

MASCULINITY IDEOLOGIES SCALE: DEVELOPMENT AND VALIDATION FOR PAKISTANI CONTEXT

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Abstract

By reviewing Pakistani literature on men and masculinities, existing research seems to be in a budding phase. Current study thus targeted to develop a psychometrically sound scale for measuring masculinity ideologies in a Pakistani culture so as to give thrust to the masculinity studies. The scale development proceeded in three phases. First phase involved generation of item pool based on an earlier qualitative study that explored about indigenous masculinity ideologies. In second phase, factor structure was explored using exploratory factor analysis where Principal Axis Factoring was utilized with Promax rotation. For this purpose, 421 participants (Men = 268, Women = 173) were recruited with age range of 19 to 51 years, through convenience sampling. A four factors structure was yielded that comprised of 31 items explaining 48.70% variance. Final phase involved performing the confirmatory factor analysis on the items finalized in the previous phase using an independent sample. This sample

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(Men = 219, Women = 133) ranged in age from 20 to 44 years. The tested model was confirmed after adding three modification indices. The scale yielded good alpha reliabilities for the emerged factors. Weak to moderate correlations of these factors with Gender Role Attitude Scale (Kamal & Saqib, 2004) provided for discriminant validity evidence. This scale thus outlines the masculinity ideologies of male privilege and power, traditional roles and responsibilities, avoiding effeminacy, and restricted emotionality. A useful measure was thus acquired to provide impetus to clinical and research work focusing on masculinity in indigenous context.

Key Words: *Masculinity ideologies, male privilege and power, traditional roles and responsibilities, avoiding effeminacy, restricted emotionality.*

Introduction

The study of masculinity is an interdisciplinary field that deals with the social construction of “being a man” that was interestingly inspired by feminist wave to point out the problems inherent in masculinity (Levant, 1996). This includes studying the behaviors, roles, and relationships that men adhere to and understands what meanings are attributed to each concept. It is important to identify that ‘masculinity’ stresses gender while ‘male’ is linked with the biological sex. This highlights that masculinity is not confined to the biological male. Masculinity is often referred to by scholars as in the plural ‘masculinities’ to emphasize a variety of connotations, functions, and behaviors subsumed in the term. Gender is no doubt an intimate and personal experience that makes up our identity. But masculinities are introduced repeatedly through day-to-day interactions with the various institutions of society. In line with this, it has been well asserted that gender ideologies tend to vary across the social institutions and are not universal (Thompson & Bennett, 2017).

Masculinity is blend of historical norms, beliefs, and expectations which are socialized and reside in a particular culture (Kimmel, 1997). Masculinity ideologies are beliefs emphasizing men to follow the masculine code of conduct that is advocated by a particular culture (Thompson & Pleck, 1995). It requires a person's endorsement and internalization of the belief system about male gender and masculinity prevalent in that culture. The beliefs inherent in a particular culture tend to be embedded in how the relationship between two sexes is structurally arranged (Pleck, 1995).

The research on the construct of masculinity ideology is driven from gender role strain paradigm (GRSP) that acknowledges the social construction of gender rather than being biologically driven as proposed by gender role identity paradigm (Levant, 1996). GRSP proposed the strain to be of three types. Following the masculinity norms is seen to make way to dysfunction strain for being inherently problematic as is the expectation to restrict the emotions. Then not being able to fulfill the prescribed roles refers to discrepancy strain. Lastly, learning about the masculine expectations takes toll on the person for being traumatic in nature and thus results in trauma strain (Pleck, 1995).

Anchorage of masculinity ideologies into the prevailing culture (Thompson & Bennett, 2015; Pleck, 1995) requires them to be explored indigenously within the pertinent culture. A thorough exploration was thus done to unfold the prevailing masculinity ideologies within the Pakistani culture that actually provided with content to develop a scale on masculinity ideologies. Within the field of psychology the subfield psychology of gender is taking strides. In the same manner, psychology of men has been successful to make its place on a global level. In Pakistan however, the field is in the budding stage. In order to further advance the field in Pakistan an effort was made to develop a measurement tool on masculinity ideologies. Since development and validation of scales is crucial to generating knowledge with in the field of social sciences (Morgado et al., 2018).

Review of literature indicated for existence of great variety of scales measuring masculinity ideologies (Thompson & Bennett, 2015 presents a review). It has been indicated that some of the measures were catering to serve a particular purpose (Chu et al., 2005; Luyt, 2005; Thompson et al., 2020). Various versions of Male Role Norm Inventory (Levant et al., 1992; Levant & Richmond, 2008; Levant et al., 2010; Levant et al., 2013; McDermott et al., 2018) were found to be popular among the available ones on account of its extensive usage. The need for a culture specific measure was still at its place because existing measures could not fully grasp the specific Pakistani cultural context.

Within Pakistan Arshad and Shahid (2021) were the first who came up with a measure of gender role strain for men. Their work was however confined to working men only. Current study aimed to generate an understanding of masculinity ideologies of both men and women. Moreover, their aim was to measure the strain associated with male role, however here the aim is to measure the mere internalization of male role. Then, a revision of Male Role Norm Inventory (Rizvi, 2015) was available but this revision was exercised for adolescent age group and the original scale was developed in a western culture. A thorough interpretation of this Scale highlighted the revisions to be outdated for current context. Likewise, the qualitative inquiry (involving 3 focus group discussions and 15 individual interviews) about indigenous masculinity ideologies prevailing in Pakistan put forth some of the ideologies that were not part of the original scale. In order to incorporate the missing aspects of masculinity ideologies the scale development activity was particularly focused on ideologies held up by adults within a Pakistani cultural context, since the conception of gender is based on the specific cultural context (Thompson & Bennett, 2015). Additionally, to better capture the Pakistani cultural context the content of scale items were derived from a thorough inquiry of masculinity ideologies using grounded theory method that calls for moving back and forth from data and analysis. It results in a theory which is thought to be data driven in nature (Glaser & Strauss, 1967). In this manner the current study justifies to address the existing gaps in literature, so as to come up with a scale of masculinity ideologies targeting to measure

masculinity ideologies for an adult where non-university individuals and women also took part in the study, a short coming in existing masculinity ideologies measures (Thompson & Bennett, 2015).

The proposed scale of masculinity ideologies is aimed to be tested for construct validity evidence by associating it with Gender Role Attitude Scale since it measures one's attitude for distinctness of roles performed by men and women in Pakistani society (Salik, 2003). Masculinity ideologies when counted traditional, should have a moderate association with gender role attitudes. It has been advocated that although both the constructs stem from gender ideology literature both have differential correlates and thus are said to be discriminatory (Pleck et al., 1994). The evidence for discriminant validity is to be collected when one wants to discriminate the two dissimilar measures (Hubley, 2014).

Pakistan is a patriarchal society and patriarchy is strongly interlinked with concepts of masculinity in fact they support one another and are mutually reinforcing (Mshweshwe, 2020). As highlighted by the preceding qualitative study strict instructions to configure masculinity in men comes from versatile segments of close circle ranging from immediate family members to a neighbor or a passerby. Exercising male supremacy and winning entitlements in the name of being a man has been advocated well in a Pakistani culture. Compliance with purported script for masculinity is thus very essential because contrary situation poses severe threat on men's masculinity.

Method

Objectives

Following objectives were focused in present study.

1. To develop Masculinity Ideologies Scale keeping in view the Pakistani cultural context.

2. To ascertain the reliability and validity of Masculinity Ideologies Scale for adults.

Stages of Scale Development and Validation

The scale development and validation process proceeded in three phases. First phase involved item pool generation. Second phase was based on exploration of factors embedded in the item pool using Exploratory Factor Analysis (EFA). In the third phase the factor structure emerged in the previous phase was confirmed using Confirmatory Factor Analysis (CFA) approach. Broadly, these stages are based on scale development process devised by Furr (2011) that requires setting forth the construct and context, setting up the response format, , item pool generation, then data collection and followed by ascertaining the psychometric properties of the scale.

Phase I: Generating Item Pool

Adult masculinity ideologies were thoroughly explored as a part of an initial study. Findings of this study provided with the content of items for scale construction. Using grounded theory approach, the exploration yielded adult masculinity ideologies that were transformed into statements for the proposed scale to be developed. While writing down the statements some of the ideologies were framed directly from the verbatim of research participants. Also, some of the posed ideologies were embedded in the actual statements uttered. Item pool generation covered maximum dominions highlighted by participants of initial study. These included items related to physical strength, emotional strength, mental strength, competence, roles and responsibilities, physical demeanor, sexuality, power and control, and male privileges. Specifically, physical demeanor, sexuality, power and control, and male privileges were giving reflections of patriarchal culture in Pakistan and had variations in comparison to other cultures. Two items were also borrowed from Male Role Norm Inventory-Revised (Rizvi, 2015). These included “*us k chehry sy us k dil ka haal maloom na ho*” [His face should not display his true feelings] (item no. 1)

and “*paisun sy munsalik mamlaat ki faisla sazi mard kary*” [His decision should be final in monetary matters] (item no. 26). At first a pool of 110 items was generated after self-inspection for best statements related to each domain.

This item bank underwent careful scrutiny and review process that was done by taking expert opinion. Five individuals including two PhD faculty members and three PhD scholars played part as field experts. Item pool was presented in a proper booklet form including both instructions and response categories without specification of domains covered by the statements. Specific instructions for expert review mentioned clearly to look for face validity, and appropriateness of posed statements, any redundancy, or lack of clarity. Based on this evaluation the scrutiny process was finalized through a committee approach where researcher along with a PhD scholar and supervisor eliminated the element of redundancy from the initial pool that was left out with 80 items at the end of this activity.

The statements of item pool had five response categories asking for the degree of agreement or disagreement. These categories were proposed to be scored as 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree. Except four items (Item no. 75, 90, 96, & 103) that were reverse coded, the final pool of items all items were phrased in a conventional manner. Therefore, high score of scale is thought to indicate for traditional ideologies.

Phase II: Exploration of Embedded Factors Through EFA

Data was collected for the finalized item pool. This data was used to explore factors embedded in the item pool.

Sample

A sample of 421 adults was taken based on purposive sampling. They included both Men = 268 and Women = 173 with age range of 19 to

51 years ($M = 29.21$, $SD = 5.44$). Inclusion criteria required the participant to be currently residing in Pakistan for more than 5 years. Likewise, exclusion criteria outlined that those who have stayed for more than 10 years in another culture or had less than matric level education are denied participation in the study.

Procedure

This study progressed further after approval from Institutional ethics committee. Participants of the study were contacted based on personal contacts at academic, home, and work settings. After sharing the study purpose, consent was taken to participate in study. Moreover, elaboration was provided about confidentiality of collected data, anonymity, and right to withdraw. On average participants took 15-20 minutes to complete the given questionnaire.

Result

Findings of factor analysis are presented below after specification of the preliminary analysis.

At first item to total correlations were sought. These indicated for the existence of significant positive correlations for most of the item. However, correlations of Item no. 60, 75, 90, 96, 103, 105 and 108 with the total could not reach significance, and thus they were removed from further analysis. Moreover, inter-item correlations indicated for weak to moderate correlations that indicated for correlated factors and tend to justify the use of Promax rotation when looking for the embedded factor structure. In order to check for sampling adequacy Kaiser-Meyer-Olkin was performed that turned out to be .928. Data fitness for factor analysis was assessed through Bartlett's test of sphericity which was found to be significant 21090.70 ($p < .001$).

EFA was thus performed for data on 73 items, since 7 items were discarded based on low item-total correlations. Principal Axis Factoring

(PAF) method was used with Promax rotation for conducting EFA. As Principal Component Analysis is not considered a true factor analysis procedure PAF was employed in order to explore the factors from data (Field, 2017). Principle Axis factoring has been seen as a data reduction technique, where based on correlation among variables, maximum items are retained. Oblique rotations are assumed best since they allow the factors to correlate and facets of masculinity ideologies are thought to be correlated. Moreover, oblique rotation is thought to yield realistic results that are statistically simpler (Schmitt, 2011). EFA was done by fixing for two, three, four, five, and six factors and also without fixing the factors. Item retention was done using $\geq .35$ criteria for factor loadings and omitting items that cross loaded on more than one factor. A detailed investigation of all solutions indicated for a four factor solution that best explains the factor structure in terms of items presented within a factor (face validity) and an overall importance of a specific factor. Factor loadings for all of the items, percentage of variance explained by each factor, and an overall interpretability or meaningfulness of a particular factor were considered for finalizing the scale. These indicators are thought to be critical with reference to factor retention according to current research trends (Ledesma et al., 2015).

The emerged factors were named with the help of input gained from field experts. These experts included seven individuals including four PhD faculty members and three PhD scholars. Field experts were therefore provided with items streamlined for each factor separately. Experts were given with items on each factor and were instructed to name the four set of items presented separately. All finalized items along with factor loading of items, eigenvalue for each factor, and percentage of variance explained are mentioned in the table.

Table 01

Factor Loadings of the Masculine Ideologies Scale obtained through Promax Rotation (N = 421)

Sr. no.	Item no. in item pool	MPP	TRR	AE	RE
20	78	.89	-.002	-.04	-.03
21	79	.80	-.03	.05	-.03
19	77	.76	.16	.01	-.06
23	84	.61	-.07	.05	-.004
18	59	.59	-.16	-.10	-.08
25	86	.54	-.11	.002	.03
16	53	.52	.14	.04	-.01
24	85	.49	-.12	-.07	.12
26	91	.47	.05	.05	.08
17	56	.44	.13	-.08	-.14
22	80	.42	.10	.04	.02
5	8	.41	-.05	.003	.29
15	47	.38	.04	.01	.06
10	30	-.09	.90	-.02	.004
12	35	-.12	.87	.02	-.03
7	24	-.05	.81	-.08	-.04
4	5	-.06	.70	-.07	.10
11	31	.03	.65	.01	.07
14	39	.06	.63	.02	.04
8	27	.05	.60	.09	-.13
13	37	.18	.48	-.04	.01
9	29	-.01	.47	.12	.04
6	12	.06	.35	-.03	.08
30	104	.03	-.02	.94	-.02
31	106	.04	-.06	.89	.03
27	97	.03	-.02	.89	-.07
28	99	-.05	.06	.74	.003
29	100	-.06	.05	.74	.07
2	3	.03	.07	.02	.76
3	4	.10	-.05	-.02	.65

1	2	-.03	.09	.003	.61
Eigenvalues		6.56	4.88	2.58	1.09
Percentage of Variance Explained		21.1	15.7	8.31	3.51
Percentage of Variance Explained		21.1	36.8	45.1	48.7
Cumulative		5	8	9	0

MPP = Male Privilege and Power, TRR = Roles and Responsibilities, AE = Avoiding Effeminacy, RE = Restricted Emotionality.

Table indicates that the finalized four factor structure has 31 items in total, with 13 items covering male privilege and power, 10 items covering traditional roles and responsibilities, 5 items covering avoiding effeminacy, and 3 items covering restricted emotionality domain. The presented four factor solution explains 48.70% of variance. It is generally thought about cumulative variance explained that the greater the better. Though no defined criterion is there, less than 50% is considered acceptable within social sciences (William & Brown, 2010).

Phase III: Measuring Reliabilities and Establishing Construct Validity

Utilizing an independent sample this phase aimed to ascertain the psychometric soundness of the instrument acquired from previous phase.

Instruments

Following instruments were utilized in this phase of study.

Masculinity Ideologies Scale. Newly developed (finalized from EFA Phase) 31 item Scale was used to measure masculinity ideologies. The scale is scored using 5-point rating scale from strongly disagree = 1 to strongly agree = 5. Items of respective subscale (as mentioned above) are summed to get subscale total.

Gender Role Attitude Scale. Sex Role Attitude Scale was initially developed by Anila and Ansari (1992) and was then modified by Saqib (2004) and was retitled as Gender Role Attitude Scale. The scale has 30 items assessing role of both genders inside and outside home, parental responsibilities they occupy, occupational abilities, life decisions of importance, level and type of academic achievement, and personal relationship between them. The Scale has 30 items rated using a five point response scale that asks about extent of correctness of posed statements. Statements that are phrased in a traditional manner (item no. 1, 3, 5, 8, 9, 14, 15, 16, 17, 21, 24, 25, 28, 29, & 30) are reverse scored so that high score on the scale indicates for modern gender role attitudes. This measure has indicated to display good reliability of .76 (Kalsoom & Kamal, 2020) and .78 (Huda & Kamal, 2020).

Sample

A sample of 352 adults was taken based on purposive sampling. They included both Men = 219 and Women = 133 with age range of 20 to 44 years ($M = 29.70$, $SD = 5.67$). Participation in the study required same criteria as for previous phase.

Procedure

It was same as it proceeded for previous phase.

Results

Findings of this phase have been outlined below.

Reliability Estimation. The data collected for this phase was first assessed for reliability estimation of Masculinity Ideologies Scale and the Gender Role Attitude Scale. It was indicated that reliability estimates calculated in terms of Cronbach's alpha were well into the acceptable levels. For overall Masculinity Ideologies Scale it was .84. For subscale it was .89 for male privilege and power, .86 for traditional roles and responsibilities, .90 for avoiding effeminacy, and .72 for restricted emotionality. For Gender Role Attitude Scale it was indicated to be .81.

Confirmatory Factor Analysis. This phase was focused to perform CFA utilizing AMOS version 23. CFA was done with an intention to replicate the factor structure emerged in the previous phase when an independent data set is used. This phase assumed that factor structure proposed by EFA would remain same. Therefore a measurement path model was made and was tested using maximum likelihood method. Items having .40 and more factor loadings were retained in the model.

The default model could not reach the appropriate level of fit indices. Three modification indices were therefore added between the error terms of item no. 78 and 79, 53 and 56, and lastly between 99 and 100. After addition of these modification indices model fit indices came in the required range. All items recommended by EFA were thus retained since

factor loading of all items were .40 or greater. Table below indicates for fit indices for both default model and model with modification indices.

Table 02

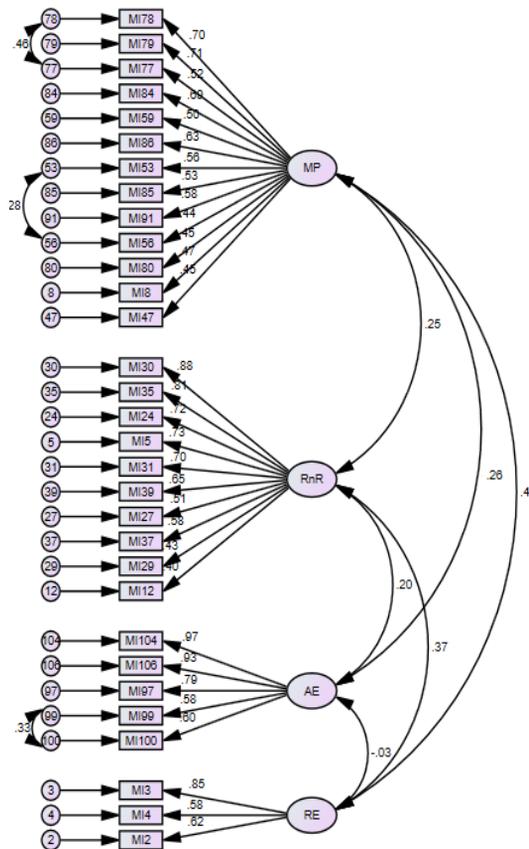
Model Fit Indices for Confirmatory Factory Analysis of Masculinity Ideologies Scale (N = 352)

M o d e l	χ^2	<i>D</i> <i>f</i>	<i>p</i>	Fit Indices				
				S R M R	C F I	T L I	I F I	R M S E A
M o d e l 1	31 items without modification indices							
	9 5 1. 9 2	4 2 8	. 0 0	. 0 8	. 8 9	. 8 8	. 8 9	. 0 6
M o d e l 2	31 items with three modification indices							
	8 1 7. 7 4	4 2 5	. 0 0	. 0 7	. 9 1	. 9 1	. 9 2	. 0 5

The measurement model for above mentioned findings has also been illustrated in the figure below.

Figure 1

Masculinity Ideologies Scale Measurement Model for Confirmatory Factor Analysis



Correlation Between Masculinity Ideologies and Gender Role Attitude Measures. Additional construct validity evidence was collected by correlating the score on newly developed Masculinity Ideologies Scale and scores on Gender Role Attitude Scale.

Table 3

Correlation Matrix for Scales and Subscales of Masculinity Ideologies Scale and Gender Role Attitude Scale (N = 352)

S	Scales	1	2	3	4	5	6
r							
.							
n							
o							
.							
1	Masculinity Ideologies Scale	-	.77*	.75*	.61*	.56*	-.38*
2	Male Privilege subscale		-	.30*	.29*	.36*	-.33*
3	Roles and Responsibilities subscale			-	.13*	.31*	-.11*
4	Avoiding Effeminity subscale				-	-.07	.10
5	Restricted					-	-.01

	Emotion	3
	ality	7
	subscale	*
		*
6	Gender	-
	Role	
	Attitude	
	Scale	

The table 3 indicates correlation coefficients between Masculinity Ideologies Scale, Subscales, and the Gender Role Attitude Scale. It was indicated that both measures had weak to moderate negative correlations, thus signifying for embedded discriminant validity of the new scale.

Masculinity Ideologies Scale. The emerged factors were defined with the help of input gained from field experts. These experts included five individuals including three PhD faculty members and two PhD scholars. Field experts were therefore provided with a definition for each factor based on items streamlined for each factor separately.

The process of validation gave rise to 31 item scale having a four-factor structure. The scale uses a stem stating ‘In a Pakistani society a man’s masculinity is tied with certain tendencies, as it is important for a man that...’. The asked statements are responded using a Likert type response format ranging from strongly agree to strongly disagree. Male privilege and power has 13 items (78, 79, 77, 84 59 86 53, 85, 91, 56, 80, 8, & 47). Male privilege and power subscale measures the entitlements men enjoy and the dominance exerted by them in a Pakistani culture based on their sex only. These include: provision of dignified food serving; intensive financial investment; exercising their influence/power on women; preserving family honor; authority in domains of sexuality and finances; unquestionable liberty. Traditional roles and responsibilities comprise of 10 items (30, 35, 24, 5, 31, 39, 27, 37, 29, & 12). Traditional roles and responsibilities subscale measures men’s role as, provider (sole financial

contributor); protector; frontline responsibility taker; pressure handler; executor of heavy work, and outdoor tasks. Avoiding effeminacy comprises of 5 items (104, 106, 97, 99, & 100). Avoiding effeminacy subscale requires men to stay away from feminine outlooks and behavioral demeanor. Specifically, men are expected to avoid feminine clothing; fashion; gossiping/backbiting; and time expenditure on grooming. Restricted emotionality comprises of 3 items (3, 4, & 2). Restricted emotionality subscale requires men to abstain from disclosing vulnerable emotions; crying publicly and mourning at the death of loved ones.

The scale is scored by adding scores obtained on each item. Score for a particular factor is obtained by adding scores on all items covered in a particular factor. High score on the scale or subscale indicates for holding more traditional ideologies about masculinity overall or for particular domain respectively.

Discussion

Masculinity is a mindset that originates through the socialization via norms and standards of a culture within a society that is meant to fulfill certain requirements of everyday life. Pakistan being a patriarchal society witnesses the incident of domestic violence, sexual abuse, honor killings and the like quite often. Studying masculinity ideologies of native people therefore marks a point that in order to bring in a quantum change one has to work on the prevailing ideologies. Moreover, problems inherent in the masculinity notion itself like emotional constriction, amplified demands in terms of roles and responsibilities, health related concerns that emerge as a result of exercising masculinity, calls for availability of measurement tools that assesses about existing ideologies.

The aim of this study was to come up with an indigenous scale for measuring masculinity ideologies for which item pool was taken from a thorough qualitative inquiry that deeply probed into the masculinity ideologies of both men and women. The impetus for developing a measurement tool for masculinity ideologies came from the fact that

currently no scale is available specifically to measure masculinity ideologies of adults in Pakistan. Only a revised version of a western scale (Rizvi, 2015) is available that measures these ideologies for adolescents and does not cater for the current social context. Taking in the content from a qualitative study makes for the incorporation of indigenous aspects in a true sense. Likewise, within the framework of gender roles it is important to mention that a well-established valid and reliable measure of Gender Role Attitude Scale (Saqib, 2004) is available and it owes a wide utility (Huda & Kamal, 2020; Kalsoom & Kamal, 2020; Zahra & Hanif, 2012). However, measuring attitude towards masculinity calls for sticking to masculinity depictions and meanwhile avoiding any gender comparison when phrasing the statements of scale (Thompson et al., 1992) which is there in Gender Role Attitude Scale. Therefore, a thorough measurement of masculinity ideologies is not possible utilizing gender role attitude scales. In addition, Arshad and Shahid (2021) have devised a scale on gender role strain experienced by men based on findings of a qualitative study. Firstly, this scale is directly measuring the level of strain not the nature of ideologies. Secondly, the qualitative inquiry putting up the content of scale was done with working men only. Whereas, Whorley and Addis (2006) have asserted that to fully grasp the masculinity ideologies of a particular culture it is important to see how they are being portrayed by both men and women.

This study yielded a 31-item indigenous measure of masculinity ideologies of Pakistani adults. It has five-point response categories and caters for multiple domains of prevailing ideologies. The scale can be completed by anyone with minimum of matric level education. Psychometric soundness was first assured by looking for internal consistency of the measure. Reliability coefficient indicated that the scale has good internal consistency, certifying that measure is reliable for future use. This is so because all reliability coefficients were well above .70 which is often reported as a threshold in literature for Cronbach's alpha reliability (Pasquali, 2003).

For establishing validity of the Scale both EFA and CFA techniques were utilized (McMurtry & Torres, 2002; Titlestad, et al., 2017). EFA aids to precipitate a new theory by looking for those embedded factors that give finest interpretation regarding interrelationships and differences among the observed variables. This technique is mostly employed when there is no clear idea that how variables will relate with each other on occasions when researcher has some insight about primary mechanism of issue at hand (Henson & Roberts, 2006). EFA was done with oblique rotation, as suggested by low to moderate inter-item correlations. EFA streamlined four distinct but related factors namely; male privilege and power, traditional roles and responsibilities, avoiding effeminacy, and restricted emotionality that cumulatively tends to explain 48.70% of variance. Though there is no set criteria for cumulative variance but generally it is believed that the more the better. According to Williams et al. (2010) less than 50% explained variance is acceptable in social sciences that can possibly be explained through homogeneity of sample (Field, 2017).

After performing EFA another data set was collected and was utilized for conducting CFA. It was assumed that the factor structure streamlined by EFA will stay the same when data comes from an independent sample for CFA. Results indicated that after adding three modification indices the same factor structure got confirmed through CFA. In doing so, the value of chi-square came out to be significant, which occurs because of sensitivity of chi-square statistics for larger samples (Meade et al., 2008). Although diverse fit indices are observed and are frequently used. However, preference has been seen for the use of CFI, TLI and RMSEA when doing one time analysis (Harrington, 2009). For CFI and TLI the values range from 0 to 1 and a value of .90 or more is considered appropriate (Hu & Bentler, 1999; Portela, 2012). RMSEA value is considered to be appropriate if it is .05 or less (Harrington, 2009). These criterions thus imply that CFA supports the proposed measurement model for Urdu language Masculinity Ideologies Scale for adults.

Similarity of the embedded factors is seen in literature where the notion of masculinity ideology is put up based on toughness, inhibited

emotional expression, avoidance of feminine aspects, and success and supremacy within the heterosexual domain (Chu et al., 2005). Present study had aspects of dominance was catered through male privilege and power, toughness that got embedded within roles and responsibilities domain, staying away from feminine stuff is advocated by avoiding effeminacy, and lack of independence to express emotions was seen within restricted emotionality domain. Though sexuality aspect was part of the original item pool but could not streamline in finalized model because within Pakistani cultural context openness is not there to open up for sharing about sexuality (Rauf, 2021).

While ascertaining constructs validity of a measure, correlating the measure with other established measures is a general practice. When two similar constructs are correlated evidence is collected for convergent validity and when two dissimilar constructs are correlated evidence is collected for discriminant validity (Carlson & Herdman, 2012). Since Masculinity Ideologies Scale yields a score for one's agreement with traditional masculinity ideologies and Gender Role Attitude Scale yields a score for one's egalitarian gender role attitudes, the constructs were supposed to be producing correlations in negative direction This assumption is there because of the fact that egalitarian gender roles call men and women to occupy similar roles (Thornton et al., as cited in Salik, 2003). Whereas traditional masculinity ideologies require one to comply with what is considered conventional about masculinity in a particular culture. It has been well advocated by Pleck et al. (1994) that attitudes towards masculinity or attitude towards femininity operate independently of each other and when these are measured in a comparative format they tend to have differential correlates thus adding to the distinction of both the construct. Particularly, it has been asserted that comparative items assessing attitudes of both genders can meaningfully give picture of attitudes towards one gender if attitude towards other gender seems to be invariant or fixed. Presences of correlations only show that attitudes towards gender roles can get influenced by beliefs about role

expectation for masculinity. These findings add to the collected evidence in support of a psychometrically sound instrument.

Conclusion

The measure developed in the current study would be an addition in literature for measuring masculinity ideologies for Pakistani adult individuals. This measure has been found to be reliable for measuring four different facets of masculinity ideologies prevailing in a Pakistani context. Adequate validity evidence through CFA and correlation with Gender Role Attitude Scale was also collected that signifies it to be a psychometrically sound instrument.

Implications

This study yields an effective measure of masculinity ideologies which has been seen to be psychometrically sound and is seen to be a needed tool so as to expedite research on men and masculinity in Pakistan. Moreover, the traditional ideologies measured by the scale would also be helpful in clinical practice when dealing with men representing problem populations.

Ethical Statement

All ethical protocols were followed for the research process as the research was evaluated and approved by an institutional review committee.

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