INTERNATIONAL JOURNAL OF TRANSGENDER HEALTH
2020, VOL. 21, NO. 2, 182–193
https://doi.org/10.1080/26895269.2020.1745113

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Internalized transphobia and mental health among transgender adults: A nationwide cross-sectional survey in South Korea

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ABSTRACT

Introduction: Transgender people are stigmatized in South Korea (hereafter Korea), where cultural expectations of a biologically-based, binary sex and gender system present fundamental challenges to those whose gender identity does not align with their birth-assigned sex. A growing international body of literature implicates gender minority stress as a key contributor to transgender mental health disparities, but little research has been conducted on this topic in Korea. As in other cultural settings, depression and suicidality are urgent public health concerns for transgender people in Korea, primarily for those who have not initiated gender affirming medical treatment (GAMT), such as cross-sex hormone therapy. In the current study, an international and interdisciplinary team of authors apply the lens of gender minority stress to elucidate the relationships between a key facet of gender minority stress, internalized transphobia (ITP), and outcomes of depressive symptoms and suicidality.

Methods: Based on a cross-sectional survey of 207 Korean transgender adults, the current study evaluates the relationships between ITP and depressive symptoms, suicidal ideation, and suicide attempts. ITP was measured with an eight-item, Korean-language questionnaire adapted from the Gender Minority Stress and Resilience Measure through a translation and back-translation process.

Results: Korean trans women and trans men mean (mean age = 26.4) were included in the analysis, most of whom had at least one experience of any GAMT. The findings of this study show that Korean transgender adults face similar public health concerns such as high prevalence of depressive symptoms, suicidal ideation, and suicide attempts. As predicted, ITP was significantly related to depressive symptoms, suicidal ideation, and suicide attempts.

Conclusion: The authors suggest potential clinical, policy, and research applications, including institutional interventions, to address structural and cultural barriers to optimal mental health and GAMT as well as mental health interventions to reduce Korean transgender people's internalized negative beliefs about their gender identity.

KEYWORDS
depressive symptoms; internalized transphobia; mental health; South Korea; suicidality; transgender

Introduction

Multiple studies, conducted primarily in North America (Brown & Jones, 2016; Lefevor et al., 2019; Reisner et al., 2014; Scheim et al., 2016, 2017; Tabaac et al., 2018) and Europe (Asscheman et al., 2011; Bouman et al., 2017; Dhejne et al., 2011; Witcomb et al., 2015, 2018), have yielded evidence of health disparities between transgender and general population samples. Across these studies, there is evidence of barriers to adequate healthcare access among transgender people as well as troubling rates of mental health outcomes such as suicide attempts and ideation, depression, anxiety, and psychological distress. However, some of these studies (Brown & Jones, 2016; Lefevor et al., 2019; Reisner et al., 2014; Tabaac et al., 2018) did not include a homogeneous group of transgender individuals, for example, in terms of gender affirming medical treatment (GAMT), such as cross-sex hormone therapy and gender affirmation surgery. An emerging body of broader international scholarship (Baral et al., 2013; Reisner

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et al., 2016) also provides evidence that disparities in transgender individuals' physical and mental health are a worldwide phenomenon, though more research is needed to better understand culturally specific contexts and contributing factors.

A commonly cited approach to contextualizing determinants of health in transgender populations is the Gender Minority Stress and Resilience (GMSR) model (Testa et al., 2015). This model, an extension of earlier scholarship on sexual minority stress (Brooks, 1981; Meyer, 2003), incorporates several factors believed to affect physical and mental health of transgender individuals, including past gender-related discrimination (e.g., gender-related non-affirmation, harassment, and assault), negative expectations of future gender-related discrimination, internalized stigma (e.g., internalized transphobia and cisgenderism), issues related to concealment of gender identity, community connectedness, and pride (Jäggi et al., 2018; Scandurra et al., 2018; Testa et al., 2015).

According to the GMSR model, internalized transphobia (ITP) is a particular form of minority stress that occurs when transgender individuals develop negative perceptions of themselves in response to repeated exposure to societal stigma against transgender people (Testa et al., 2015). Unsurprisingly, ITP has been associated consistently with poor mental health in transgender samples (Austin & Goodman, 2017; Brennan et al., 2017; Breslow et al., 2015; Jackman et al., 2018; Perez-Brumer et al., 2015; Reyes et al., 2016; Scandurra et al., 2018; Staples et al., 2018; Tebbe & Moradi, 2016; Testa et al., 2017; Valentine & Shipherd, 2018). However, few published studies have been conducted in Asian countries (e.g., Reyes and colleagues' (2016) publication based on a Filipino sample), and no known studies have been conducted on ITP among Korean transgender adults. Further, what is known about ITP among Asian samples is based on inconsistent approaches to measuring ITP (e.g., Breslow et al., 2015; Reyes et al., 2016; Tebbe & Moradi, 2016). As such, it is difficult to understand how ITP in Asian settings compares to ITP in other cultural contexts across the globe.

An important contextual consideration for the current study is that suicide rates in the general population of South Korea (hereafter, Korea) has been reported to be the highest among member countries of the Organization for Economy Co-operation and Development (OECD, 2019). As of 2017, suicide rate in Korea has been estimated to be 24.3 per 100,000 persons, representing one of the leading causes of death among Koreans (Statistics Korea, 2018). Several possible factors attributing to this phenomenon include the Korean financial crisis in the late 1990s and an increase in suicides among the elderly (Khang et al., 2005; Kim et al., 2010). Considering the high baseline suicide rate in the Korean general population, transgender people in Korea may face greater suicide risk than transgender people in other OECD countries. Thus, studying suicide risk and protective factors among Korean transgender people is important, as is understanding how malleable risk factors such as minority stress may relate to depression and suicidality among Korean transgender people.

Although research on transgender mental health in Korea is sparse, public health researchers have noted a higher prevalence of adverse physical and mental health indicators among transgender individuals as compared to the general population (Lee et al., 2020). Even compared to other types of health outcomes, disparities in mental health symptoms faced by Korean transgender adults are particularly concerning (Lee et al., 2020). This might be primarily present among transgender individuals who have not initiated GAMT. Further, initial findings are suggestive of gender minority stress being of great concern to transgender people in Korea (Kim et al., 2018). However, there is no research in Korea on factors, such as gender-related stress and resilience factors, which could explain health disparities that transgender individuals encounter (Lee et al., 2014).

Few researchers have noted an increase trend in prejudice and violence against the Korean transgender population, due to opposition expressed by certain segments of the society in response to the growing visibility of transgender community in Korea since the 2000s (Yi et al., 2015; 2019). Transgender individuals in Korea have reported experiences of discrimination at school, at work, while serving in the military, and when attempting to use public restrooms (Kim et al., 2018).

Additionally, Korean transgender people have reported anti-trans verbal and sexual harassment at healthcare institutions that provided transition-related services (Kim et al., 2018). Korean transgender adults have also shared reflections about how they see anti-trans stigma and binary assumptions about gender impeding their access to healthcare services, especially transition-related healthcare (Son et al., 2017).

Given the reports of frequent and distressing exposure to prejudice and discrimination among Korean transgender adults, internalized stigma, along with exposure to negative social conditions (e.g., discrimination) themselves, is a potential explanation for at least some of the striking mental health disparities noted in this population. Contrary to a well-documented literature on anti-trans discrimination and prejudice and its impacts on health, relatively small number of studies have been conducted on the association between internalized stigma and health among them (Valentine & Shipherd, 2018). To the best of our knowledge, no research has examined the relationship between ITP and health outcomes among transgender people in Korea. Therefore, the present study examines associations between ITP and depressive symptoms, suicidal ideation, and suicide attempts among transgender adults in Korea. Specifically, we hypothesized that ITP would be associated positively with depressive symptoms and suicidality in a Korean transgender sample.

Methods

Data and study participants

This study utilized survey data from a nationwide, cross-sectional, non-probability sample of Korean transgender adults, "Rainbow Connection Project II - Korean Transgender Adults' Health Study." The survey was conducted from June to August 2017, and participants were recruited through the following venues: (1) four healthcare institutions in Seoul which provide GAMT (i.e., cross-sex hormone therapy and/or gender affirmation surgeries), (2) pride events held in Seoul and Daegu, and (3) online and offline Korean transgender community groups. At these venues, individuals could access materials that clearly described study purpose and included an online survey link.

Koreans who were 19 years or older and identified themselves as transgender could participate in the online survey. Among 347 individuals who responded to the online survey recruitment link, we excluded those who did not provide informed consent for study participation or academic use of the survey data ($N = 5$), had missing values in any information on transgender identity ($N = 32$), or a gender identity disorder diagnosis (based on the International Statistical Classification of Diseases and Related Health Problems 10th Revision; $N = 28$). In addition, we excluded non-binary individuals who were not categorized as either trans women or trans men ($N = 34$) from the analysis because this group did not align with our initial research question. This group was determined using information on current gender identity (man, woman, or neither man nor woman) and birth-assigned sex (male or female). We also excluded those who had missing values in mean ITP score, mental health, and demographic covariates ($N = 41$). As a result, a total of 207 were included in the current study's analyses.

All those who participated in the survey provided informed consent. This study was approved by the institutional review board of Korea University (IRB No. 1040548-KU-IRB-17-67-A-1). Prior publications based on the same dataset involved analysis of perceived barriers to transition-related healthcare (Lee et al., 2018) and health disparities of Korean transgender adults (Lee et al., 2020). The current study represents the testing of unique hypotheses.

Measures

Internalized transphobia

The 8-item Internalized Transphobia subscale of the GMSR measure (Testa et al., 2015) was included to assess the degree to which transgender people have internalized negative cultural views about their own identity and the transgender community (Testa et al., 2015). Following recommendations for cross-cultural adaptation of self-reported measures (Beaton et al., 2000; Guillemin et al.,

1993), the scale was translated into Korean, back-translated into English, and reviewed by an expert to ensure that the Korean-translated scale was equivalent to the original scale in English. Items from the Korean-translated ITP scale are presented in *Appendix 1*. Consistent with the English language administration of the scale, participants were asked how much they agreed with statements such as "When I think of my gender identity or expression, I feel depressed." Response options ranged from "strongly disagree" (0) to "strongly agree" (4). Previous research on ITP scale reported a Cronbach's alpha of 0.89 (Testa et al., 2015). In the current study, Cronbach's alpha of the Korean-translated ITP scale was 0.88.

Depressive symptoms

Depressive symptoms were assessed using a Korean-translated version of the Center for Epidemiologic Studies Depression Scale-20 (CES-D 20; Cho & Kim, 1993; Radloff, 1977). The Korean-translated version by Cho and Kim (1993) has been validated in a Korean sample and includes direct translations of each of the 20 original items. A systematic review study on the CES-D demonstrated that it could be useful as a screening test to detect major depression (Vilagut et al., 2016). For each scale item, respondents reported the frequency of each symptom per week as follows: "less than one day" (0), "one or two days" (1), "three or four days" (2), or "more than five days" (3). The summed score ranges from 0 to 60. We used a standard cutoff of 16, which was suggested by prior literature to screen for depressive symptoms (Lewinsohn et al., 1997; Radloff, 1977). Therefore, those whose scores were 16 or greater were categorized as having depressive symptoms in this study.

Suicidality

Suicidal ideation and suicide attempts were assessed via single items followed by yes/no response options: "During the past 12 months, have you ever seriously thought about suicide?" and "During the past 12 months, have you ever attempted suicide?" (Yi et al., 2017). Respondents who answered "yes" were coded as positive for recent suicidal ideation and suicide attempt, respectively.

Participant demographics

Participants reported demographic characteristics including age, transgender identity (trans men and trans women were included) and sexual orientation (heterosexual, gay/lesbian, bisexual, or asexual, based on sexual attraction). Participants indicated their residential areas as urban or suburban/rural and their educational level according to four options ranging from high school to graduate school. Using 10,000 Korean Won (KRW; approximately 8.80 USD) as the base unit, annual household income was divided into five groups ranging from $<$ 1,000 to $\geq$ 5,000. Finally, employment status was indicated according to five possible categories. Specific categories for each demographic variable are delineated in Table 1.

Data analysis

Following univariate descriptive analyses, bivariate analyses were used to identify the relationships between demographic characteristics, ITP, and each mental health indicator. Gender differences in continuous variables (i.e., age and ITP) were tested using independent *t*-tests, whereas gender differences in categorical variables were tested using Pearson's Chi-square tests, and if more than 20% of the expected cell counts were less than 5, one-tailed Fisher's exact tests. When examining the relationships between demographic variables, ITP and mental health indicators, Spearman's rho values were calculated for ordinal variables, and Pearson's *r* values were calculated for binary categorical and continuous variables.

We then performed separate multiple regression analyses to examine the independent associations between ITP and the three mental health outcomes: depressive symptoms, suicidal ideation, and suicide attempts. All analyses were adjusted for age, transgender identity, sexual orientation, residential area, educational level, annual household income, and employment status, based on the results of bivariate analyses in the current study and covariates included in previous studies (Jackman et al., 2018; Perez-Brumer et al., 2015;

Table 1. Descriptive statistics of demographic variables and group differences by transgender identity among transgender adults in South Korea ($N = 207$).

Variable	Full sample ($N = 207$) *M* (*SD*) or *N* (%)	Trans women ($N = 130$) *M* (*SD*) or *N* (%)	Trans men ($N = 77$) *M* (*SD*) or *N* (%)	*p*-value[a]
Age in years (range: 19 – 46)	26.4 (5.4)	26.8 (5.5)	25.8 (5.3)	0.206
Sexual orientation				0.001
Heterosexual	103 (49.8)	51 (39.2)	52 (67.5)	
Gay/lesbian	23 (11.1)	20 (15.4)	3 (3.9)	
Bisexual	69 (33.3)	49 (37.7)	20 (26.0)	
Asexual	12 (5.8)	10 (7.7)	2(2.6)	
Residential area				0.890
Urban area	117 (56.5)	73 (56.2)	44 (57.1)	
Suburban or rural area	90 (43.5)	57 (43.9)	33 (42.9)	
Educational level				0.703
High school level or less	49 (23.7)	30 (23.1)	19 (24.7)	
2-year college level	28 (13.5)	18 (13.9)	10 (13.0)	
4-year college level	120 (58.0)	74 (56.9)	46 (59.7)	
Graduate school level or more	10 (4.8)	8 (6.2)	2 (2.6)	
Annual household income (10^4 Korean Won)				0.144
< 1,000	55 (26.6)	39 (30.0)	16 (20.8)	
1,000 – 1,999	45 (21.7)	25 (19.2)	20 (26.0)	
2,000 – 2,999	36 (17.4)	27 (20.8)	9 (11.7)	
3,000 – 4,999	37 (17.9)	21 (16.2)	16 (20.8)	
≥ 5,000	34 (16.4)	18 (13.9)	16 (20.8)	
Employment status				0.549
Unemployed	99 (47.8)	60 (46.2)	39 (50.7)	
Permanent employee	39 (18.8)	24 (18.5)	15 (19.5)	
Non-permanent employee	58 (28.0)	38 (29.2)	20 (26.0)	
Self-employed	10 (4.8)	8 (6.2)	2 (2.6)	
Unpaid family worker	1 (0.5)	0 (0.0)	1 (1.3)	
Data collection channel[b]				0.068
Healthcare institution A	103 (49.8)	63 (48.5)	40 (52.0)	
Healthcare institution B	2 (1.0)	0 (0.0)	2 (2.6)	
Pride parade in Seoul	6 (2.9)	6 (4.6)	0 (0.0)	
Pride parade in Daegu	7 (3.4)	3 (2.3)	4 (5.2)	
Online/offline transgender community groups	89 (43.0)	58 (44.6)	31 (40.3)	

[a]*p*-value of independent t-tests (for a continuous variable) and Pearson's Chi-square tests or one-tailed Fisher's exact tests (for categorical variables) comparing the mean or prevalence of demographic variables by transgender identity.
[b]In the survey, transgender adults participated only through two healthcare institutions among the four institutions, and online and offline transgender community groups were considered as a single data collection channel.

Scandurra et al., 2018; Staples et al., 2018). Additionally, we adjusted for data collection channels, such as a pride event held in Seoul. Due to the high prevalence of depressive symptoms and suicidality, we used a modified Poisson regression model with a log-link and robust sandwich variance estimator (Zou, 2004). All statistical analyses were performed using STATA/SE version 16.0 (StataCorp, College Station, TX, USA), and all prevalence ratios reported in the current study were estimated with 95% confidence intervals.

Results

Demographic characteristics of the transgender participants

Participants for this analysis were 207 Korean transgender adults (Table 1). The sample consisted primarily of heterosexual young adults (mean age = 26.4; $SD = 5.4$) residing in urban areas. The majority of participants had at least started a four-year college degree, reported low annual household income, and were unemployed (65.7% reported household income below 30 million KRW, or approximately 26,000 USD, and 47.8% were unemployed). More than half of the total transgender population participated in the survey through healthcare institutions.

ITP scores spanned the full possible range of the ITP scale. As shown in Table 2, almost two thirds of participants reported depressive symptoms in the past week. Further, just over half of participants had considered suicide within the last 12 months, and 15% had made a suicide attempt in the past 12 months.

As presented in Tables 1 and 2, trans men and trans women did not differ significantly in terms of age, residential area, educational level, annual household income, employment status, data collection channel, ITP, or suicidality. However, there was a significant difference in sexual orientation and depressive symptoms. Compared to

Table 2. Descriptive statistics of independent and dependent variables and group differences by transgender identity among transgender adults in South Korea ($N = 207$).

Variable	Full sample ($N = 207$) *M* (*SD*) or *N* (%)	Trans women ($N = 130$) *M* (*SD*) or *N* (%)	Trans men ($N = 77$) *M* (*SD*) or *N* (%)	*p*-value[a]
Internalized transphobia (observed range: 0 – 4)	2.29 (0.97)	2.27 (0.95)	2.32 (0.99)	0.721
Scored ≥ 16 on CES-D (depressive symptoms) (within the last week)	125 (60.4)	86 (66.2)	39 (50.7)	0.027
Suicidal ideation (responded "yes") (during the past 12 months)	108 (52.2)	73 (56.2)	35 (45.5)	0.136
Suicide attempts (responded "yes") (during the past 12 months)	31 (15.0)	23 (17.7)	8 (10.4)	0.155

[a]*p*-value of independent t-tests (for a continuous variable) and Pearson's Chi-square tests (for categorical variables) comparing the mean or prevalence of internalized transphobia and mental health indicators by transgender identity.

Table 3. Bivariate relationships among demographic, independent, and dependent variables ($N = 207$).

	Independent and dependent variables			
Demographic variables	1	2	3	4
Age	−.11	−.13	−.16*	−.17**
Residential area (1 = urban; 2 = suburban/rural)	.13	.07	.10	.07
Educational level (3 ordinal categories)[a]	−.13	−.03	−.07	−.04
Annual household income (5 ordinal categories)[a]	−.04	−.13	−.11	−.09
Independent and dependent variables				
1. Internalized transphobia	–	.32***	.27***	.13*
2. Depressive symptoms		–	.47***	.23***
3. Suicidal ideation			–	.37***
4. Suicide attempts				–

*$p < .05$; **$p < .01$; ***$p < .001$.
[a]Spearman's rho values were represented in these rows to report correlations. For all other correlations in this table, Pearson's *r* values were represented.

Table 4. The association between independent and dependent variables among transgender adults in South Korea ($N = 207$).

	Unadjusted		Adjusted[a]	
	PR	95% CI	PR	95% CI
Depressive symptoms				
Internalized transphobia	1.33**	1.17,1.51	1.30**	1.13,1.49
Suicidal ideation				
Internalized transphobia	1.32**	1.14,1.53	1.20*	1.03,1.40
Suicide attempts				
Internalized transphobia	1.41*	1.01,1.96	1.44*	1.01,2.04

*$p < .05$; **$p < .001$.
[a]Adjusted for age, transgender identity, sexual orientation, residential area, educational level, annual household income, employment status, and data collection channels.

trans women, trans men were more likely to identify as heterosexual and less likely to have depressive symptoms.

Bivariate analysis among demographics, independent, and dependent variables

Table 3 presents additional bivariate associations among demographic variables, ITP, and mental health indicators. For example, younger participants reported significantly more suicidal ideation and suicide attempts during the past 12 months than older participants. Furthermore, ITP, depressive symptoms, suicidal ideation, and suicide attempts were all significantly correlated with each other. When we additionally conducted Chi-square tests and one-way ANOVA tests to examine whether other nominal variables (i.e., sexual orientation, employment status, and data collection channel) were related to ITP and mental health outcomes, we found a significant association between employment status and suicidal ideation, $\chi^2(4, N = 207) = 10.09$, $p = 0.039$. However, no other significant associations were observed.

Multiple regression analysis of the association between independent and dependent variables

Our main study analyses involved modeling the likelihood of three concerning mental health outcomes as a function of internalized transphobia among Korean transgender adults. As shown in Table 4, we found that after adjusting for relevant covariates, higher ITP was significantly associated with greater prevalence of depressive symptoms in the past week as well as suicidal ideation and suicide attempts within the past 12 months.

Discussion

The purpose of this study was to investigate associations between ITP and depressive symptoms, suicidal ideation, and suicide attempts among

transgender adults in Korea. In the current sample, we found evidence for concerning levels of prevalence and severity of depressive symptoms and suicidality among Korean transgender adults. Of 207 transgender participants, 60.4% reported depressive symptoms, 52.2% reported recent suicidal ideation, and 15.0% reported a recent suicide attempt. These results are congruent with findings from a previous study in which transgender adults reported a strikingly higher prevalence of depressive symptoms and suicidal behaviors, compared to the Korean general population (Lee et al., 2020). For instance, the age-standardized prevalence of depressive symptoms was 63.6% among transgender participants and 4.96% and 7.21% among men and women, respectively, in the general population. In addition, a recent study conducted in the United Kingdom demonstrated that transgender individuals who were not taking cross-sex hormone therapy reported almost four times greater prevalence of depressive symptoms, compared to the general population matched by age and gender (Witcomb et al., 2018).

It is interesting to note that significant gender differences were observed in the prevalence of depressive symptoms, indicating that trans women had a higher prevalence of depressive symptoms compared to trans men. Sexual minority status might in part explain these differences. In the present study, trans women were more likely to identify themselves as lesbian, bisexual, or asexual than trans men who were more likely to identify as heterosexual. In accordance with the Minority Stress Model, gender minority individuals who also identity as sexual minorities might experience additional stressors, which could adversely impact their health (Meyer, 2003). Therefore, research examining transgender individuals' mental health should further consider the role of sexual minority status as an additional, independent factor relevant to minority stress-related consequences.

Given the positive relationships between ITP and both suicidality and depressive symptoms in the current sample, the present study's results are consistent with a growing body of literature identifying ITP as a robust, cross-cultural predictor of negative mental health outcomes among transgender people (Austin & Goodman, 2017; Brennan et al., 2017; Breslow et al., 2015; Jackman et al., 2018; Perez-Brumer et al., 2015; Reyes et al., 2016; Scandurra et al., 2018; Staples et al., 2018; Tebbe & Moradi, 2016; Testa et al., 2017; Valentine & Shipherd, 2018). Additional analyses were performed to examine whether the associations between ITP and mental health indicators differ by participants' experience of GAMT (Appendix 2). In the stratified analyses, the association between ITP and depressive symptoms was still statistically significant among participants without GAMT (aPR: 1.93, 95% CI: 1.24, 3.01) as well as with any GAMT (aPR: 1.39, 95% CI: 1.18, 1.64). Regarding suicidal ideation, the association was significant among participants without GAMT (aPR: 4.92, 95% CI: 1.84, 13.20), but not among those with any GAMT (aPR: 1.14, 95% CI: 0.96, 1.35). These findings suggest that GAMT might mitigate the association between ITP and mental health among Korean transgender adults. However, due to small cell sizes, these analyses may lack statistical power. Further exploration is, therefore, needed to fully understand the role of GAMT in the association between ITP and mental health among transgender individuals.

Overall, the current findings reinforce concerns about ITP, a reflection of a society where trans-related stigma is prevalent, as a risk factor for depressive symptoms and suicidality among transgender people across cultural contexts. Further, the two minority stress models suggested that proximal minority stressors (e.g., ITP) could work as mediators of relationships between distal stressors (e.g., discrimination and violence) and health outcomes (Meyer, 2003; Testa et al., 2015), which has been demonstrated by existing research of the transgender population (e.g., Scandurra et al., 2018; Staples et al., 2018; Tebbe & Moradi, 2016; Testa et al., 2015, 2017). Specifically, ITP has been flagged as a mediator connecting experiences of anti-trans rejection and victimization to suicidality (Staples et al., 2018; Testa et al., 2017). There is also evidence of ITP mediating connections between anti-trans discrimination and depression among transgender people (Scandurra et al., 2018). While beyond the scope of the current study, the possibility of ITP mediating relationships between anti-trans discrimination and transgender mental health outcomes is important to keep in mind for any future research on this topic. In Korea, transgender

individuals face substantial gender minority stressors in their daily lives, including rejection, discrimination, and violence due to transgender identity (Kim et al., 2018). According to a study on the public opinion of transgender rights in 23 countries, Korea was one of the countries that showed the lowest levels of support for transgender people's rights among the general public (Flores et al., 2016). Facing hostile and aggressive social environments, transgender individuals may internalize transphobia (Hendricks & Testa, 2012; Testa et al., 2015), and our study supports concerns about ITP relating to debilitating psychological outcomes among transgender people in Korea.

There are several limitations in this study that should be considered. First, due to non-probability sampling and online survey administration, the findings might not represent the Korean transgender population as a whole. In the survey, just over half (50.8%) of participants were recruited through healthcare institutions, which calls for a need of a non-clinical, representative sample of the transgender population. Second, due to a cross-sectional survey design of the study, causal relationships between ITP and each mental health outcome could not be established. This study also assessed a current state of ITP at the time of surveying and suicidal behaviors within the last 12 months, therefore, a temporal order between ITP and suicidality needs to be cautiously understood and interpreted. Third, sample size limitations precluded exploration of any differences in modeled relationships between sample subgroups, including potential moderating effects of diverse gender identities on the association between ITP and mental health outcomes. Lastly, the current study did not include non-binary transgender individuals. Even given its limitations, the current study's findings provide insight about the relationship between ITP and mental health outcomes among Korean transgender individuals. To the best of our knowledge, this is the first study to assess ITP in the Korean transgender population and the first study to examine its relationships with depressive symptoms, suicidal ideation, and suicide attempts in Korea.

Clinical and Public Policy Implications

The Korean-translated ITP scale provided in Appendix 1 might be useful in clinical settings; therefore, we recommend the use of this scale to assess ITP in Korean transgender individuals and further research on its psychometric properties. For example, the Korean-translated ITP scale could be used to assess transgender individuals' initial ITP and change over time, thus informing adjustment of therapeutic interventions to reduce internalization of negative social messages about transgender identities. In addition, based on the current study's findings, public health interventions could be explored to provide affirming care and support to transgender people in Korea, with particular consideration for the likelihood of suicidality and depressive symptoms among members of this population.

Policy efforts to reduce the anti-trans social stigma in Korea may also assist in reducing internalized trans-negativity among Korean transgender people. To date, however, Korea does not have a comprehensive anti-discrimination law which includes gender identity as a protected class under the law (SOGILAW, 2019). In addition, there are no required education or training programs for healthcare providers, such as clinical psychologists who may provide transgender individuals with mental health care in Korea (Yi et al., 2015). More attention, therefore, is needed to educate policymakers and healthcare providers about the healthcare needs of transgender people in Korea.

Future Research Directions

Our recommendations for future research include a representative sampling of the Korean transgender population. Researchers interested in furthering the literature on internalized trans-negativity and mental health outcomes in Korea should consider replicating the current methodology in a nationally representative, probability sample of Korean transgender individuals, which would facilitate greater confidence in the generalizability of the current study's findings. To our knowledge, there has been no nationally representative survey including questions about transgender identity in Korea. Furthermore, future research should include transgender youth (Chodzen et al., 2019) and older adults (Fredriksen-Goldsen et al., 2014). Larger sample sizes and representative sampling could also enhance understanding of heterogeneity among

Korean transgender people. For example, previous research in the United States found that genderqueer participants, who identify themselves as neither cisgender nor binary transgender, reported higher risks of adverse mental health outcomes than trans men and trans women (Lefevor et al., 2019). Yet, no such research has been conducted in Korea. There also is a need to build a longitudinal and quasi-experimental data on transgender population's health in order to explore potential mediating and causal relationships between anti-trans discrimination, ITP, and mental health outcomes.

A second theme of future research recommendations involves measurement development. For example, we recommend a psychometric evaluation of the Korean-translated ITP scale (Appendix 1) as well as use of this measure to enhance public health knowledge about health outcomes associated with internalized trans-negativity. Further, translation of the other subscales of the GMSR model (Testa et al., 2015) would facilitate exploration of how other gender minority stress and resilience factors relate to health outcomes among Korean transgender people. Lastly, researchers should consider modifying the current ITP scale and other subscales of the GMSR measure, or developing entirely new scales from an emic perspective, in order to better capture the unique local experiences of transgender individuals in Korea.

Conclusions

In the current study, we identified that ITP was associated with higher risks of depressive symptoms, past 12-month presence of suicidal ideation, and past 12-month suicide attempts among Korean transgender adults. We hope the findings from this study will enhance the understanding of ITP and its important relationship to mental health outcomes among transgender individuals in Korea, where there have been few transgender-specific public health studies and few targeted efforts at improving health outcomes for this understudied population.

Acknowledgements

The authors would like to acknowledge the support from the professionals at the four healthcare institutions involved in data collection. Also, the authors would like to acknowledge 'Jogakbo,' the Korean Transgender Rights Organization, and the numerous volunteer consultants for their help with survey questionnaire development as well as participant recruitment and Dr. Rylan Testa who provided important feedback in the cross-cultural adaptation process of the Internalized Transphobia scale. Furthermore, the authors deeply appreciate the transgender individuals who participated in the study.

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Statement of conflict of interest

The authors have no known conflicts of interest to disclose.

Funding

This study was funded by a Daumstoryfunding project, "Our Transgender Health Study Journey Begins" and by Engineers and Scientists for Change as its first crowd funding project. This study was also financially supported by Korea University Grant (K1916921).

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Appendix 1. A Korean-translated version of the internalized transphobia scale

아래의 항목에 얼마나 동의하는지 응답해주세요.

	전혀 동의하지 않음	대체로 동의하지 않음	보통	대체로 동의함	매우 동의함
A. 나는 나의 성별 정체성이나 성별 표현이 원망스럽다					
B. 나는 나의 성별 정체성이나 성별 표현으로 인해 스스로가 별종처럼 느껴진다					
C. 나는 나의 성별 정체성이나 성별 표현에 대해 생각하면 우울해진다					
D. 나는 나의 성별 정체성이나 성별 표현에 대해 생각하면 기분이 언짢아진다					
E. 나는 성별 정체성이나 성별 표현 때문에 내가 낙오자인 것처럼 느낀다					
F. 나는 종종 스스로에게 "왜 나의 성별 정체성이나 성별 표현은 정상적이지 않을까?"라고 묻곤 한다					
G. 나는 나의 성별 정체성이나 성별 표현이 창피하다					
H. 나는 나와 같은 성별 정체성이나 성별 표현을 가지지 않은 사람들이 부럽다					

Appendix 2. Stratified analysis of associations between internalized transphobia and mental health indicators by participants' experience of gender affirming medical treatment ($N = 207$)

		Unadjusted		**Adjusted**[a]	
		PR	95% CI	PR	95% CI
Depressive symptoms					
Internalized transphobia	No GAMT (N = 24)	1.12	0.95,1.33	1.93**	1.24,3.01
	Any GAMT (N = 183)	1.42***	1.22,1.66	1.39***	1.18,1.64
Suicidal ideation					
Internalized transphobia	No GAMT (N = 24)	1.52**	1.13,2.04	4.92**	1.84,13.20
	Any GAMT (N = 183)	1.29**	1.10,1.52	1.14	0.96,1.35
Suicide attempts					
Internalized transphobia	No GAMT (N = 24)	1.23	0.60,2.54	N/A	N/A
	Any GAMT (N = 183)	1.48*	1.03,2.13	1.56	1.02,2.39

*$p < .05$; **$p < .01$; ***$p < .01$.

Note. Gender Affirming Medical Treatment (GAMT) includes current cross-sex hormone therapy and gender affirmation surgery.

[a]Adjusted for age, transgender identity, sexual orientation, residential area, educational level, annual household income, employment status, and data collection channels.