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# Translation and Validation of Psychological Capital Questionnaire

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The present study was conducted to translate the Psychological Capital Questionnaire (PCQ-24; Luthans, Avolio, Avey, & Norman, 2007) Urdu language and to establish the construct validity of the translated version. The study was completed in two phases. In the first phase, Urdu version of PCQ-24 was obtained after the forward and back translations as per the guidelines suggested by Brislin (1970). In the second phase, the Urdu version of PCQ-24 was validated which measures the construct of psychological capital. The sample comprised of 380 small business entrepreneurs (men = 270, women = 110), taken from Rawalpindi and Islamabad with age range of 18 to 50 years. For this instrument, two concurrent models were tested through confirmatory factor analysis; the first model analyzed was for a four-factor structure. In this model, four subscales of PCQ-24 including Self-efficacy, Hope, Resilience, and Optimism were taken as interrelated factors. While, the second model was a hierarchical model in which four subscales were loaded onto a latent factor of PsyCap. Results established that the fourfactor structure of PsyCap showed better fit than the higher-order factor structure. Furthermore, PCQ-24 showed adequate construct validity and reliability after excluding three problematic items (i.e., no. 13, 20, & 23) which were found to cause poor model-fit and lower the reliabilities. Overall, the findings show that newly translated Urdu version of PCQ-24 is a reliable and a valid measure in Pakistani context.

*Keywords:* psychological capital, construct validity, confirmatory factor analysis, entrepreneurs

Currently, it is being emphasized that while using foreign developed instruments in Pakistan, one should establish the reliability and validity of the given instrument before drawing inferences out of it. Earlier, researchers have not focused on this part of the study, but

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Foxcroft, Roodt, and Abrahams (2001) emphasized that before using the imported measures (those measures developed in a foreign country), a researcher should investigate the psychometric properties of such instruments. PCQ-24 (Luthans et al., 2007) is a psychological test developed in a foreign country (USA).Van de Vijver and Leung (2001) reported that instruments such as PCQ-24 can be considered as a mono-centered instrument, that is, an instrument developed originally in a Western country; therefore, the transportability of PCQ-24 from a single Western culture to a predominately non-Western setting such as Pakistan, requires an investigation of the psychometric properties of the study instrument.

PCQ-24 (Luthans et al., 2007) has been used to measure the construct of PsyCap. This construct has originated from the Positive Organizational Behavior school of thought which focuses on maximization of human strengths. Using psychological resources theory as a theoretical framework given by Hobfoll (2002), Luthans et al. (2007) defined PsyCap as a positive psychological state of development that is characterized by *Self-efficacy*, an individual's confidence to take part in and succeed at challenging tasks by putting in the necessary effort to accomplish it; *Hope*, an individual's ability to drive forward towards goals, even when confronted with challenges, and when required, he or she can redirect paths to get succeeded; *Resilience*, an individual's capability to bounce back from adversity and sustain when beset by problems; and *Optimism*, an individual's positive state of mind in which people make positive attribution about succeeding in the present and in future.

Stajkovic and Luthans (1998) defined self-efficacy as an individual's confidence or belief that one can successfully accumulate the mental assets, inspiration, and action plan to effectively complete an assignment in a particular domain. Additionally, critical to Stajkovic and Luthans' (1998) conceptualization, self-efficacy is found to be domain specific, that is an individual who is competent in one job (present domain) may not be competent in another job. Past studies have confirmed a strong positive relationship between self-efficacy and work-related performance (Jawahar, Meurs, Ferris, & Hochwarter, 2008; Schmidt & DeShon, 2010).

Snyder (1991) described hope as a cognitive set which is characterized by agency and pathways. *Agency* comprised of an individual's dedication for the goal attainment, whereas, *pathways* include planning of alternate ways to achieve that goal. This definition suggests that individuals who are high on the construct of hope have an ability to set realistic goals and then pursue them (agency & goals).

Also, hopeful individuals have the capacity to create multiple pathways to achieve a desirable outcome even when faced with challenges (pathways & goals). Like self-efficacy, Luthans et al. (2007) confirmed positive relationship between hope and job performance across variety of settings including services, manufacturing, and non-governmental sectors.

Luthans (2002) defined resiliency as an individual's capability to sustain challenging situations and move on. Those higher on resiliency not just adjust to the distressing circumstances, but they also learn from their painful experiences (Youssef & Luthans, 2007). Avey, Luthans, and Youssef (2009) reported that the concept of resiliency is significant and widely studied in organizational settings. Similar to self-efficacy and hope, Luthans et al. (2007) found a positive association between resilience and work-related performance.

The theory of *positive expectancy optimism* (Scheier & Carver, 1985) claimed that optimists are people who anticipate positive outcomes in any situation. As mentioned in Snyder and Lopez (2002), the approach of positive expectancy optimism was taken a step further in which it is proposed that optimists generally attribute success and positive events to internal and stable processes. This approach was named as *explanatory style optimism* (Seligman, 1990). Finally, past studies (Luthans, Avolio, Walumbwa, & Li, 2005; Tuten & Neidermeyer, 2004) also confirmed positive influence of optimism on performance in the workplace. Hence, it has been established that PsyCap is an important personal resource that predicts various workplace and health-related outcomes for individuals (Avey, Wernsing, & Luthans, 2008; Christian, Garza, & Slaughter, 2011).

Despite the fact that the four PsyCap resources were shown to have discriminant validity, Luthans et al. (2007) established their convergent validity; thereby, showing the interrelatedness of the four components of PsyCap. Moreover, Luthans et al. (2007) suggested that the four factors of PsyCap share many characteristics in common that make them to form PsyCap as a higher-order core factor. For example, the four components of PsyCap have a basic theme of positive expectations for the future and motivation to achieve targets and goals (Avey et al., 2009). Luthans, Avey, Avolio, and Peterson (2010) also analyzed the competing models for factor structures of PsyCap, and found that the higher-order factor structure for the construct showed the best fit to the data for USA sample. In contrast, some researchers (Avey et al., 2008) suggest that the four components of PsyCap are different from one another by stating that self-efficacy and hope are focused on a specific context, whereas resilience and optimism are more general in nature. Thus, there is a need to explore whether a four-factor structure or hierarchical-order core factor for PsyCap best fits for Pakistani sample.

Considering the importance of PsyCap in determining various work-related as well as health-related outcomes for individuals, the research interest in investigating the given construct continues to grow (Dawkins, Martin, Scott, & Sanderson, 2013). Other than the studies conducted in USA, researcher found many published articles from around the world. These include from Canada (Laschinger & Grau, 2012), China (Cheung, Tang, & Tang, 2011), Portugal (Rego, Sousa, Marques, & Cunha, 2012), India (Tripathi, 2011), the United Kingdom (Nigah, Davis, & Hurrell, 2012), South Africa (Du Plessis & Barkhuizen, 2011), and Pakistan (Ali & Ali, 2014). Most of these researches conducted in different countries found consistent findings for the factor structure of PCQ-24 as illustrated by Dawkins et al., (2013) and majority of these have used English version of PCQ-24 in their work. To date, the results of the two published Pakistani studies (Ali & Ali, 2014; Wazir, Manzoor, & Hassan, 2014) established the construct validity of PCQ-24. However, authors used English version of PCQ-24 in their research. Therefore, lack of literature addressing the factor structure of Urdu version of PCQ-24 in the Pakistani context guided the present study.

It is a common practice in Pakistan to use standardized instruments developed in foreign countries. However, researchers must ensure that the foreign instrument/s that they use in their studies should be validated first on Pakistani sample, and findings of their studies must be based on an instrument with good psychometric properties. Next, Urdu is our national language and it would be easy for the participants to understand the test items when presented in Urdu. Also, it is desirable to use the instrument in a language which is easily comprehendible by the participants of the study, that is why, PCQ-24 was thought to be translated into Urdu language so that it could be conveniently administered on people of Pakistan.

As this measure was translated for the first time in Urdu language, therefore, establishing the reliability and validity of the newly translated Urdu version of PCQ-24 was a prerequisite for its use in Pakistan. Therefore, present study also investigated the psychometric properties of the Urdu version of PCQ-24 (Luthans et al., 2007) in Pakistani context, and provide preliminary findings on its reliability and construct validity. Major objectives of present research were to translate the PCQ-24 (Luthans et al., 2007) and to validate the Urdu version of PCQ-24.

### Method

The present investigation was completed in two phases. Phase-I included translation and adaptation of PCQ-24, and Phase-II included validation of the Urdu version of PCQ-24.

# Phase-I: Translation and Adaptation of Psychological Capital Questionnaire

The Urdu version of PCQ-24 was not available, therefore, present study aimed to translate the questionnaire into Urdu language. The translation was done by following the rules given by Brislin (1970). Researcher initially asked the author for his permission to translate the scale. After getting permission from the author, the scale was translated into target language (Urdu) from the source language (English). Next, six bilingual experts who were acquainted in reading and writing both Urdu and English languages were approached. Four of the experts who translated the scale had an M.Phil degree in Psychology, one had a Master's qualification in Psychology, and the sixth had a degree of Masters in Urdu. Researcher asked these experts to translate the scale into Urdu language and instructed them to translate the statements in such a manner that the inherent meaning of the items stays same and could be effectively comprehendible in Pakistani context. Six forward translations of the scale were acquired. Afterward, these Urdu translations were assessed in a committee approach in which after reviewing all translations carefully, members of the committee selected and finalized the most appropriate translation for each item.

The committee comprised of three members; the researcher and two bilingual experts from National Institute of Psychology who had expertise on both languages that is, Urdu and English. Before starting off with the procedure, all six translations received for each item were jotted down by the researcher under respective items. After that, the translations of the items were subjected for evaluation in a committee approach. The members of the committee then evaluated the received translations and carefully selected the most suitable translation for the given item. The criterion for selecting the appropriate translation was that the statement of the translated item is understandable and shows semantic equivalence with the original item.

The next step involved in the translation was to conduct the back translation of the items from Urdu into source language that is, English. For this process, once again three bilingual experts (other than the individuals who already did forward translations) were approached and asked to translate the Urdu version of PCQ-24 back into English. Two of the bilingual experts who translated the scale into English had an M.Phil degree in Psychology, whereas the third one had a Master's degree in English. The experts were instructed to do the translations accurately maintaining the meanings of the items same as in Urdu translated version.

Researcher received three back translations of the scale which were later assessed in another committee approach. Same committee members were approached to complete the process of translation. This time, the aim of the committee approach was to check the similarity of the newly translated English items with the original items of PCO-24. For this purpose, all the back translations of the scale were written down under the respective item of the original version and then evaluated by the members of the committee. The committee later reviewed the translations and checked the semantic equivalence of the back translations with the original statements. The members of the committee found no such ambiguity in majority of the items, except for item no. 16, for which Urdu translation was not conveying the same meaning as per the original item. For the purpose of clarity, author was contacted again to confirm the meaning of the statement, and then item was rephrased as per guidelines from the author. Similarly, word "client" was added besides management in item no. 2 with consent from author, to make this item more comprehendible for the present study sample that is, small business entrepreneurs, who generally deal with their clients in their daily routine. Finally, instructions of the scale were settled by the committee members and Urdu version of PCO-24 was finalized.

#### Phase II: Validation of the Urdu version of PCQ-24

Phase-II involved the validation of the Urdu version of PCQ-24.

**Sample.** The sample comprised of 380 participants, who were approached through purposive and convenient sampling from Rawalpindi and Islamabad. For the present study, business owners and business managers of micro and small business enterprises were included. The sample included 244 (64.21%) business owners and 136 (35.79%) business managers. Further, based on the number of workers in a business firm, total 286 (75.26%) business owners and managers of micro, and 86 (22.63%) of small business firms were included. Both male and female entrepreneurs were included in the study. In terms of gender representation, sample comprised of 270 (71.05%)

men and 110 (28.95%) women. Additionally, majority of the entrepreneurs worked mainly in retail and service sectors. Next, minimum experience of 2 years in the current firm or organization criterion was adopted. The age range of the participants was 18 to 50 years (M = 29.91, SD = 7.95).

**Instrument.** The Urdu version of PCQ-24 (Luthans et al., 2007) consists of 24 items with six items for each of the four subscales (Selfefficacy, Hope, Resilience, & Optimism). Items 1-6 measure Selfefficacy; 7-12 measure Hope; 13-18 measure Resilience; and 19-24 measure Optimism. Item no. 13, 20, and 23 are negatively scored items. Response categories of PCQ-24 ranged from strongly disagree (1), to strongly agree (6); the scoring is reversed for negatively phrased items. To get a total composite score for PsyCap, an average of all 24 items was taken. Similarly, all six responses for each of the items of subscales were summed and averaged to get a subscale composite score. High scores on the scale and subscale reflect higher PsyCap, Self-efficacy, Hope, Resilience, and Optimism. PCQ-24 demonstrated adequate confirmatory factor analytic structure across multiple samples and had strong internal reliability (Luthans et al., 2007). The PCQ-24 showed good reliability for composite score as well as its subscales (Self-efficacy = .92, Hope = .87, Resilience = .83, & Optimism = .78). Across different occupations and organizations alpha coefficient of composite was found to be .95 (Avey et al., 2009). The internal consistency of the scale and subscales was also found to be good in Pakistani context (Manzoor, Khattak, & Hassan, 2015).

**Procedure.** Both male and female entrepreneurs were approached through purposive and convenient sampling from Rawalpindi and Islamabad. Prior to completing the questionnaires, participants signed a consent form. Further, participants were ensured about anonymity, confidentiality, and right to quit at any time. Moreover, researcher was available to answer questions during the testing procedure. Debriefing information was also provided. Finally, the questionnaires were collected from the participants once completed by the research participants.

#### Results

As per objectives of the present study, Confirmatory Factor Analysis (CFA) was conducted first to establish the construct validity of Urdu version of PCQ-24. Furthermore, corrected item-total correlations, alpha reliability coefficients, descriptive statistics, and inter-subscale correlations were computed. The construct validity of Urdu version of PCQ-24 was established by conducting CFA with maximum likelihood estimation in Amos-21. Initially, a model of four inter-related factors was tested. Findings revealed a poor model fit for the respective model. To represent the likelihood that individual items influence this poor model fit, study examined individual item properties. It was observed that factor loadings of Item no. 13, 20, and 23 were quite low than acceptable value of  $\lambda = .30$  (Field, 2009). The factor loadings of Item no. 13, 20, and 23 were  $\lambda = .22$ , .07, and .28 respectively. Based on these observations, this study then tested the models that excluded these three items.

After excluding the three problematic items including item no. 13, 20, and 23, the next model that was tested in the present study was with four inter-related factors. This model showed overall a good model fit with the data. While the good fit of the four-factor model supports the idea of the four-dimensional nature of PsyCap, the four dimensions have found to be profoundly associated (r = .65 - .87), proposing the plausibility of a higher-order factor underlying these four factors. Based on this observation, the present study tested a third model for PCQ-24 (Urdu version). In this model, the four factors of PCQ-24 were loaded onto a latent factor of PsyCap. Results of this hierarchical model are given in Table 1.

#### Table 1

Confirmatory Factor Analysis of PCQ-24 (Urdu Version) With Higher-order Factor Structure (N = 380)

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Model	$\chi^2$	$\chi^2/df$	GFI	IFI	CFI	SRMR	RMSEA
Mo	510.36 (185)	2.76	.89	.88	.88	.06	.07
	p .000						
M1	479.63 (184)	2.61	.89	.89	.89	.06	.06
$e10 \leftrightarrow e12$	p .000						
M2	454.58 (183)	2.48	.90	.90	.90	.05	.06
$e2 \leftrightarrow e3$	p .000						

*Note.*  $\chi^2$  = chi-square;  $\chi^2/df$  = relative/normed chi-square; GFI = goodness of fit index; IFI = incremental fit index; CFI = comparative fit index; SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation.

Urdu version of PCQ-24 has 21 items.

 $\chi^2$  should be low;  $\chi^2/df < 5.0$ ; GFI, IFI, and CFI  $\geq .90$ ; SRMR and RMSEA < .08.

Model Mo shows results of higher-order factor structure in which four factors of PCQ-24 (Urdu version) are loaded onto a latent factor of PsyCap. Findings reveal that values of  $\chi^2/df$ , SRMR, and RMSEA lie in acceptable ranges. Other fit indices are also close to acceptable value. The goodness of fit is attained for this higher-order factor structure after adding two error covariances that is,  $e10 \leftrightarrow e12$  (model M1) and  $e2 \leftrightarrow e3$  (model M2). Factor loadings for PCQ-24 in higher-order factor structure are given in Table 2.

#### Table 2

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Factor Loadings for PCQ-24 (Urdu Version) With Higher-order Factor Structure (N = 380)

Item No.	λ						
1	.56	7	.59	13	-	19	.64
2	.55	8	.65	14	.67	20	-
3	.62	9	.61	15	.68	21	.66
4	.69	10	.53	16	.59	22	.72
5	.47	11	.62	17	.63	23	-
6	.64	12	.50	18	.65	24	.68

Note. Item no. 13, 20, and 23 have been excluded from Urdu version of PCQ-24.

Table 2 shows factor loadings of items in PCQ-24; higher-order factor structure lie in acceptable range ( $\lambda = .47$ -.72), that is,  $\geq .30$  (Field, 2009; Floyd & Widaman, 1995). Similarly, the factor loadings of the four factors of PsyCap also lie in acceptable range, and these were:  $\lambda = .87, .97, .88$ , and .79 for Self-efficacy, Hope, Resilience, and Optimism respectively.

After validation of PCQ-24, present study finalized a 21-item version, excluding three problematic items (Item no. 13, 20, & 23). Next, corrected item-total correlations were computed for PCQ-24 and the subscales. Results revealed that the corrected item-total correlations for this new Urdu version and its subscales were found to be above the acceptable threshold (i.e.,  $r \ge .30$ ; Ferketich, 1991), showing relationships between items in the scale and respective subscales. The range of the values of corrected item-total correlations for PCQ-24 was .39 to .60, and for the respective subscales, the range was .40 to .61.

Table 3 shows that values of alpha coefficients of the scale used in the present study and its respective subscales are above the acceptable value of .70 as per criteria specified by George and Mallery (2003). Coming to the descriptive statistics, participants scored higher on PsyCap and its subscales. Next, the values of Skewness and Kurtosis show that the shapes of the curves indicated normal distribution of test scores across the variables, except for PsyCap, for which the value of Kurtosis is found to be marginally higher. Furthermore, this value is positive showing that the distribution of scores across PsyCap is fairly peaked and the scores are in constellation around the mean value. Lastly, the construct of PsyCap is found to be positively related with its subscales. Positive associations are also found between the four subscales which further confirm the construct validity of PsyCap comprising of four interrelated factors.

#### Table 3

Alpha Coefficients, Descriptive Statistics, and Inter-subscale Correlations for PCQ-24 (N = 380)

Variable	No. of	α	M(S.D)	Skew	Kurt	1	2	3	4	5
	Items									
1. PCQ	21	.90	5.10(.50)	73	1.03	-	.83**	.88**	.84**	.76**
2. SE	6	.77	5.09(.59)	69	.62		-	.66**	.53**	$.50^{**}$
3. Hope	6	.76	5.09(.59)	62	.00			-	.65**	.54**
4. Res.	5	.78	5.01(.66)	61	.42				-	.60**
5. Opt.	4	.77	5.22(.60)	79	.74					-

*Note.* Skew = Skewness; Kurt = Kurtosis; PCQ = Psychological Capital Questionnaire; SE = Self-efficacy; Res = Resilience; Opt = Optimism.

 $p^{**} < .01.$ 

#### Discussion

The main objective of the present study was to translate and validate the Psychological Capital Questionnaire (PCQ-24; Luthans et al., 2007). The basic purpose for translating the scale into Urdu language was to make it comprehendible for the research participants who were small business entrepreneurs. As Urdu is our national language, therefore, people of Pakistan even with basic education can readily read it and comprehend it. Further, the scale was translated using back translation method (Brislin, 1970). Back translation method was applied to get the Urdu version of the given scale with items closer to the original English version items in terms of semantic equivalence as well as content similarity. Next step was to establish the psychometric properties of the newly translated Urdu version PCQ-24 to make it a reliable and a valid measure.

The psychometric validation of the study instrument was carried out. For this purpose, CFA was conducted for PCQ-24 (Luthans et al., 2007), as studies confirmed that CFA is a well-established analysis to assess the construct validity of an instrument (Gorgens-Ekermans & Herbert, 2012). For PCQ-24, two concurrent models were tested through CFA, the first model analyzed was for a four-factor structure. In this model, four subscales of PCQ-24 including Self-efficacy, Hope, Resilience, and Optimism were taken as interrelated factors. And, the second model was the hierarchical model in which the four subscales mentioned above were loaded onto a latent factor of PsyCap. Findings show that the four-factor model displayed a better fit as compared to the hierarchical model, nevertheless author of this instrument and several other studies have confirmed the higher-order factor structure for PsyCap (Luthans et al., 2007). Results of this study reflects that each of the four subscales of PCQ-24 is a unique construct as well as are related with one another. Our findings were consistent with previous literature which characterized PsyCap as four correlated factors (see, e.g., Formiga, Viseu, & Jesus, 2014). These studies were mainly conducted in Latin cultures i.e., Spain, Portugal and Brazil, thus provided new information regarding the expression of this construct in countries with languages other than English. Same issue was earlier highlighted by Azanza, Domínguez, Moriano, and Molero (2014) who also found that tests may show different factor arrangements when administered on varied samples or with different languages other than the source language. This might have happened in present study as well because PCO-24 has been translated into Urdu language; and also the data was collected from small business entrepreneurs which is a distinct sample.

While the good fit of the four-factor model supports the idea of the four-dimensional nature of PsyCap, the four dimensions seem to be exceptionally related, proposing the plausibility of a higher-order factor underlying these four factors. Based on this observation, present study tested a hierarchical model in which the four factors loaded onto the overall PsyCap latent factor. Results of this hierarchical model were also found to be acceptable, thus present data also supported the higher-order factor structure for PsyCap as conceptualized by Luthans et al. (2007). Although, the model fit for four-factor structure was superior as compared to the hierarchical model, present study confirmed the higher-order factor structure for PCQ-24. This is because the authors of the instrument (Luthans et al., 2007) conceptualized PsyCap as a higher order construct.

The factor loadings of items of PCQ-24 were above the acceptable criteria, except for three items which showed factor loadings lower than the acceptable criteria. All these items are reverse scored items. Latest review of the psychometric properties of PCQ-24 (Dawkins et al., 2013) demonstrates issues with some of its items especially the negatively worded items. Furthermore, as indicated by CFAs from various studies, different researchers (Chen & Lim, 2012;

Dehramann, 2012; Gooty, Gavin, Johnson, Frazier, & Snow, 2009; Rego, Marques, Leal, Sousa, & Cunha, 2010) have also confirmed similar findings on PCQ-24 with reference to its negative items. Authors of these studies reported that removal of certain items and specifically those that are reverse-scored (i.e., Item no. 13, 20, & 23) would increase factor loadings and tends to improve overall model fit of the construct. The decision to remove the above mentioned items was carried out on the basis of low factor loadings and previous research literature which also shows these items to be problematic. Furthermore, authors of this instrument gave their consent to exclude these items from the final analysis explaining that all reverse coded items of the instrument have the potential to load with each other more than the mapped constructs. Finally, Hooper, Coughlan, and Mullen (2008) recommended that items with low factor loadings and low squared multiple correlations is an indication of high level of error, therefore, removal of such items is desirable to improve overall model fit. Also, Schmitt and Stults (1985) reported reverse coded items to be problematic, as these lower the reliability coefficients for the respective instrument. Thus, Item no. 13, 20, and 23 were excluded from the final analysis. However, present research suggests rewording of these negative items for future use of PCO-24 in Pakistani context. Also, the construct of PsyCap and its nature needs to be explored in Pakistani culture, and how this construct is perceived by the working individuals.

Alpha coefficients of the scale and its respective subscales were above the acceptable value of .70 as per criteria specified by George and Mallery (2003). Findings of the reliability analysis were consistent with the overall patterns in the literature that is, the subscales of Self-efficacy and Hope easily met the criteria of .70 for acceptable reliability. Whereas, in line with prior literature, Resilience and Optimism subscales showed lower reliability coefficients (Dawkins et al., 2013). Three items that were found to be problematic compromised the reliability of these subscales. One of these items belonged to the Resilience subscale (Item no. 13), whereas the other two items were of Optimism subscale (Item no. 20 & 23). Furthermore, all three items were reverse scored items. Schmitt and Stults (1985) described that reverse scored items generally reduce the reliability of the scale. As mentioned above all three problematic items were removed from the final analysis, thus alpha coefficients for PCQ-24 and its subscales achieve the threshold of acceptance for alpha reliability coefficient. Thus, reliability estimates showed that PCQ-24 was reliable, and items of the respective scale/subscale were internally consistent. Furthermore, corrected item total correlations of PCQ-24 and its subscales were also above the threshold of acceptance (i.e.,  $r \ge .30$ ) for all items.

Finally, the mean values obtained showed that small business entrepreneurs scored higher on the construct of PsyCap and its components. This finding was in line with the results obtained in a previous study. Baron, Franklin, and Hmieleski (2013) also found that entrepreneurs generally score higher on PsyCap and its components. Authors of this study concluded that entrepreneurs reported less perceived stress as compared to non-entrepreneurs because of their higher level of PsyCap.

#### **Limitations and Future Recommendations**

First, convenience sampling technique was applied and sample was taken from Rawalpindi and Islamabad only, therefore, generalizability of the results is a serious limitation. Next, the present study found that CFA for Urdu version of PCQ-24 did not show a good model fit, thus, items that were found to be problematic were excluded from the final analysis to obtain adequate model fit in CFA. Therefore, it is recommended for the future researchers using the Urdu version of PCQ-24 to perform exploratory factor analysis first, and then confirm the construct validity for PsyCap. Also, the three negative items of the instrument are consistently found to be problematic in previous literature, therefore, rewording of these items are suggested. Lastly, present research included small business entrepreneurs only, thus, it is suggested that future researchers should also study corporate businessmen to assess their general level of PsyCap and work-related functioning.

#### Implications

The present study translated the PCQ-24 for the first time in Pakistan to provide an Urdu version of the instrument. The study also reported the psychometrics of the Urdu translated version of PCQ-24, thus establishing the construct validity of PsyCap in Pakistan. Further, this work implies that the construct PsyCap behaves differently in Pakistani culture as compared to the Western culture, where this variable has been conceptualized. Therefore, there is a dire need to explore the construct of PsyCap in Pakistani context.

#### Conclusion

The construct of PsyCap is worth studying because it is an important variable that leads to various positive outcomes at work.

Considering this, present study attempted to translate and validate PCQ-24 which is a widely used instrument to measure PsyCap. The Urdu translated version of PCQ-24 showed adequate construct validity and reliability after excluding three problematic items including item no. 13, 20, and 23 (all three were negative items) which were found to cause poor model fit and lower the reliabilities.

# References

- Ali, N., & Ali, A. (2014). The mediating effect of job satisfaction between psychological capital and job burnout of Pakistani nurses. *Pakistan Journal of Commerce and Social Sciences*, 8(2), 399-412.
- Avey, J. B., Luthans, F., & Youssef, C. M. (2009). The additive value of positive psychological capital in predicting work attitudes and behaviors. *Journal of Management*, 36(2), 430-452.
- Avey, J. B., Wernsing, T. S., & Luthans, F. (2008). Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors. *Journal of Applied Behavioral Science*, 44, 48-70.
- Azanza, G., Domínguez, Á. J., Moriano, J. A., & Molero, F. J. (2014).
  Capital psicológicopositivo: Validacióndelcuestionario PCQ enEspaña [Positive psychological capital: Validation of the PCQ in Spain]. *Anales de Psicología*, 30, 294-301. doi:10.6018/analesps.30.1.153631
- Baron, R. A., Franklin, R. J., & Hmieleski, K. M. (2013). Why entrepreneurs often experience low, not high, levels of stress: The joint effects of selection and psychological capital. *Journal of Management*. doi:10.1177/ 0149206313495411.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185-216.
- Chen, D. J. Q., & Lim, V. K. G. (2012). Strength in adversity: The influence of psychological capital on job search. *Journal of Organizational Behavior*, *33*(6), 811-839. doi:10.1002/job.1814.
- Cheung, F., Tang, C. S., & Tang, S. (2011). Psychological capital as a moderator between emotional labor, burnout, and job satisfaction among school teachers in China. *International Journal of Stress Management*, 18, 348-371.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64, 89-136.
- Dawkins, S., Martin, A., Scott, J., & Sanderson, K. (2013). Building on the positives: A psychometric review and critical analysis of the construct of psychological capital. *Journal of Occupational and Organizational Psychology*, 86(3), 348-370.

- Dehramann, L. (2012). *Predictors of examination success in the SAICA qualifying examinations* (Unpublished master's thesis). Stellenbosch University, South Africa.
- Du Plessis, Y., & Barkhuizen, N. (2011). Psychological capital, a requisite for organisational performance in South Africa. South African Journal of Economic & Management Sciences, 15(1), 16-30.
- Ferketich, S. (1991). Focus on psychometrics: Aspects of item analysis. *Research in Nursing & Health*, 14, 165-168.
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Beverly Hills, CA: Sage.
- Floyd, F. J., & Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment*, 7(3), 286-299.
- Formiga, N., Viseu, J., & Jesus, S. N. (2014). Empirical verification of a measure of positive psychological capital in Brazilian workers. *Eureka*, 11, 284-300.
- Foxcroft, C. D., Roodt, G., & Abrahams, F. (2001). Psychological assessment: A brief retrospective overview. In C. Foxcroft, & G. Roodt (Eds.), An introduction to psychological assessment in the South African context (pp. 11-32). Cape Town, South Africa: Oxford University Press.
- George, D., & Mallery, P. (2003). SPSS for windows step by step: A simple guide and reference. (4th ed.). Boston: Allyn and Bacon.
- Gooty, J., Gavin, M., Johnson, P. D., Frazier, M. L., & Snow, D. B. (2009). In the eyes of the beholder: Transformational leadership, positive psychological capital, and performance. *Journal of Leadership & Organizational Studies*, 15(4), 353-367. doi:10.1177/1548051809332021.
- Gorgens-Ekermans, G., & Herbert, M. (2012). Psychological capital: Internal and external validity of the Psychological Capital Questionnaire (PCQ-24) on a South African Sample. South African Journal of Industrial Psychology, 39(2), 1-12.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6, 307-324. Retrieved from http://dx.doi. org/10.1037/1089-2680.6.4.307
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modeling: Guidelines for determining model fit. *The Electronic Journal* of Business Research Methods, 6(1), 53-60.
- Jawahar, I. M., Meurs, J. A., Ferris, G. R., & Hochwarter, W. A. (2008). Selfefficacy and political skill as comparative predictors of task and contextual performance: A two-study constructive replication. *Human Performance*, 21(2), 138-157.
- Laschinger, H. K. S., & Grau, A. L. (2012). The influence of personal dispositional factors and organizational resources on workplace violence, burnout, and health outcomes in new graduate nurses: A cross-sectional study. *International Journal of Nursing Studies*, 49, 282-291.

- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23, 695-706.
- Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly*, 21, 41-67. Retrieved from http://dx.doi.org/10.1002/hrdq.20034
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541-572.
- Luthans, F., Avolio, B. J., Walumbwa, F. O., & Li, W. (2005). The Psychological Capital of Chinese workers: Exploring the relationship with performance. *Management and Organization Review*, 1(2), 249-271.
- Manzoor, S. R., Khattak, I. A., & Hassan, S. (2015). Psychological capital and counterproductive work behavior with intrusion of employee performance: Study from KP, Pakistan Universities. *City University Research Journal*, 5(2), 78-96.
- Nigah, N., Davis, A. J., & Hurrell, S. A. (2012). The impact of buddying on psychological capital and work engagement: An empirical study of socialization in the professional services sector. *Thunderbird International Business Review*, 54(6), 891-905.
- Rego, A., Marques, C., Leal, S., Sousa, F., & Pina e Cunha, M. (2010). Psychological capital and performance of Portuguese civil servants: Exploring neutralizers in the context of an appraisal system. *The International Journal of Human Resource Management*, 21(9), 1531-1552. doi:10.1080/09585192.2010.488459.
- Rego, A., Sousa, F., Marques, C., & Cunha, M. P. (2012). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65, 429-437.
- Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4(3), 219-247.
- Schmidt, A. M., & DeShon, R. P. (2010). The moderating effects of performance ambiguity on the relationship between self-efficacy and performance. *The Journal of Applied Psychology*, 95(3), 572-81.
- Schmitt, N., & Stults, D. M. (1985). Factors defined by negatively keyed items: The result of careless respondents? *Applied Psychological Measurement*, 9, 367-373.
- Seligman, M. (1990). Learned optimism. New York: A. A. Knopf, Inc.
- Snyder, C. R. (1991). The will and ways: Development and validation of an individual differences measure of hope. *Journal of Personality & Social Psychology*, 60(4), 570-585.
- Snyder, C. R., & Lopez, S. J. (2002). *Handbook of positive psychology*. Oxford: Oxford University Press.

- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, *124*, 240-261.
- Tripathi, P. (2011). Employee well-being: Role of psychological capital. *Amity Journal of Applied Psychology*, 2(1), 18-22.
- Tuten, T. L., & Neidermeyer, P. E. (2004). Performance, satisfaction, and turnover in call centers. *Journal of Business Research*, 57(1), 26-34.
- Van de Vijver, F., & Leung, K. (2001). Personality in cultural context: Methodological issues. *Journal of Personality*, 69(6), 1007-1031.
- Wazir, S. A., Manzoor, S. R., & Hassan, S. (2014). Influential role of psychological capital interventions towards enhancement of female teachers' attitude & daughters education: Evidence from universities of KP Pakistan. *Journal of Social Sciences*, 7(2), 292-312.
- Youssef, C. M., & Luthans, F. (2007). Positive organizational behavior in the workplace: The impact of hope, optimism, and resilience. *Journal of Management*, 33(5), 774-800.

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