TRANSLATION AND VALIDATION OF GENDER MINORITY STRESS & RESILIENCE SCALE

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ABSTRACT
The purpose of the present study was to translate Gender Minority Stress & Resilience Scale (GMSR; Testa, 2014) into Urdu language for construct validity of the scale for gender nonconforming individuals living in Pakistani culture. This purpose was accomplished in two phases. In the first phase, the GMSR Scale was translated in to Urdu language by following the steps of back translation method suggested by Brislin (1972).To establish the construct validity of GMSR Scale, data was collected in two phases, first from transgender community to determine convergent validity of the scale, in second stage from gender nonconformist individuals living in general population, a total of 420 gender nonconformist individuals, males(n =215) and females (n = 205) from different cities including Rawalpindi, Islamabad, Lahore, Gujrat, Sialkot and surrounding of these cities. Data was collected through snowball sampling from all these cities. Study participants were informed about the nature of the study and signed consent was obtained. Data was analyzed to establish construct validity of Urdu version of GMSR Scale. Results indicate that all scales and respective items of the Urdu version of original GMSR Scale show good fit. Reliability analysis through SPSS also indicated satisfactory values of Cronbach alpha. This study facilitated us to establish a valid and reliable measure for upcoming studies on Gender diversity and gender nonconformity in Pakistan using GMSR Scale.
*Keywords***:** Gender Diversity, Gender Nonconformity, Gender minority stress, resilience, Pakistan.

INTRODUCTION
Gender diversity and gender nonconformity is becoming evident with the beginning of this era. With the advent of modern times, people want to express their gender diversities through expressions beyond binary gender categories. With the enactment of Law of third gender recognition (2012) and Law of self-identification (2018), a greater visibility of culturally existent subculture of transgender persons known as *KhawajaSira* in Pakistan was witnessed (Redding,2019). Along with the research on *KhawajaSira* community, gender nonconforming Individuals living in general population also needs to be included in research for better understanding of their experiences. GMSR Scale was translated to meet the needs of this population.

According to DSM -5, gender nonconforming behavior refers to somatic or behavioral features that are not characteristic of individuals with the same assigned gender in any society and historical era (American Psychological Association [APA], 2013).

Transgender and gender nonconforming persons have gender identities, behaviors, or actions that are not characteristically pertinent with their sex assigned at birth. They may associate more intensely with the opposite gender (e.g., FtM transgender persons female sex assigned at birth/ MtF transgender persons male sex assigned at birth), or they may categorize themselves beyond the gender binary (APA,2013; 2022).

In the Eighth Standard of Care of the World Professional Association for transgender Health (2022), gender nonconformity and Gender dysphoria are described as distinct but related phenomena (Coleman et al,2022). Gender nonconformity defines the possibility to which a person's gender role, identity or expression vary from the cultural rules recommended for a particular sex e.g, Deviant mannerisms and gestures, different dressing style, Others tend to perceive them as different or weird.

Meyer defined multiple ways in which gender minorities might experience minority stress (Meyer, 2015). Testa's model is based on Meyer's minority stress model, it reflects on the experiences of nonconformist individuals.

Meyer's minority stress model defines how social stress specific to LGBT people negatively impacts their mental health (Meyer,2015). Meyer highlighted ways in which gender nonconformist individuals may experience minority stress. One classification consists of distal or external stressors, includes episodes of discrimination, rejection, violence because one's identity. Such experiences of victimization are considered to escalate distress and effect mental health. Second classification of minority stressors consists of proximal or internal stressors. These stressors refer to the fear of further victimization and mistrust of others, internalized negative views about one's identity, and resultant stress of not disclosing one's identity (Meyer, 1995). Gender-related stressor such as discrimination, rejection, victimization, non -affirmation, exposure to transphobia, non -disclosure, and internalized transphobia have all been identified as strong indicators of psychopathology among transgender people, (Bocketing, 2013; Fredriksen-Goldsen et al., 2013) particularly among transgender youths (Nuttbrock et.al, 2010; Nuttbrock et.al, 2013).

Gender-related discrimination is unjust or prejudicial treatment because one's belonging or showing gender nonconforming attitude. Studies confirm that gender nonconforming individuals experience high levels of minority stressors like physical/ sexual violence, and internalized transphobia due to belonging to gender minority community (Marcellin et al.2013; Testa et al.,2014; Valentine & Shipherd, 2018). Gender-related rejection refers to deliberate exclusion of a person from social interaction. Literature has also reinforced the minority stress model, indicating strong links of higher level of rejection in nonconformist individuals as well as higher levels of minority stress (Meyer, 2015; 2016).

Gender-related victimization is the action of singling out someone for cruel or unjust treatment. Gender-related victimization (verbal / physical) have been linked with suicide attempts. Examples of victimization would include physical and verbal abuse, sexual assault and blackmailing (Testa,2014). Non-affirmation of gender identity transpires if one's inner sense of gender identity is not acknowledged by society. Gender nonconforming individuals who may not identify as male or female (e.g., gender queer) may experience a sense of non-affirmation as others may fail to address them in gender neutral ways (Price-Feeney et al., 2020).

Internalized transphobia refers to negative beliefs about one's identity. Gender nonconformist individuals have experiences of proximal stressors (internalized transphobia). Literature points out, when stigmas are internalized, the transgender population tends to lower their self-esteem (Healy, 2011). Clinicians use the term internalized transphobia to refer to the internalization of societal denunciation (Scandurra et al., 2018). Non -disclosure is synonymous to concealment. Only that in the case of gender, one cannot conceal it. Concealment results in intense cognitive pressure,constant navigation, hypervigilence and constant stress and anxiety about being stagmatized (Scheim et al., 2014; Rossman et al.,2017).

Gender nonconformity is not concealable stigma. Gender is mainly predictable by physical indicators like size of the body,shape, hair patterns or voice. Therefore, in some ways there is no option for hiding it. Constant exposure to victimization, discrimination, or rejection becomes a part of self-concept of gender non-conformist individuals and it adds up to the negative expectations for future (Testa et al., 2014). Gender nonconformist individuals tend to experience additional distal stressor, which the author of the scale has labeled as non-affirmation of gender identity (Hendricks &Testa,2012). Non affirmation happen when one's innate sense of gender identity is not acknowledged by others.

According to Meyer (2015), Minorities not only suffer from stressors, but they also develop resilience to face of all these stressors. Like social or emotional support by connecting with a community and developing a sense of pride in one's identity. Individuals who engage with their minority community can develop resilience factors such as social/ emotional support of individuals with shared identity, i.e., pride and community membership. Connection with other transgender persons has been associated with well-being in gender nonconforming individuals. Meyer describes it as shield against stress. It is a resilience factor and contributes to psychological well-being.

Individuals who engage with their minority community can access such resilience factors like social/ emotional support with shared identity of others, identity pride and community connections. To

develop resilience, friendly contacts with other transgender persons have been linked with psychological well-being in this population (Bariola et al., 2015; Breslow et al., 2015).

Research shows that gender nonconforming individuals, who were in contact with other gender nonconforming individuals during early identity development period reported lesser anxiety, suicidality and higher levels of comfort when first recognizing their own gender nonconforming identity. Pride is also a resilience factor and proves helpful in reducing mental health problems (Meyer,2015).

Several latest research have demonstrated that transgender and gender nonconforming persons have links between particular minority stressors, resilience factors, mental/physical health disparities (Bockting et al.,2013; Testa et al., 2012). In order to develop resilience, ties with other transgender persons have been linked with psychological well-being in this population (Matsuno & Budge et al., 2017; Devor, 2004; Scandurra et al., 2018).

METHOD

The study was done in two phases. The first phase was translation of the Gender Minority Stress & Resilience Scale, and the second phase established construct validity of the scale.

Step1: Obtaining Permission from the Author

For this purpose, respective author was contacted via email and requested for the permission of translation, which he readily granted.

Step 2: Forward Translation of the Scales

This step included the translation of the scale into target language (Urdu) from the source language (English). For this purpose, three bilingual experts, well versed with both languages were requested to translate the scales in Urdu language. Translators were given clear cut instructions to translate the scales in a way that their innate and actual meaning should be conveyed exactly in Urdu language and should be understandable in Pakistani cultural context as well. The Urdu translated versions received for the scales were re-evaluated in the committee to choose the most suitable translation of each scale, separately.

Step 3: Selection of the most suitable translation through committee approach

In this step, all the received translations for scales were typed along with the English version and later presented in the committee for evaluation and selection of the most appropriate item. The committee consisted of three members, including the researcher and two bilingual experts from Nation institute of Psychology, proficient in both languages as well as one of them were having her Ph.D in the specific field of gender diversity. The committee re-evaluated all the translations of an item and selected most suitable translation on the basis of clarity, understandability and literary as well as semantic equivalence of original item. The instructions of the scales were also decided by the consent of the committee.

Step 4: Back translation of the selected items into Source Language

Back translation of the selected items into source language (English) was done in this stage. Urdu versions of the scales were given to three independent bilingual experts to translate the items as accurately as possible. The committee selected most appropriate item on the basis of comprehension, clarity and semantic equivalence of original item. The instructions of the scales were also decided by the consent of the committee.

Step 5: Comparing the back translations with the Original Version

All the back translations for the scales were written with the respective items to be re-evaluated in the committee approach. Same bilingual experts re-evaluate the back translations for their similarity with the original items.

No ambiguity was found in most of the items except few that were not conveying exact meaning, those were translated into Urdu and then again back translated into source language., After modifying the problematic items, Urdu translation as well as the back translation was shared with authors for finalization.

Step 6: Sharing of the back translations with authors for their approval & feedback

After finalization of the back translations, authors of the respective scales were contacted again and the back translations were sent for evaluating their equivalence and for their recommendations and suggestions. Author approved most of the items, there were certain objections on one or two items from author. The concerns raised by author were reconsidered and addressed by the researcher. The amended items were again shared with the author and translations were finalized after getting approval from the author.

After sharing the back translation of GMSR Scale with author, his response was that translation looks good overall but there are certain points that need to be clarified. According to the author, on the victimization scale, item 2: the phrase *"being outed"* in the US means that someone reveals your identity as a transgender or gender non-conforming person to people without your permission. For example, someone might say "*if you don't have sex with me, I will tell your employer you are transgender."* I'm not sure your back translation reflects this meaning - the word "*expelled"* seems different to me. So this item was retranslated into Urdu by three independent bilingual experts and then translated back into English. Again committee reviewed the versions of English translation as well as Urdu translation and the best item conveying the meaning was chosen and again sent to the author for approval. This time author approved it.

On the victimization scale, item 6: *"had sexual contact"* means a person touching your body in a sexual way. This also seems different from your back translation, *"Keep a sexual relationship".* Non-affirmation scale, item 5: Your back translation refers to "*give me respect*," but the original item is about respecting one's gender identity specifically. Author advised that perhaps researcher could use the same wording used in item 4 just before, that was back translated to be "*accept my gender".* So again these items were revised by using same procedure and after author's approval included into Urdu version as well.

There was confusion in Urdu translation of item 1 of the scale Internalization of Transphobia, it was revised again by giving for back translation to independent translators and correct Urdu equivalent was chosen again in committee approach. Initially, It was decided to omit two scales "Pride" and "Negative Expectations for Future" but later those were also included and it was decided to use full scales, so both scales were translated as well.

Phase II: Establishing construct validity of the Urdu version of the GMSR Scale

Sample

Data was collected in two phases. In order to establish the convergent validity of the construct, other instruments were used along the translated versions of selected scales. Hijra Perception of Attitude Towards Hijra's (HPHS) Scale (Jami, 2012) on *KhawajaSira* (transgender), a culturally existent community as representative of gender nonconformists. Snowball sampling technique was used, as gender nonconformist individuals living in general population are not visible or easily accessible. Sample was taken from all the cities, mainly from Islamabad, Rawalpindi, Gujrat, Sialkot and surrounding areas of these cities.

Instrument

Gender minority Stress & resilience Scale (GMSR) developed by Testa et al., (2014) was currently translated into Urdu language. GMSR is a 58-item measure with 9 scales namely Gender-related Discrimination, Gender-related Rejection, Gender-related Victimization, Non-affirmation of Gender identity, Internalization of Transphobia, Negative Expectations for Future, Non-disclosure and two resilience scales namely Pride and Community Connectedness. Total scores calculated for each scale are based upon summed values assigned to possible response options. First 17 items of three scales are scored 0 for *Never* and 1 for all other response. All other items are scored from 0–4 according to responses (*strongly disagree* to *strongly agree)*. There are two reverse scored items 4,5 in Community Connectedness scale. Reliability analysis indicated all the scales have satisfactory reliability ranging from .61 to .91 (Testa et al., 2014).

Procedure

As snowball sampling technique was used, so participants were approached through different references and every individual was asked to recommend a person whom they knew. respondents were informed about the academic nature of the research. Confidentiality and anonymity were ensured, and informed consent was taken by participants. APA guidelines for approaching the sensitive sample were followed thoroughly (APA,2013).

RESULTS

Descriptive and Cronbach alpha was calculated for each scale and total of the scale. Item total correlation and scales correlation to establish convergent validity was also calculated. results are as follows. Mean difference of scores was also calculated between female and male gender nonconformists.

Table 1
Correlation between Study Variables (n=30)

Scales	1	2	3	4	5	6	7	8	9	10
1.G rej		.68**	-.04	.58**	.29	.04	.61**	.43*	.22	-.03
2.G vic			.27	.58**	-.10	.53**	-.10**	.54**	.48**	-.14
3.G nonafir				.30	.37*	-.17	-.18	.02	.64**	.02
4.G inttran					.18	-.10	-.10	.10	.18	-.08
5.G non dis						.07	-.00	.28	.49**	-.14
6.G comm							-.15	-.29	-.29	.06
7.HPHS- rights								.25	.38*	-.24
8. HPHS-dis									.06	-.09
9.HPHS issues										-.03
10.HPHS-total										-

Note. GDis-total=gender related discrimination subscale; Gjre= Gender related rejection; G vic=Gender related victimization; Gnonafirm=Gender non affirmation; Ginttran=internalized transphobia; G non dis=Gender non-disclosure comm=community connectedness; Hphs rights= rights and status subscale of Hphs; Hphs issues= social distance subscale of Hphs; Hphs issues=sexual issues subscale of Hphs; Hphs-total= Hijra's perception about hijra's scale; LS= Satisfaction with lifescale; WHO= WHO (five) wellbeing index.

Table 1 indicate positive correlation between Minority stress factors (gender-related discrimination, rejection, victimization, non-affirmation of gender identity, internalized transphobia, and concealment) and perceived negative attitudes of people which indicates convergent validity.

Table 2

Descriptive and Reliabilities of Scales for Male Gender Nonconformist(n=215)

Scales	No. of Items	*a*	M(SD)	Actual Range Min max	Potential range Min	Max	Skew	Kurt
GMSRDiscrim	5	.86	1.5(1.8)	0-5	0-4		.81	-.84
GMSRR- Reject	6	.86	3.3(2.3)	0-6	0-4		-.23	-1.5
GMSR-Victim	6	.87	3.0(2.3)	0-6	0-4		-.03	-1.5
GMSR-NonAff	6	.94	24.9(9.5)	0-36	1-5		-.90	.13
GMSR-IntTrPh	8	.94	19.04(9.3)	0-32	1-5		-.60	-.49
GMSR-NE	9	.94	24.9(9.5)	0-36	1-5		-.90	.13
GMSR-ND	5	.87	13.6(5.1)	0-20	1-5		-.85	.06
GMSR-Comm	5	.85	12.8(4.8)	0-20	1-5		-.53	-.59
GMSR-Pride	8	.85	15.6(6.5)	0-32	1-5		-.00	-.09

Note. N= No. of items; Skew=skewness; Kurt=kurtosis; GMSR-Discrim=Gender minority stress and resilience Gender-related Discrimination Scale; GMSR- Reject = Gender-related Rejection Scale; GMSR-Victim= Gender-related Victimization Scale; GMSR-NonAff= Non-affirmation of Gender identity Scale ; GMSR-InTrPh=Internalization of Transphobia Scale; GMSR-NE= Negative Expectations for Future Scale; GMSR-ND= Non-disclosure of identity Scale; GMSR-Comm=Community Connectedness Scale ; GMSR-Pride= Pride.

Table 2 shows that reliability and descriptive of all scales are within satisfactory range as well as skewness and kurtosis are also within the prescribed range i.e. -2 to +2(George & Mallery,2010).

Table 3
Descriptive and Reliabilities of Scales for Female gender nonconformist(n=205)

Scales	No. of Items	a	M(SD)	Actual Range Min-Max	Potential range Min-Max	Skew	Kurt
GMSRDiscrim	5	.84	1.20(1.6)	0-5	0-4	1.0	-.30
GMSRR- Reject	6	.82	2.47(2.1)	0-6	0-4	.25	-1.3
GMSR-Victim	6	.81	1.39(1.7)	0-6	0-4	1.3	.72
GMSR-NonAff	6	.94	10.77(8.3)	0-24	1-5	.03	-1.5
GMSR-IntTrPh	8	.93	12.79(8.2)	0-32	1-5	.44	-.54
GMSR-NE	9	.95	14.69(9.4)	0-36	1-5	.36	-.61
GMSR-ND	5	.85	8.40(5.0)	0-36	1-5	.07	-.70
GMSR-Comm	5	.77	11.30(4.4)	0-20	1-5	-.08	-.83
GMSR-Pride	8	.86	16.26(6.8)	0-32	1-5	-.50	.04

Note. N= No. of items; Skew=skewness; Kurt=kurtosis; GMSR Discrim=Gender minority stress and resilience Gender-related Discrimination Scale; GMSR- Reject = Gender-related Rejection Scale; GMSR-Victim= Gender-related Victimization Scale; GMSR-NonAff= Non-affirmation of Gender identity Scale ; GMSR-InTrPh=Internalization of Transphobia Scale; GMSR-NE= Negative Expectations for Future Scale; GMSR-ND= Non-disclosure of identity Scale; GMSR-Comm=Community Connectedness Scale ; GMSR-Pride= Pride.

Table 2 shows that reliability and descriptive of all scales are within satisfactory range as well as skewness and kurtosis are also within the prescribed range i.e. -2 to +2(George & Mallery,2010).

Table 4
Item total correlation of Gender-related Discrimination Scale of GMSR

No. of Items	r (Female gender nonconformists)	r (Male gender nonconformists)
Item 1	.81**	.80**
Item 2	.81**	.84**
Item 3	.85**	.78**
Item 4	.64**	.80**
Item 5	.96**	.78**

Note. # shows negative slope for items of validity scale. (V) = item of validity scale; r = Item total correlations α = Item discrimination parameter; ICC = Item Characteristic Curves.
** $p < .01$.
All the scores show significant correlation for both male and female gender nonconformists.

Table 5
Item total correlation of Gender-related Rejection Scale of GMSR

No. of Items	r (Female gender nonconformists)	r (Male gender nonconformists)
Item 1	.63**	.68**
Item 2	.78**	.78**
Item 3	.80**	.84**
Item 4	.72**	.73**
Item 5	.74**	.83**
Item 6	.71**	.77**

Note. # shows negative slope for items of validity scale. (V) = item of validity scale; r = Item total correlations α = Item discrimination parameter; ICC = Item Characteristic Curves.
** $p < .01$.

All the scores show significant correlation for both male and female gender nonconformists.

Table 6

Item total Correlation of Gender-related Victimization Scale of GMSR

No. of Items	r (Female gender nonconformists)	*r (Male gender nonconformists)*
Item 1	.54**	.70**
Item 2	.78**	.84**
Item 3	.77**	.80**
Item 4	.79**	.87**
Item 5	.81**	.79**
Item 6	.67**	.68**

Note. # shows negative slope for items of validity scale. (V) = item of validity scale; r = Item total correlations α = Item discrimination parameter; ICC = Item Characteristic Curves.
** *p* < .01.

All the scores show significant correlation for both male and female gender nonconformists.

Table 7

Item total correlation of Non-affirmation of Gender Identity Scale GMSR

No. of Items	r (Female gender nonconformists)	*r (Male gender nonconformists)*
Item 1	.68**	.67**
Item 2	.91**	.92**
Item 3	.93**	.93**
Item 4	.90**	.91**
Item 5	.91**	.91**
Item 6	.93**	.93**

Note. # shows negative slope for items of validity scale. (V) = item of validity scale; r = Item total correlations α = Item discrimination parameter; ICC = Item Characteristic Curves.
** *p* < .01.

All the scores show significant item total correlation for both male and female gender nonconformists.

Table 8

Item total correlation of Internalization of Transphobia Scale of GMSR

No. of Items	r (Female gender nonconformists)	*r (Male gender nonconformists)*
Item 1	.72**	.69**
Item 2	.84**	.87**
Item 3	.87**	.90**
Item 4	.88**	.90**
Item 5	.86**	.87**
Item 6	.84**	.86**
Item 7	.75**	.84**
Item 8	.83**	.85**

Note. # shows negative slope for items of validity scale. (V) = item of validity scale; r = Item total correlations α = Item discrimination parameter; ICC = Item Characteristic Curves.
** *p* < .01.

All the scores show significant item total correlation for both male and female gender nonconformists.

Table 9

Item total Correlation of the Non-disclosure of gender identity Scale of GMSR

Item No.	r (Female gender nonconformists)	*r (Male gender nonconformists)*
Item 1	.73**	.76**
Item 2	.85**	.89**
Item 3	.82**	.84**
Item 4	.71**	.67**
Item 5	.84**	.89**

Note. # shows negative slope for items of validity scale. (V) = item of validity scale; r = Item total correlations α = Item discrimination parameter; ICC = Item Characteristic Curves.
** *p* < .01.
All the scores show significant item total correlation for both male and female gender nonconformists.

Table 10

Item total correlation of the Negative Expectations for Future Scale of GMSR

Item No.	r (Female gender nonconformists)	*r (Male gender nonconformists)*
Item 1	.82**	.56**
Item 2	.87**	.52**
Item 3	.87**	.57**
Item 4	.91**	.56**
Item 5	.90**	.62**
Item 6	.90**	.64**
Item 7	.84**	.55**
Item 8	.73**	.46**
Item 9	.77**	.37**

Note. # shows negative slope for items of validity scale. (V) = item of validity scale; r = Item total correlations α = Item discrimination parameter; ICC = Item Characteristic Curves.
** *p* < .01.
All the scores show significant item total correlation for both male and female gender nonconformists.

Table 11

Item total Correlation of the Community Connectedness Scale of GMSR

Item No.	r (Female gender nonconformists)	*r (Male gender nonconformists)*
Item 1	.81**	.74**
Item 2	.86**	.77**
Item 3	.84**	.75**
Item 4	.50**	.29**
Item 5	.56**	.23**

Note. # shows negative slope for items of validity scale. (V) = item of validity scale; r = Item total correlations α = Item discrimination parameter; ICC = Item Characteristic Curves.
** *p* < .01.

All the scores show significant item total correlation for both male and female gender nonconformists.

Table 12

Item total correlation of the Pride Scale of GMSR

Item No.	r (Female gender nonconformists)	*r (Male gender nonconformists)*
Item 1	.66**	.60**
Item 2	.70**	.71**
Item 3	.66**	.62**
Item 4	.71**	.66**
Item 5	.77**	.73**
Item 6	.74**	.83**
Item 7	.82**	.78**
Item 8	.70**	.65**

Note. # shows negative slope for items of validity scale. (V) = item of validity scale; r = Item total correlations α = Item discrimination parameter; ICC = Item Characteristic Curves.
** *p* < .01.
All the scores show significant item total correlation for both male and female gender nonconformists.

Table 13

Mean difference of scores between female and male gender non conformists (n=420)

Variables	FtM(N= 205)		MtF (N=215)		95% CI			
	M	SD	M	SD	T	P	LL	UL
GMSRD	1.20	1.67	1.55	1.85	-2.04	.04	-.69	-.01
GMSRR	2.46	2.15	3.32	2.31	-3.88	.00	-1.28	-.422
GMSRV	1.38	1.74	3.08	2.32	-8.40	.00	-2.09	-1.30
GMSRN	10.77	8.33	12.68	8.14	-2.33	.02	-3.52	-.30
GMSRIT	12.79	8.21	19.04	9.31	-7.19	.00	-7.96	-4.54
GMSRF	14.68	9.42	24.95	9.53	-10.82	.00	-12.13	-8.40
GMSRND	8.40	5.04	13.65	5.18	-10.30	.00	-6.25	-4.25
GMSRP	16.25	6.87	15.68	6.55	.85	.39	-.73	1.87
GMSRCC	11.30	4.47	12.31	3.50	-2.53	.01	-1.80	-.22

p<.001

Note. M= mean; SD= Standard Deviation; t= degree of freedom ; P=significance level; CI= Confidence Interval; LL=Lower Limit; UL= Upper Limit; GMSR-Discrim=Gender minority stress and resilience Gender-related discrimination scale; GMSR- Reject = Gender-related Rejection; GMSR-Victim= Gender-related Rejection; GMSR-Victim= Gender-related victimization; GMSR-NonAff= Non-affirmation of Gender identity; GMSR-InTrPh=Internalization of transphobia;GMSR-NE= Negative Expectations for future; GMSR-ND= Non-disclosure of identity; GMSR-Comm=community connectedness; GMSR-Pride= pride in one's identity.

      The independent t-test was used to compare the sample of female and male gender nonconformists. It indicates that hypotheses are supported about the differences between males and females gender nonconformists on almost all the scales except there was no significant difference was found on GMSR-Pride Scale.

DISCUSSION

Current study was aimed to enhance understanding of gender minority stress & resilience factors experienced by transgender and gender nonconforming people living in general population by validation of GMSR scale. This instrument was based on the Meyer's minority stress model and was expanded by Testa (2014) to develop items to reveal the unique experiences of gender nonconforming people. The GMSR instrument's reliability and validity results support its indigenous use. Cronbach's alphas were adequate and demonstrate internal consistency. The seven stress scales positively correlating with each other and the two resilience factor scales not correlating with them. This provides evidence that the scales measure accurate, independent, and meaningful constructs, and that the scale items represent each of these constructs. However, further evidence for validity should be explored in subsequent studies. Upcoming research should provide additional evidence of discriminant validity. However, the initial results are encouraging, and this instrument may be considered for use with transgender and gender nonconforming population with close attention to psychometric properties of the scale in different studies.

      Future validation of the measure would also add up to support the growing body of literature on Meyer's minority stress model. In particular, findings suggest that the theory behind the constructs shared by both models represent stress and resilience factors. It is expected that these findings will inspire future research and development of interventions in the domains of research and clinical settings for transgender and gender nonconforming persons.

CONCLUSION

Current study offers primary evidence of the reliability and validity of the GMSR Scale. This instrument can have several usages for both research and clinical purposes. This instrument is expected to enhance knowledge about the exclusive stress and resilience factors experienced by gender nonconformist persons, improve understanding of the causes of stress and resilience factors in this population, and help clinicians in providing culturally informed attention to gender nonconforming people.

RECOMMENDATIONS

The current study is an important initial attempt towards establishing a valid instrument to assess Gender Minority Stress & Resilience factors. It would further provide basis for research and clinical practice in the field of gender diversity and gender nonconformity.

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