

URDU TRANSLATION AND VALIDATION OF PSYCHOLOGICAL FLEXIBILITY QUESTIONNAIRE

Summia Waheed

MPhil Scholar, National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan
s.waheed999@yahoo.com

Sobia Masood*

Assistant Professor, National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan
s.masood@nip.edu.pk

Shawana Fazal

Assistant Professor, Department of Education, Hazara University Mansehra, Khyber Pakhtunkhwa, Pakistan
sf14pk@gmail.com

ABSTRACT

Psychological flexibility is considered an important factor affecting various individual and relational outcomes, however, there are limited cross-culturally validated measures available. The objective of the present study was to translate and to assess the psychometric properties of Psychological Flexibility Questionnaire (Kashdan & Rottenberg, 2010) which is a well-known measure of this construct. The research was carried out in two stages. The first stage comprised of three phases. In the Phase I the scale was translated into Urdu language, while cross language validity and construct language validity was established in Phase II and Phase III respectively. The sample comprised of 300 married women (n = 146) and men (n = 154) with age range 17-65 years (M = 37.60, SD = 9.06). Findings suggested that the measure had good construct validity. In the second stage, convergent validity of the Urdu version was established with the Mindfulness Scale (Neff, 2003). A positive correlation was found between both construct providing an evidence for convergent validity. Overall, Psychological Flexibility Questionnaire-Urdu version appeared to be a valid tool to assess psychological flexibility in married individuals which can be a recommended tool for future studies in Pakistani cultural context to assess psychological flexibility.

Keywords: Psychological flexibility, translation, validation, psychometric properties, mindfulness.

INTRODUCTION

In contemporary times, human survival is dependent on physical as well as psychological health. According to Fredrickson and Losada (2005) psychological health is dependent on the frequency of positive experiences compared to negative experiences such that health is attributed to minimum 3 positive experiences against one negative experience. Contrary, illness is related to 11 or more than 11 negative experiences compared to one positive experience. Scholars also conceptualized psychological health as sense of connectedness, mastery, competitiveness, self-efficacy and autonomy (Deci & Ryan, 2000). Likewise, commitment or positive self-concept is significant indicator of psychological health and sound mental well-being (Csikszentmihalyi, 1990). The afore mentioned concepts no doubt are significant predictors of psychological health, however, the basic limitation in these constructs is that their static nature failed to comprehensively describe the context specific day to day behaviors of human beings. Psychological flexibility hence, could be another indicator that complements traditional perspectives to explain psychological health and mental well-being of an individual (Kashdan & Rottenberg, 2010). Despite being vital for well-being and psychological health, psychological flexibility had not been given much importance. Therefore, it is the need of hour to explore and investigate the impact of psychological flexibility on psychological functioning of an individual. Furthermore, psychological flexibility had impact on marital interactions. Relationship quality or marital quality is significantly related to psychological flexibility. In interpersonal interactions, conflicts are inevitable

* Corresponding Author

but the way to deal with such conflicts and to avoid burnout depends on the flexibility of an individual as well as conflict resolution styles. Hence, the effect of psychological flexibility on marital life indicates that it is necessary to explore impact of psychological flexibility on married individuals.

Psychological Flexibility

Psychological flexibility can be defined as the “ability to adapt to changing situations, changing behavioral pattern and beliefs when required as well as maintaining a relative equilibrium among multiple facets of life and most importantly an ability to be open, aware and respond to event with aligned values” (Kashdan & Rottenberg, 2010). It can also be conceptualized as the ability to be flexible, focusing on current situation, openness to experience as well as changing behavioral pattern as per demand of the situation. Psychological flexibility is a dynamic, multidimensional construct having psychological, cognitive, affective and behavioral facets (Ben-Itzhak et al., 2014) and can be exhibited across various domains of life, by consistent transactions between people and their environment (Williams et al., 2012).

Evidence suggests several positive individual and relational outcomes of psychological flexibility. As evident in literature, psychological flexibility ensures mental health (McCracken et al., 2013) either by enabling the person to identify emotional and cognitive pattern in a better way (Landstra et al., 2013) or by increasing attention, alertness, and concentration level as per changing situations (Galatzer-Levy et al., 2012). On the contrary, psychological inflexibility contributes to anxiety, depression, rumination, excessive worry and faulty decision processing (Kashdan & Rottenberg, 2010; Nolen-Hoeksema et al., 2008). Psychological flexibility also acts as resilience factor for chronic pain patients (Gentili et al., 2019).

Graham et al., (2016) highlighted that psychological flexibility positively relates to higher life satisfaction in people suffering from muscle related anomalies. Furthermore, Graham and Rose (2017) and Kashdan and Rottenberg (2010) found a positive relationship of physical health, resilience and life satisfaction with psychological flexibility. Lack of psychological flexibility has been associated with psychopathology (Galatzer-Levy et al., 2012; Landstra et al., 2013). Psychological adjustment is negatively related to early maladaptive schemas among college students (Cecero et al., 2008). Evidence suggests a positive link between early maladaptive schemas and psychopathology as well as the mediating role of psychological flexibility for this relationship (Fischer et al., 2016). Association of schema domains such as: disconnection/rejection, impaired autonomy and performance and over vigilance, and anxiety symptoms has also been found as mediated by psychological flexibility (Ahi et al., 2007; Lang, 2015; McCarthy, & Lumley, 2015).

Furthermore, previous studies have explored the psychological flexibility questionnaire in clinical sample (Fischer et al., 2016; McCarthy & Lumley, 2015), adolescents (Cecero et al., 2008) but few studies so far have explored the psychological flexibility construct in married individuals. Marital quality has a significant relation with psychological flexibility, but this relationship has not been studied so extensively. Hence, exploring the psychological flexibility in married individuals may provide insight for conflict resolution and marital satisfaction. Psychological flexibility facilitates trust building towards partner compared to maladaptive schemas (Baugh et al., 2019). Researches indicate that psychological flexibility reduces level of stress and improvise mental wellbeing in married individual (Brinkborg et al., 2011; Dahl et al., 2004; Flaxman & Bond, 2010; Wersebe et al., 2018). In marital relations distress is quite evident hence, exploring the impact of psychological flexibility in married individuals provides the evidence for how psychological flexibility reduces stress in marital life.

Psychological flexibility had been extensively researched with various other related constructs. In previous research to measure psychological flexibility various other scales such as Acceptance and Action Questionnaire (Wolgast, 2014), and Multidimensional Psychological Flexibility Scale (Seidler et al., 2020) were used. However, to overcome the limitations of these scales, Psychological Flexibility Questionnaire was developed and tested on a variety of samples. However, to use for the Pakistani sample, Urdu translation of the scale was needed. Hence, the main objective of the present study was to translate the English version of Psychological Flexibility into Urdu version and establish its validity on a sample of married adults.

METHODS

Research Design

This research was completed in two stages. Stage I consisted of three phases: In phase I, Psychological Flexibility Questionnaire (Ben-Itzhak et al., 2014) was translated into Urdu language. Translation and adaptation of scale was done by following the guidelines of Brislin (1980). In Phase II Cross Language Validation of the translated scale was established. Structural Validation of the scale was done in the final phase, Phase III, and was established by measuring construct validity through confirmatory factor analysis. In stage II, convergent validity of the scale was established by measuring correlation between psychological flexibility and mindfulness scales.

Operational Definition

Psychological Flexibility. Psychological flexibility can conceptually be defined as ability to adapt to situations, to change mindset when needed, maintain balance among various aspects of life, as well as openness and acceptance to behaviors congruent with values of life (Kashdan & Rottenberg, 2010). Psychological Flexibility is operationally defined as a score on Psychological Flexibility Questionnaire. A higher score will be an indicator of higher psychological flexibility.

Instrument

Psychological Flexibility Questionnaire. To assess psychological flexibility among married individuals, Psychological Flexibility Questionnaire, a 20-item scale was used (Ben-Itzhak et al., 2014). This is a six-point Likert scale with response categories from 1= *not at all* to 6= *very much*. This scale comprised of five factors and dimensions: positive perception of change, characterization of self as flexible, self-characterization as open and innovative, a perception of reality as dynamic and changing and perception of reality as multifaceted. However, composite score is used in the research study to measure psychological flexibility among married individuals. Reliability estimate indicates that Cronbach alpha coefficient for psychological Flexibility is .91 (Ben-Itzhak et al., 2014). Since this scale was available in English language, the scale was translated into Urdu language for the research purpose in the Phase I of the present study. Translation was done after getting permission from the original authors. Cross language validation and construct validity of the scale were also established in the current study.

Procedure

Stage-I: Translation and Validation of Psychological Flexibility Questionnaire

One of the major aims of the current study was to translate the Psychological Flexibility Questionnaire into Urdu language, in such a simple manner that its items were easy to comprehend by the research participants.

Phase I: Translation of Psychological Flexibility Questionnaire

To get a conceptually equivalent translation of the scale, forward and back-translation method was used (Brislin, 1980). Five bilinguals were asked to translate the scale items into Urdu language and then a committee approach was used to select the best translation. Then this translated version was handed over to another group of five independent bilingual with a request to translate it back into English. After the approval of back translations by the author, final Urdu version of the scale was ready to be tested in the field.

Phase-II. Cross Language Validation

Sample and Procedure. To establish the cross-language validity, a total of 60 married adults were divided into four equal groups and were administered the scale in a way that two groups were given original English version first while two were administered the Urdu version first. After two weeks, a re-test was done using English-English, English-Urdu, Urdu-Urdu, and Urdu-English scales to control learning effect and previous experiential impact. This procedure was followed to identify any discrepancy and to examine equivalency in both versions or with-in same version application.

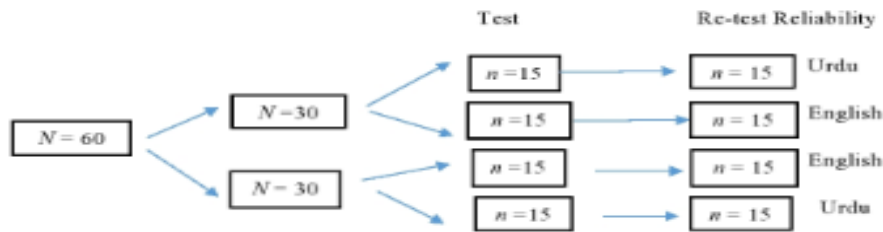


Figure 1. Representation of sample distribution for test-retest reliability (N = 60).

RESULTS

Correlation between both administrations for all groups has been presented in Table 1.

Table No. 1 Test-retest Reliability of Translated Psychological Flexibility Questionnaire on Married Individuals (N = 60)

Scale	GP. I (EE) (n =15)	GP. II (EU) (n =15)	GP.III (UE) (n =15)	GP.IV (UU) (n =15)
Psychological Flexibility Questionnaire	.97	.97	.98	.99

Note. GP. I = Group 1; GP.II = Group 2; GP.III = Group 3; GP.IV = Group4; (EE) = English to English; (EU) = English to Urdu; (UE) = Urdu to English; (UU) = Urdu to Urdu

Findings in Table show positive and high correlations between both administrations providing evidence for the consistency over time. The highest values of correlation coefficient appear for Urdu-Urdu administration translated Urdu version was found to have better comprehension.

Phase III. Confirmatory Factor Analysis for Confirming Structural Validation of Instrument

Sample and Procedure. A total of 300 married individuals with the age range 19 to 65 years ($M = 37.60$, $SD = 9.06$) participated in this phase of the study using convenience sampling technique. Informed consent was taken from the respondents after explaining complete ethical protocol to the participants.

Results. Following were the findings of Phase III:

Table No. 2 Confirmatory Factor Analysis for Psychological Flexibility Questionnaire-Urdu Version

	$\chi^2 (df)$	IFI	CFI	RMSEA	$\Delta \chi^2 (\Delta df)$
Model 1	2608.27(170)	.86	.86	.21	2438.27
Model 2	193.81(124)	.99	.99	.04	69.81

Note. IFI = Incremental Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square error of Approximation

Model 1 is the default model of CFA while model 2 is the model after adding error covariance.

Findings in the Table 2 suggests that for the first model, the values of CFI and IFI are low, hence, in order to get better model fit, certain error variances were added on basis of content overlapping and as a result, the values of CFI and IFI were increased showing a good fit.

Table No. 3 Factor Loading and Squared Multiple Correlation for Psychological Flexibility Questionnaire- Urdu Version (N = 350)

Item No.	λ	SMCs	Item No.	λ	SMCs
1	.77	.59	11	1.00	.99
2	.88	.77	12	.98	.95
3	.93	.86	13	.99	.97
4	.95	.91	14	.97	.95
5	.96	.92	15	.98	.95
6	.97	.94	16	.98	.95

7	.99	.98	17	.97	.94
8	.99	.98	18	.96	.91
9	.99	.98	19	.97	.93
10	.98	.96	20	.95	.89

Note. λ = Factor Loading, SMC = Squared Multiple Correlation.

Findings in Table 3 shows the values for factor loadings and multiple correlation for items of Psychological Flexibility Questionnaire. Usually, factor loadings equal or greater than .3 are considered acceptable while for the Squared Multiple Correlation, values should be greater than .70 (Bryant & Yarnold, 1995). As shown in the table, all the items of scale show acceptable values of factor loadings and Squared Multiple correlation reflecting upon the construct validity of the measure.

Stage II: Convergent Validity

Stage II of the study aimed to establish the convergent validity of Psychological Flexibility Questionnaire-Urdu version. For this, a positive correlation was hypothesized between the construct of psychological flexibility and mindfulness and Mindfulness Scale (Neff, 2003) that measures the extent to which an individual remain non-judgmental, accept thoughts and emotions as it is without suppressing them was used.

Table No. 4 Correlation between Psychological Flexibility Questionnaire and Mindfulness Subscale of Self-Compassion

Variable	PFQ	SCS
PFQ	-	.77**
SCS		

Note. PFQ = Psychological Flexibility Questionnaire & SCS = Self-Compassion Scale.

** $p < .01$.

Table 4 shows that psychological flexibility and mindfulness are positively correlated with each other. Result indicates that psychological flexibility has higher convergent validity with Mindfulness scale and establishes that psychological flexibility measure is the valid tool to assess flexibility.

DISCUSSION

The current study underlies the translation and cross language validation of research instruments i.e., Psychological Flexibility Questionnaire (Ben-Itzhak et al., 2014). The main aim of the study was to make the research instruments comprehensible to the sample and to check the cultural as well as conceptual equivalence. For this, the measure was first translated into Urdu language following the guidelines by Brislin (1980) and a conceptually and functionally equivalent Urdu version was prepared and then its cross-language validity was established. Our findings are consistent with Gudmundsson (2009) who also found that Psychological Flexibility Questionnaire was a valid instrument. Confirmatory factor analysis was performed to examine the factor structure of the scale. Findings suggested that model was a good fit indicating the measure to be a valid tool for assessment of psychological flexibility over a Pakistani population. In testing for convergent validity, a positive correlation was found between the flexibility questionnaire and the mindfulness subscale of Self-Compassion Scale (Neff, 2003). The questionnaire also demonstrated satisfactory construct validity and convergent validity. This evidence suggests that Psychological Flexibility Questionnaire is a valid tool to measure the construct. These findings are consistent with Ben-Itzhak et al. (2014).

Psychological flexibility is an important theoretical construct which can facilitate coping with different stressors of life (Kashdan & Rottenberg, 2010; Landstra et al., 2013), hence, valid cross-cultural measures are needed to explore psychological flexibility in a variety of samples and over different phases of life. The translated Psychological Flexibility Questionnaire can also be used for psychological assessment before, during, or after providing psychotherapy or other psychological interventions for better mental health.

The present study, hence, presents a valid and reliable instrument to investigate flexibility in Pakistani populations. The role of psychological flexibility on mental health domain demands extensive research in Pakistan. This scale might be relevant to many areas outside psychotherapy such as future researchers could examine role of psychological flexibility in relationship satisfaction, employee recruitment procedures to predict better individual and relational outcomes. Psychosocial interventions could also be developed for increasing the psychological flexibility of our youth to increase their

adaptability skills. For all these, Psychological Flexibility Questionnaire-Urdu version appears to be a valid and beneficial measure.

REFERENCES

- Ahi, Q., Mohammadifar, M., & Besharat, M. (2007). Reliability and validity of the short form of Young Schema Questionnaire. *Psychology and Educational Sciences, 37*(3), 5-20.
- Baugh, L. M., Cox, D. W., Young, R. A., & Kealy, D. (2019). Partner trust and childhood emotional maltreatment: The mediating and moderating roles of maladaptive schemas and psychological flexibility. *Journal of Contextual Behavioral Science, 12*, 66-73. <https://doi.org/10.1016/j.jcbs.2019.02.001>
- Ben-Itzhak, S., Bluvstein, I., & Maor, M. (2014). The Psychological Flexibility Questionnaire (PFQ): Development, reliability and validity. *Webmed Central Psychology, 5*(4), 10-22, doi: 10.9754/journal.wmc.2014.004606.
- Bonanno, G. A., Papa, A., Lalande, K., Westphal, M., & Coifman, K. (2004). The importance of being flexible the ability to both enhance and suppress emotional expression predicts long-term adjustment. *Psychological Science, 15*(7), 482-487. <https://doi.org/10.1111%2Fj.0956-7976.2004.00705.x>
- Bond, F. W., & Bunce, D. (2003). The role of acceptance and job control in mental health, job satisfaction, and work performance. *Journal of Applied Psychology, 88*(6), 1057-1067. <https://psycnet.apa.org/doi/10.1037/0021-9010.88.6.1057>
- Bryant, F. B., & Yarnold, P. R. (1995). Principal components analysis and exploratory and confirmatory factor analysis. In L. G. Grimm & P. R. Yarnold (Eds.), *Reading and understanding multivariate analysis*. Washington, DC: American Psychological Association.
- Brislin, R. W. (1980). Cross-cultural research methods. In *Environment and culture* (pp. 47-82). Springer, Boston, MA.
- Cecero, J. J., Beitel, M., & Prout, T. (2008). Exploring the relationships among early maladaptive schemas, psychological mindedness and self-reported college adjustment. *Psychology and Psychotherapy: Theory, Research and Practice, 81*, (105-118). <https://doi.org/10.1348/147608307X216177>
- Csikszentmihalyi, M., & Csikszentmihaly, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.
- Dahl, J., Wilson, K. G., & Nilsson, A. (2004). Acceptance and commitment therapy and the treatment of persons at risk for long-term disability resulting from stress and pain symptoms: A preliminary randomized trial. *Behavior therapy, 35*(4), 785-801.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227-268. https://doi.org/10.1207/S15327965PLI1104_01
- Eggerth, D. E. (2008). From theory of work adjustment to person–environment correspondence counseling: Vocational psychology as positive psychology. *Journal of Career Assessment, 16*(1), 60-74
- Fischer, T. D., Smout, M. F., & Delfabbro, P. H. (2016). The relationship between psychological flexibility, early maladaptive schemas, perceived parenting and psychopathology. *Journal of Contextual Behavioral Science, 5*(3), 169-177. <https://doi.org/10.1016/j.jcbs.2016.06.002>
- Fredrickson, B. L., & Losada, M. F. (2005). Positive Affect and the Complex Dynamics of Human Flourishing. *American Psychologist, 60*(7), 678–686. <https://doi.org/10.1037/0003-066X.60.7.678>
- Galatzer-Levy, I. R., Burton, C. L., & Bonanno, G.13. A. (2012). Coping flexibility, potentially traumatic life events, and resilience: a prospective study of college student adjustment. *Journal of Social and Clinical Psychology, 31*(6), 542-567. <https://doi.org/10.1521/jscp.2012.31.6.542>
- Gentili, C., Rickardsson, J., Zetterqvist, V., Simons, L., Lekander, M., & Wicksell, R. K. (2019). Psychological flexibility as a resilience factor in individuals with chronic pain. *Frontiers in Psychology, 10*, 16-20. <https://doi.org/10.3389/fpsyg.2019.02016>

- Graham, C. D., & Rose, M. R. (2017). What explains high life satisfaction in men living with Duchenne muscular dystrophy? A preliminary study to inform psychological intervention. *Muscle & Nerve*, 56(1), 163-166. <https://doi.org/10.1002/mus.25495>
- Graham, C. D., Gouick, J., Ferreira, N., & Gillanders, D. (2016). The influence of psychological flexibility on life satisfaction and mood in muscle disorders. *Rehabilitation Psychology*, 61(2), 210-217. <http://dx.doi.org/10.1037/rep0000092>
- Gudmundsson, E. (2009). Guidelines for translating and adapting psychological instruments. *Nordic Psychology*, 61(2), 29-45. <https://doi.org/10.1027/1901-2276.61.2.29>
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60.
- Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review*, 30(7), 865-878. <https://doi.org/10.1016/j.cpr.2010.03.001>
- Landstra, J., Ciarrochi, J., Deane, F. P., & Hillman, R. J. (2013). Identifying and describing feelings and psychological flexibility predict mental health in men with HIV. *British Journal of Health Psychology*, 18(1), 844-857. DOI: 10.1111/bjhp.12026.
- Mccarthy, M., C., & Lumley, M., N. (2012). Sources of emotional maltreatment and the differential development of unconditional and conditional schemas. *Cognitive Behaviour Therapy*. 41(4), 288-297. DOI:10.1080/16506073.2012.676669.
- McCracken, L. M., Gutiérrez-Martínez, O., & Smyth, C. (2013). “Decentering” reflects psychological flexibility in people with chronic pain and correlates with their quality of functioning. *Health Psychology*, 32(7), 820. <https://psycnet.apa.org/doi/10.1037/a0028093>
- Neff, K. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and identity*, 2(2), 85-101.
- Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky S. (2008). Rethinking rumination. *Perspectives on Psychological Science*, 3(5), 400-424.
- Seidler, D., Stone, B., Clark, B. E., Koran, J., & Drake, C. E. (2020). Evaluating the factor structure of the Multidimensional Psychological Flexibility Inventory: An independent replication and extension. *Journal of Contextual Behavioral Science*, 17, 23-31.
- Stopa, L., & Waters, A. (2005). The effect of mood on responses to the Young Schema Questionnaire: Short form. *Psychology and Psychotherapy: Theory, Research and Practice*, 78(1), 45-57. <https://doi.org/10.1348/147608304X21383>
- Wersebe, H., Lieb, R., Meyer, A. H., Hofer, P., & Gloster, A. T. (2018). The link between stress, well-being, and psychological flexibility during an acceptance and commitment therapy self-help intervention. *International Journal of Clinical and Health Psychology*, 18(1), 60-68. <https://doi.org/10.1016/j.ijchp.2017.09.002>
- Williams, K. E., Ciarrochi, J., & Heaven, P. C. (2012). Inflexible parents, inflexible kids: A 6-year longitudinal study of parenting style and the development of psychological flexibility in adolescents. *Journal of Youth and Adolescence*, 41(8), 1053-1066. <https://doi.org/10.1007/s10964-012-9744-0>
- Wolgast, M. (2014). What does the Acceptance and Action Questionnaire (AAQ-II) really measure? *Behavior Therapy*, 45(6), 831-839.