *Journal of Adolescent Health*, *64*(4), 467-471.

Cumming, G. (2017). *Understanding the new statistics: Effect sizes, confidence intervals, and meta-analysis*. Routledge.

D'AUGELLI, A. R. (1992). Lesbian and Gay Male Undergraduates' Experiences of Harassment and Fear on Campus. Journal of Interpersonal Violence, 7(3), 383–395. https://doi.org/10.1177/088626092007003007

Douglass, R. P., & Conlin, S. E. (2022). Minority stress among LGB people: Investigating relations among distal and proximal stressors. *Current Psychology*, 1-11.

Feinstein, B. A. (2020). The rejection sensitivity model as a framework for understanding sexual minority mental health. *Archives of Sexual Behavior*, *49*(7), 2247-2258.

Ferguson, C. J. (2009). An effect size primer: A guide for clinicians and researchers. Professional Psychology: Research and Practice, 40, 532–538. http://dx.doi.org/10.1037/a0015808

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.

Flynn, S., & Smith, N. G. (2021). Interactions between blending and identity concealment: Effects on non-binary people's distress and experiences of victimization. *Plos one*, *16*(3), e0248970.

Gao, S., Assink, M., Cipriani, A., & Lin, K. (2017). Associations between rejection sensitivity and mental health outcomes: A meta-analytic review. *Clinical Psychology Review*, *57*, 59-74.

Gorard, S. (2020). Handling missing data in numeric analyses. *International Journal of Social Research Methodology*, *23*(6), 651-660.

Grant, J. M., Mottet, L. A., Tanis, J., Herman, J. L., Harrison, J., & Keisling, M. (2010). National Transgender Discrimination Survey. Report on health and health care (pp. 1–23). Washington, DC: National Center for Transgender Equality and National Gay and Lesbian Task Force.

Haas, A. P., Eliason, M., Mays, V. M., Mathy, R. M., Cochran, S. D., D'Augelli, A. R., . . . Russell, S. T. (2010). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. Journal of Homosexuality, 58, 10–51. doi:10.1080/00918369.2011.534038

Hatzenbuehler, M. L. (2009). How does sexual minority stigma "get under the skin"? A psychological mediation framework. *Psychological bulletin*, *135*(5), 707.

Hatzenbuehler, M. L., & Pachankis, J. E. (2016). Stigma and minority stress as social determinants of health among lesbian, gay, bisexual, and transgender youth: Research evidence and clinical implications. *Pediatric Clinics of North America, 63*, 985-997. doi:10.1016/j.pcl.2016.07.003

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.

Herek G. M., Gillis J. R., Cogan J. C. (1999) Psychological sequelae of hate-crime victimization among lesbian, gay, and bisexual adults. *Journal of Consulting and Clinical Psychology*, 67, 945–951.

Jackson, S. D., & Mohr, J. J. (2016). Conceptualizing the closet: Differentiating stigma concealment and nondisclosure processes. *Psychology of Sexual Orientation and Gender Diversity*, *3*(1), 80.

James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 U.S. Transgender Survey*. Retrieved from Washington, DC: National Center for Transgender Equality

Katz-Wise, S. L., & Hyde, J. S. (2012). Victimization experiences of lesbian, gay, and bisexual individuals: A meta-analysis. *Journal of sex research*, *49*(2-3), 142-167.

Keeley, J., Flatt, J., Sy, F., Gutierrez, K. S., Bungum, T., Moonie, S., & Moonie, S. (2020). Mental Health Disparities among Cisgender LGB individuals. *Nevada Journal of Public Health*, 10.

Klein, A., & Golub, S. A. (2016). Family rejection as a predictor of suicide attempts and substance misuse among transgender and gender nonconforming adults. *LGBT health*, *3*(3), 193-199.

Koken, J. A., Bimbi, D. S., & Parsons, J. T. (2009). Experiences of familial acceptance–rejection among transwomen of color. *Journal of Family Psychology, 23*, 853–860. doi:10.1037/a0017198

Kolp, H., Wilder, S., Andersen, C., Johnson, E., Horvath, S., Gidycz, C. A., & Shorey, R. (2020). Gender minority stress, sleep disturbance, and sexual victimization in transgender and gender nonconforming adults. *Journal of clinical psychology*, *76*(4), 688-698.

Lipari, R., Piscopo, K., Kroutil, L. A., & Miller, G. (2015). Suicidal thoughts and behavior among adults: Results from the 2014 National Survey on Drug Use and Health. NSDUH Data Review. Retrieved from http://www.samhsa.gov/data/sites/ default/files/NSDUH-FRR2-2014/NSDUH-FRR2-2014.pdf

Liu, M., & Wronski, L. (2018). Examining completion rates in web surveys via over 25,000 real-world surveys. *Social Science Computer Review*, *36*(1), 116-124.

Lorah, J. A., & Wong, Y. J. (2018). Contemporary applications of moderation analysis in counseling psychology. *Journal of counseling psychology*, *65*(5), 629.

MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. Multivariate Behavioral Research, 39, 99–128. http://dx.doi.org/10.1207/s15327906mbr3901_4

Matsuno, E., & Israel, T. (2018). Psychological interventions promoting resilience among transgender individuals: Transgender resilience intervention model (TRIM). *The Counseling Psychologist*, *46*(5), 632-655.

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.

Meyer, I. H. (2013). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence.

Mongelli, F., Perrone, D., Balducci, J., Sacchetti, A., Ferrari, S., Mattei, G., & Galeazzi, G. M. (2019). Minority stress and mental health among LGBT populations: an update on the evidence.

Moradi, B., Tebbe, E. A., Brewster, M. E., Budge, S. L., Lenzen, A., Ege, E., ... & Flores, M. J. (2016). A content analysis of literature on trans people and issues: 2002–2012. *The Counseling Psychologist*, *44*(7), 960-995.

Munroe, M. K. (2018). *Contributions of Peer Rejection and Family Discord to Internalizing and Externalizing Symptoms Among Trans Children* (Doctoral dissertation, Miami University).

Ngamake, S. T., Walch, S. E., & Raveepatarakul, J. (2016). Discrimination and sexual minority mental health: Mediation and moderation effects of coping. *Psychology of Sexual Orientation and Gender Diversity*, *3*(2), 213.

Palan, S., & Schitter, C. (2018). Prolific. ac—A subject pool for online experiments. *Journal of Behavioral and Experimental Finance*, *17*, 22-27.

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology*, *70*, 153-163.

Peitzmeier, S. M., Malik, M., Kattari, S. K., Marrow, E., Stephenson, R., Agénor, M., & Reisner, S. L. (2020). Intimate partner violence in transgender populations: Systematic review and meta-analysis of prevalence and correlates. *American journal of public health*, *110*(9), e1-e14.

Plöderl, M., & Tremblay, P. (2015). *Mental health of cisgender LGB individuals. A systematic review. International Review of Psychiatry, 27(5), 367-385.*doi:10.3109/09540261.2015.1083949

Poquiz, J. L., Shrodes, A., Garofalo, R., Chen, D., & Coyne, C. A. (2021). Supporting Pride, Activism, Resiliency, and Community: A Telemedicine-Based Group for Youth with Intersecting Gender and Racial Minority Identities. *Transgender Health*.

Prolific. (2021, October, 19). *Prolific: Revolutionizing People Research.* https://www.prolific.co/

Prolific. (2021, October 19). *Qualtrics Integration Guide*. Retrieved October 22, 2021, from https://researcher-help.prolific.co/hc/en-gb/articles/360009224113-Qualtrics-Integration-Guide.

Puckett, J. A., Maroney, M. R., Wadsworth, L. P., Mustanski, B., & Newcomb, M. E. (2020). Coping with discrimination: The insidious effects of gender minority stigma on depression and anxiety in transgender individuals. *Journal of clinical psychology*, *76*(1), 176-194.

Puckett, J. A., Matsuno, E., Dyar, C., Mustanski, B., & Newcomb, M. E. (2019). Mental health and resilience in transgender individuals: What type of support makes a difference?. *Journal of Family Psychology*, *33*(8), 954.

Rabasco, A., & Andover, M. (2021). Suicidal ideation among transgender and gender diverse adults: A longitudinal study of risk and protective factors. *Journal of Affective Disorders*, *278*, 136-143.

Ramirez, J. L., & Paz Galupo, M. (2019). Multiple minority stress: The role of proximal and distal stress on mental health outcomes among lesbian, gay, and bisexual people of color. *Journal of Gay & Lesbian Mental Health*, *23*(2), 145-167.

Rief, W., & Joormann, J. (2019). Revisiting the cognitive model of depression: The role of expectations. *Clinical Psychology in Europe*, *1*(1), 1-19.

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, 151–164. doi:10.1089/trgh.2016.0012

Schafer, J. L., & Graham, J. W. (2002). Missing data: our view of the state of the art. *Psychological methods*, *7*(2), 147.

Scheim, A., Bauer, G. R., & Pyne, J. (2014). Avoidance of public spaces by trans Ontarians: The impact of transphobia on daily life. Trans PULSE e-Bulletin, 4.

Seelman, K. L., Colón-Diaz, M. J., LeCroix, R. H., Xavier-Brier, M., & Kattari, L. (2017). Transgender noninclusive healthcare and delaying care because of fear: connections to general health and mental health among transgender adults. *Transgender health*, *2*(1), 17-28.

Singh, A. A. (2013). Transgender youth of color and resilience: Negotiating oppression and finding support. Sex Roles, 68, 690–702. doi:10.1007/s11199-012-0149-z

Singh, A. A., & McKleroy, V. S. (2011). "Just getting out of bed is a revolutionary act": The resilience of transgender people of color who have survived traumatic life events. *Traumatology*, 17(2), 34–44. https://doi.org/10.1177/1534765610369261

Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological bulletin*, *139*(1), 213.

Su, D., Irwin, J. A., Fisher, C., Ramos, A., Kelley, M., Mendoza, D. A. R., & Coleman, J. D. (2016). Mental health disparities within the LGBT population: A comparison between transgender and nontransgender individuals. *Transgender Health*, *1*(1), 12-20.

Tebbe, E. A., Moradi, B., & Budge, S. L. (2016). Enhancing scholarship focused on trans people and issues. *The Counseling Psychologist*, *44*(7), 950-959.

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

Testa, R. J., Michaels, M. S., Bliss, W., Rogers, M. L., Balsam, K. F., & Joiner, T. (2017). Suicidal ideation in transgender people: Gender minority stress and interpersonal theory factors. *Journal of Abnormal Psychology, 126*(1), 125–136. https://doi.org/10.1037/abn0000234

Timmins, L., Rimes, K. A., & Rahman, Q. (2021). Is being queer gay? Sexual attraction patterns, minority stressors, and psychological distress in non-traditional categories of sexual orientation. *The Journal of Sex Research*, *58*(5), 599-611.

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.

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.

Appendices

Appendix A

Rejection

Instructions: “In this survey gender expression means how masculine/feminine/androgynous one appears to the world based on many factors such as mannerisms, dress, personality, etc.

Please indicate how often you have experienced the following on a scale from 0 (I did not experience this event in the past six months) to 5 (I experienced this event 5 or more times in the past six months)”

Response options: 6-point scale from 0 (*I did not experience this event in the past six months*) to 5 (*I experienced this event 5 or more times in the past six months*)

1. I have had difficulty finding a partner or have had a relationship end because of my gender identity or expression.
2. I have been rejected or made to feel unwelcome by a religious community because of my gender identity or expression.
3. I have been rejected by or made to feel unwelcome in my ethnic/racial community because of my gender identity or expression.
4. I have been rejected or distanced from friends because of my gender identity or expression.
5. I have been rejected at school or work because of my gender identity or expression.
6. I have been rejected or distanced from family because of my gender identity or expression.

Negative expectations for the future

For the following items, we will use the acronym ‘**TNB**’ to represent Trans, Nonbinary, and Gender Diverse identities.

Please indicate how much you agree with the following statements on a scale of 1 (*strongly disagree)* to 5 (*strongly agree*).

Response options: 5-point scale from strongly disagree to strongly agree

1. If I express my TNB identity, others wouldn’t accept me.
2. If I express my TNB identity, employers would not hire me.
3. If I express my TNB identity, people would think I am mentally ill or “crazy.”
4. If I express my TNB identity, people would think I am disgusting or sinful.
5. If I express my TNB identity, most people would think less of me.
6. If I express my TNB identity, most people would look down on me.
7. If I express my TNB identity, I could be a victim of crime or violence.

8. If I express my TNB identity, I could be arrested or harassed by police.
9. If I express my TNB identity, I could be denied good medical care.

Identity Pride

Please indicate how much you agree with each of the following statements on a scale of 1 (*strongly disagree)* to 5 (*strongly agree*).

Response options: 5-point scale from strongly disagree to strongly agree

1. My gender identity or expression makes me feel special and unique.
2. It is okay for me to have people know that my gender identity is different from my sex assigned at birth.
3. I have no problem talking about my gender identity and gender history to almost anyone.
4. It is a gift that my gender identity is different from my sex assigned at birth.
5. I am like other people but I am also special because my gender identity is different from my sex assigned at birth.
6. I am proud to be a person whose gender identity is different from my sex assigned at birth.
7. I am comfortable revealing to others that my gender identity is different from my sex assigned at birth.
8. I'd rather have people know everything and accept me with my gender identity and gender history.

Depression, Anxiety, Stress Scale

Please read each statement and indicate how much the statement applied to you <u>over the past week</u> on a scale from 0 (*Did not apply to me*) to 3 (*Applied to me most of the time*). There are no right or wrong answers. Do not spend too much time on any statement.

[Randomized]

1. I found it hard to wind down
2. I was aware of dryness of my mouth
3. I couldn't seem to experience any positive feeling at all
4. I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)
5. I found it difficult to work up the initiative to do things
6. I tended to over-react to situations
7. I experienced trembling (e.g. in the hands)
8. I felt that I was using a lot of nervous energy
9. I was worried about situations in which I might panic and make a fool of myself
10. I felt that I had nothing to look forward to
11. I found myself getting agitated
12. I found it difficult to relax
13. I felt down-hearted and blue
14. I was intolerant of anything that kept me from getting on with what I was doing
15. I felt I was close to panic

16. I was unable to become enthusiastic about anything
17. I felt I wasn't worth much as a person
18. I felt that I was rather touchy
19. I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)
20. I felt scared without any good reason
21. I felt that life was meaningless

Coding:
(a) = anxiety
(d) = depression
(s) = stress

Demographics
Please tell us a little about yourself.

1. What is your age?

[drop-down option, 18-100]

2. Understanding that gender identity can be complex and fluid, please check all of the following terms that describe your current gender identity.
    - Transgender (trans)
    - Transgender (trans) man
    - Transgender (trans) woman
    - Nonbinary
    - Genderqueer
    - Genderfluid
    - Agender
    - Two-spirit
    - Bigender
    - Demi-boy
    - Demi-girl
    - Cisgender man
    - Cisgender woman
    - Cisgender (cis)
    - Questioning
    - Another Identity (please specify)

3. One challenge with research is that although we know that gender is complex and fluid, we need to put everyone into a smaller number of categories for some statistical analyses. So, rather than us trying to figure out where you "fit," in the

next question, could you tell us **if you had to choose one gender identity category - what would you choose?**

If I **had to** choose, which of the following best describes your current gender:

- Transgender (trans) man (man who was assigned female at birth)
- Transgender (trans) woman (woman who was assigned male at birth)
- Nonbinary (someone who doesn't exclusively identify as a man or woman)
- Cisgender man (man assigned male at birth)
- Cisgender woman (woman assigned female at birth)
- Unsure/Decline to choose.

4. The past and present experiences of people are often influenced by the sex they were assigned at birth, regardless of their current gender identity or gender expression. We ask this question to ensure we are understanding and representing trans feminine, trans masculine and both AFAB (Assigned Female at Birth) and AMAB (Assigned Male at Birth) nonbinary experiences.

   What was your sex assigned at birth (for example, what gender does your original birth certificate say)?

   - Female
   - Intersex
   - Male
   - Decline to state

What pronouns do you use? (Check all that apply)

they/them/theirs
she/her/hers
he/him/his
ze/hir/hirs
no pronouns
any pronouns
depends on context
different pronouns (please specify)

4. How do you describe your current sexual identity?

[check-all that apply]

- Asexual
- Bisexual

- Gay
- Heterosexual/Straight
- Lesbian
- Pansexual
- Queer
- Questioning
- Another identity/Describe in your own words: _____

5. What is your race/ethnicity?

[check-all that apply]

- Asian
- Black or African American
- Hispanic or Latinx
- Middle Eastern
- Native American or Alaska Native
- Native Hawaiian or Pacific Islander
- White
- Another race/ethnicity/Describe in your own words: _____

6. What best describes your household's standard of living?

- Very poor
- Poor
- Getting by
- Living comfortably
- Well off
- Very well off

7. What is your household income (that is, the income of you and those on whom you rely financially)? Please select the one best descriptor.

- $Under 20,000
- $20,001 - $40,000
- $40,001 - $60,000
- $60,001 - $80,000
- $80,001 - $100,000
- $100,001 - $120,000
- $120,001 - $140,000
- $140,001 - $160,000
- $160,001 - $180,000
- $180,001 - $200,000
- $200,001 and above

8. Please indicate the highest level of education you have completed.

- Less than high school
- High school diploma or GED
- Some college
- College degree (e.g., BA, BS)
- Some graduate school
- Graduate degree (e.g., masters or doctorate)

9. Which U.S. state do you currently live in?
   [Drop down menu with all U.S. states -including Washington DC]

10. Which best describes the geographic location that you live in?
    - Rural
    - Urban
    - Suburban

Appendix B

Original Model Results

The following model results should not be interpreted due to the poor fit of the model. This information was included in the document due to the nature of this project (i.e., thesis program requirement), and to assist my thesis committee in examining my original study hypotheses.

Direct Effects

Rejection significantly positively predicted negative expectations for the future (b =.35, SE = .03, p < .01), such that as rejection increased, negative expectations for the future increased by 0.35. Similarly, depression and anxiety were significantly positively related r= 0.20, p<.01. However, none of the other hypothesized direct effects in the model significantly predicted anxiety or depression among TGD adults. Indeed, rejection did not significantly predict depression (b =.20, SE = .13, p = .11) or anxiety (b =.20, SE = .13, p = .11). Negative expectations also did not significantly predict depression (b =.19, SE = .15, p = .19) or anxiety (b =.19, SE = .15, p = .19). Similarly, pride did not significantly predict depression (b = –.10, SE = .14, p = .46) or anxiety (b = –.10, SE = .14, p = .46).

Moderation Effects

Neither of the interactions tested were statistically significant. Namely, negative expectations x pride did not significantly predict anxiety (b = .03, SE = .04, p = .56) or depression (b = .03, SE = .04, p = .56). Likewise, rejection x pride also did not significantly predict anxiety (b = .01, SE = .04, p = .80) or depression (b = .01, SE = .04, p = .80).

Conditional Direct Effects

I calculated the simple slopes at one standard deviation above the mean, the mean, and one standard deviation below the mean to probe the interaction of negative expectations and pride predicting depression and anxiety. I also did this process of probing the interaction with rejection and pride predicting depression and anxiety. For low identity pride, the slope was b= .22, SE = .05, $p<.01$, for average identity pride the slope was b= .23, SE = .03, $p<.01$, and for high identity pride the slope was b= .24, SE = .04, $p<.01$. This suggests that the relationship between rejection → depression and anxiety was slightly stronger for individuals with high levels of identity pride than people with medium or low levels. However, these estimates were all very similar, so this does not appear to be a substantial finding.

Conditional Indirect Effects

Upon examining the bias-corrected bootstrapped confidence intervals, I found that the indirect effects of (rejection→ negative expectations→ depression/anxiety) for individuals low in identity pride were statistically significant (0.09 [0.05, 0.12]). For individuals with a medium level of identity pride, the indirect effects of (rejection→ negative expectations→ depression/anxiety) was also statistically significant (0.09 [0.07, 0.12]). Finally, for individuals with high identity pride, the indirect effects of (rejection→ negative expectations→ depression/anxiety) was also statistically significant (0.10 [0.07, 0.13]).

Conditional Total Effects

Upon examining the bias-corrected bootstrapped confidence intervals, I found that the total effects of (rejection→ negative expectations→ depression/anxiety) for

individuals low in identity pride were statistically significant (0.31 [0.21, 0.38]). For individuals with a medium level of identity pride, the total effects of (rejection→ negative expectations→ depression/anxiety) was also statistically significant (0.32 [0.26, 0.39]). Finally, for individuals with high identity pride, the total effects of (rejection→ negative expectations→ depression/anxiety) was also statistically significant (0.34 [0.26, 0.42]).