

Research Article

DOI 10.33897/fujp.v6i1.348

Successful Aging Scale: Urdu Translation and Validation Study on Older Adults

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Abstract

Background. Despite the recent work on successful aging, there are few valid and reliable measures available for capturing this construct.

Objective. One of the widely used measure is Successful Aging Scale (SAS; Reker, 2009) and the present study aimed to translate and validate this scale for using it with the Pakistani older population.

Method. This study consisted of two parts. Part 1 dealt with the translation of the scale following Brislin's (1970) guidelines while in Part 2 validity was established. Part 2 consisted of two phases: In Phase I, cross-language validation was determined on a sample of 60 older adults and the findings of the test-retest conditions over a two-week time period showed that the Urdu version of SAS has better comprehension properties as compared to the English original version. In Phase II of the Part 2, construct validity was established on a sample of 300 older adults (150 men, 150 women) with age ranging from 50 to 87 ($M = 58.71$, $SD = 6.91$).

Results. Findings of confirmatory factor analysis showed that after removing two items from SAS, the model best fit the data. Alpha coefficient Correlation between age-related stereotype and successful aging provided evidence for the convergent validity of SAS. Implications. Overall, the Urdu version of SAS appeared to be a reliable and valid measure for the use among the Pakistani population.

Keywords. Successful aging, indigenous, confirmatory factor analyses, construct validity.



Introduction

The elder population in Pakistan and around the world is occupying a higher proportion due to increasing life expectancy with increased medical technology and social progress. In the past, stigma associated with the older adults has led to them as a burden in society because they cannot be useful members in society. In recent years the concept of successful aging is an important research subject in the field of gerontology (Farooq, 2018; Ginsburg et al., 2017). It reflects the growing need to change the views on aging. In the past, most of the research focused on the negative aspects of aging (Row & Kahn, 1997). Though in this regard research on successful aging are considering the functional level and contributions of the older adults in the society (Guo et al., 2015; Shafiq, 2015).

However there has been lack of consensus on the successful aging definition and instruments (Bowling & Iliffe, 2006; Cosco et al., 2014; Depp, & Jeste, 2006). Similarly, many gerontologists and theorists have not come to an agreement about SA indicators (subjective, objective, or both), and measurement instruments for them (Pruchno, 2015). In the present study, a definition by Reker (2009) is used that describes the multiple indicators of successful aging. Reker (2009) defined successful aging as having three factors: (a) healthy lifestyle (b) adaptive coping (c) engagement with life. Healthy lifestyles include the components that an older individual can make choices. They engage themselves in good and healthy routines. Adaptive coping strategies in successful aging are confronting difficulties directly, construction of realistic assessments of problems, identifying and altering unhealthy emotional responses, and trying to stop adversative effects on the body. Active engagement with life comprises daily routine activities.

Next important issue is to measure successful aging with the measure that best describes it and measure its dimensions. Previously many instruments had been used to measure the successful aging. But to measure the subjective successful aging is by the using of the validated self-assessment scales that incorporates the multiple indicators as described by the Reker (2009). Successful Aging Questionnaire (Tate et al., 2003), Successful Aging Questionnaire (Phelan et al., 2004), the Life Satisfaction Index for the Third Age (Barrett & Murk, 2006), Successful Aging Inventory (Troutman et al., 2011) are the instruments used previously.

Successful Aging Scale (Reker, 2009) has been used in Turkish and Brazile research (Chaves, 2009; Hazer & Ozsungur, 2007; Salamene et al., 2021). Reker (2009) developed Successful Aging Scale based on the four theoretical frameworks including the Rowe and Kahn (1997) model; the SOC model by Baltes and Baltes (1990); the Psychological Well-being Model by Ryff (1989); and the Life Span Model of SA by Schulz and Heckhausen (1996). These models despite the limitation have made huge contributions in conceptualizing the successful aging concept.

Successful aging original version includes the 14 items contributing to assess the successful aging among older adults. It comprises of the three subscales or dimensions measuring different attitudes. Previously successful Aging Scale has been translated into Turkish (Hazer & Özsungur, 2017), and Brazilian (Salamene et al., 2020), however, as per the researcher's knowledge it has not been translated into the Urdu language in Pakistan.

Successful aging scale convergent validity was explored by using Image of Aging Stereotypes scale (Levy et al., 2004) Older adults practice more healthy lifestyles and significantly more preventive health behaviors, they have better longevity, recovery from the trauma and good functional health when they have positive self-perception or positive aging stereotypes as compared to the negative self-perception (Levy et al., 2016). In a subsequent study Scheierl (2009) reviewed that age-related prejudices are significant predictors for the well-being of the older individuals. He demonstrated that positive and negative stereotypes are activated automatically, and negative stereotypes decrease the memory of performance, self-efficacy, willpower, and while positive stereotypes enhanced these factors. Research has shown that successful agers high in emotional intelligence (ability to and communicate emotions and to recognize the emotions in other people), and aging stereotypes (Levy et al., 2019; Levy et al., 2004; Schulz & Heckhausen, 1996), good physical and mental health (Palmore, 1979). Thus, a valid measure of successful aging is predicted to correlate significantly with measures of stereotypes, which is self-rated physical health.

In Pakistan the population of older adults is increasing as elsewhere around the world (Ashiq & Asad, 2017). There are many other challenges associated with older age.

Firstly, geriatrics health continues worsening because of the chronic illnesses in this stage. They are more prone to chronic illnesses because of is the decreased level of the immunity in the geriatric populations. This population spends a big amount of the medical expenditure on themselves (Saqlain, 2019). Increased number of hospitalizations creating challenges for countries like Pakistan that is lacking resources. Secondly, an increased nuclear family systems, privacy issues, and space issues in families have come to marginalize the older population to live alone. Except for a few people, most of the older adults lack pension benefits that lead to dependence for financial assistance. Thirdly, numbers of old age homes are increasing doubtfully. Because availing an old age home is not according to our cultural norm. Fourthly, Pakistan is the country that is offering very less social security protection programs or employees old age benefits for older adults, but most of the elderly are ineligible to claim these benefits. Lastly, their psychosocial needs are not encountered in this age because of all these factors.

The aim of this study was to translate and to report the psychometric properties of the first translation and cross-cultural adaptation of Successful Aging Scale in Pakistani culture. This will be beneficial to know the successful aging among older adults across the globe as Pakistani are living all around the globe, secondly this scale will measure the multiple indicators of successful aging in older adults. The indigenous translation of the scale is needed because the interview guide takes a lot of time of the older adults in qualitative interviews. This research had been done in the pandemic year, in which older adults were restricted to their homes. They were approached in their home to translate the scale and later on these scales were received by them.

The Urdu translated version of scales measuring successful aging will be convenient to use with future studies. Because language restrictions create problems with indigenous population and the older population is not having a higher level of education. Urdu speaking community is living all over the globe, it will be beneficial to use Urdu measures for their better understanding.

Method

Instruments. Following instruments were used in the present study:

Successful Aging Scale (SAS). Successful Aging Scale was a 14 items scale developed by Reker (2009).

It consists of the three subscales Healthy Lifestyle (1,7,8, & 13), Adaptive Coping (2, 3, 12, & 14), and Engagement with Life (4, 5, 6,9, 10 & 11). This scale was rated on seven-point Likert type response categories ranging from 1 as strongly disagree and 7 as strongly agree. High scores on each dimension indicated the presence of that successful aging experience of the older adults in the community. Satisfactory alpha coefficients have been reported by previous research (Hazer & Ozsungur, 2017). This scale was translated into Urdu language and validated in the Study 1 of the research.

Image of Aging. Levy et al. (2004) developed this scale to measure the aging stereotypes about older adults. It consists of the 2 subscales, positive stereotypes, and negative stereotypes. Participants rated to what extent they endorsed 9 Positive Stereotypes (item no. 1, 3, 5, 7, 9, 11, 14, 16, & 18) and 9 Negative Stereotypes (item no. 2, 4, 6, 8, 10, 12, 13, 15, & 17). This scale was rated on seven-point Likert type response categories ranging from 0 as does not match my image to 6 completely match my image. The score range of the positive and the negative age-stereotypes components is from 0 to 54 of each dimension. There were no reverse items. Cronbach's alpha reliability of the positive stereotype is .84 and negative stereotype is .82. High scores on each dimension indicate the presence of that aging stereotype in older adults. This study was completed in two Parts: Part 1 dealt with the translation of the scale while in Part 2 validity was established. Part 2 consisted of two phases: In Phase I, cross-language validation was determined while in Phase II of the Part 2, construct validity was established. Sample and procedure to conduct the research has been discussed separately in each Phase. Following are the details of each part.

Part 1: Translation and Validation of Measures

The instruments used in the present study were available in Urdu language except Successful Aging Scale. Therefore, Successful Aging Scale was translated and adapted into Urdu language as it had not been previously translated in the Pakistani population.

Objectives. The main objective of this study was to translate and validate Successful Aging Scale,

Translation of Study Instruments. The instruments used in this study were in Urdu language to make them easily understood and comprehend by the elderly sample.

All study instruments except Successful Aging Scale (SAS) were available in Urdu language. Hence, this part dealt with the translation of the scales. For translation, guidelines provided by Brislin (1970) were followed. Translation was carried out into the following steps:

Step I: Acquiring permission from the authors

Step II: Forward translation

Step III: Selection of the most suitable items through committee approach

Step IV: Back translation into the source language

Step V: Committee approach for comparing the best translation.

Step I: Acquiring permission from the authors.

The original authors of respective scales were approached for the permission to translate and use SAS.

Step II: Forward translation.

In this step the successful aging scale translation was done from the source language, English, into Urdu. Translation was carried out by the bilinguals. Five participants participated in the forward translation process all having psychology background. All five participants were fluent in reading, speaking, and writing in source and target language. During translation, there was no replacement or deletion of any items and maximum similarity of the source and target language was maintained.

Step III: Committee approach for selecting the best translation.

After receiving the five translations back from the participants of each of the scales in a committee approach, the best translations were picked up from all five translations. Committee consisted of three members including two experts in psychology from faculty at the National Institute of the Psychology (NIP), Quaid-i-Azam University, Islamabad, and the researcher herself. Every item of the scale was thoroughly examined by the committee, and out of the five translations, one that carried exact and closest meaning to the original text was retained and selected. During committee approach it was made sure that none of the items contain hard or difficult meanings of the source that would not be comprehend from the sample. Translated versions were evaluated based on the context and grammatical accuracy, while emphasizing on the equivalence between original text and translation.

Step IV: Back translation.

In this step all the selected items from committee members were given to another set of bilingual experts for back translation into the source language. Source language was English. Five of each of the experts were approached for the back translation of two scales and they were completely unaware of the original scale items in English language. All the experts were fluency in English writing, reading, and speaking. Before giving the back translation all were instructed to translate the items into English by keeping their original meaning the same and do not change the context and meaning. They translated and kept the content equivalent with Urdu versions.

Step V: Committee approach for comparing the best translation.

Successful Aging Scale was taken back to committee for their reviews again and for the final selection of the items. Committee was consisted of three members including two faculty members having sound background in psychometrics and the researcher herself. In the committee, each item was assessed, and they sought the concordance between the original scale and translated English version. With the mutual decision of the committee, all those items were retained which conveyed the same meaning as that of the original scale. Little modifications were done with it, to make it more understandable. Some of the words were written into the parenthesis to convey their better insight. Otherwise, participants commented that they did not have difficulty in understanding they could easily understand the translated version of the instruments. When translation was finalized, translated version with back translations were emailed to the original authors for their reviews.

Part 2: Cross Language Validation

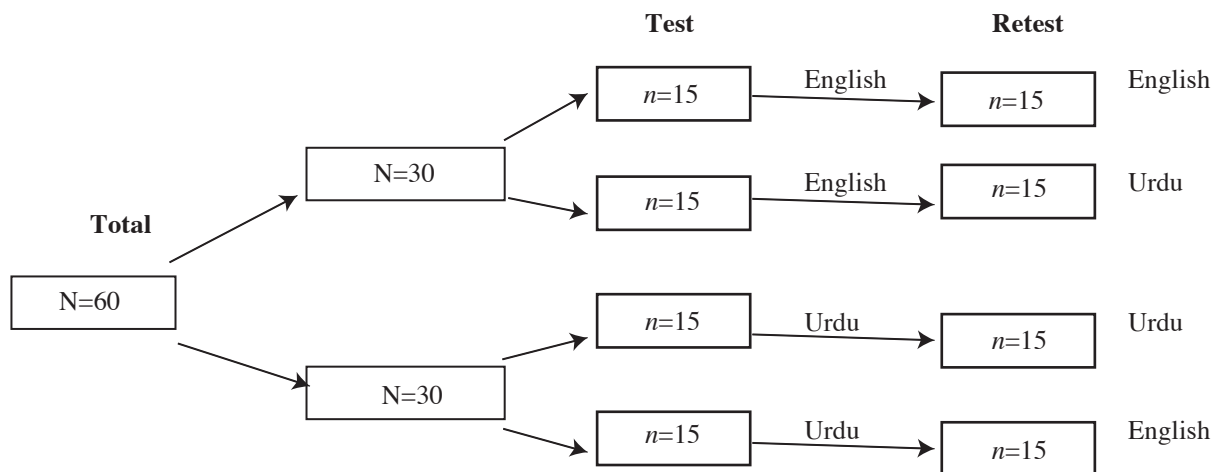
Phase I: Cross Language Validation. This phase was designed to establish the cross-language validation of the translated versions of Successful Aging Scale.

Sample. The cross-language validation sample consisted of the 60 older adults (men = 30, women = 30) from Islamabad and Rawalpindi. Participants' age ranged from 52 to 80 years ($M = 58.71$, $SD = 6.91$). Procedure. Participants were approached directly from their homes based on convenience. All participants were briefed about the nature, purpose, and implications of the study before filling the forms. Sample was distributed into four equal groups of 15 people. Each group was named as English-English, English-Urdu, Urdu-English and Urdu-Urdu on test-retest conditions.

Two weeks' time interval between test-retest conditions was used. Test was administered that way in English- English test- retest administration ($n = 15$) participants were administered the original version of the instrument and after the 15 days of gap the same participants were administered the original version of scale. In the second group ($n = 15$) participants were administered English-Urdu, in which participants were firstly administered the original instrument and after the gap of 15 days the same participants were administered the translated version (Urdu) of the instrument.

In Urdu-English test-retest conditions ($n = 15$) were administered a translated version of the scale and in the second attempt after 15 days they were administered the original version of the instrument in English. In the last group ($n = 15$) Urdu-Urdu test-retest condition participants were administered a translated version of the instrument in the Urdu and after the interval of 15 days again administered Urdu version of the instrument.

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



Results. All the data collected from the older adults by the procedure described above was used to establish test-retest reliabilities of the translated (Urdu) version of the research instrument. Results are described below obtained from data.

Table 1

Test-retest Reliabilities of Translated Successful Aging Scale Among Older Adults ($N = 60$)

Scale	GP. I (EE) ($n=15$)	GP. II (EU) ($n=15$)	GP. III (UE) ($n=15$)	GP. IV (UU) ($n=15$)	Reliability by Original Author
Successful Aging Scale	.86 *	.52 *	.57 *	.92 *	.84
Healthy lifestyle	.70 *	.48 *	.65 *	.79 *	.72
Adaptive coping	.76 *	.53 *	.59 *	.78 *	.73
Engagement with life	.71 *	.44 *	.61 *	.74 *	.75

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

Table 1 shows correlation between two administrations of scale for four groups. Significant correlations indicate high temporal validity of the scale among older adults. Correlation coefficient for the Urdu-Urdu was higher than the English-English group. Which means that the Urdu version of the scale has better understanding, and comprehension as compared to the original version. These findings support cross-language value validation of the translated scale among older adults.

Phase II: Construct Validation of Instruments.

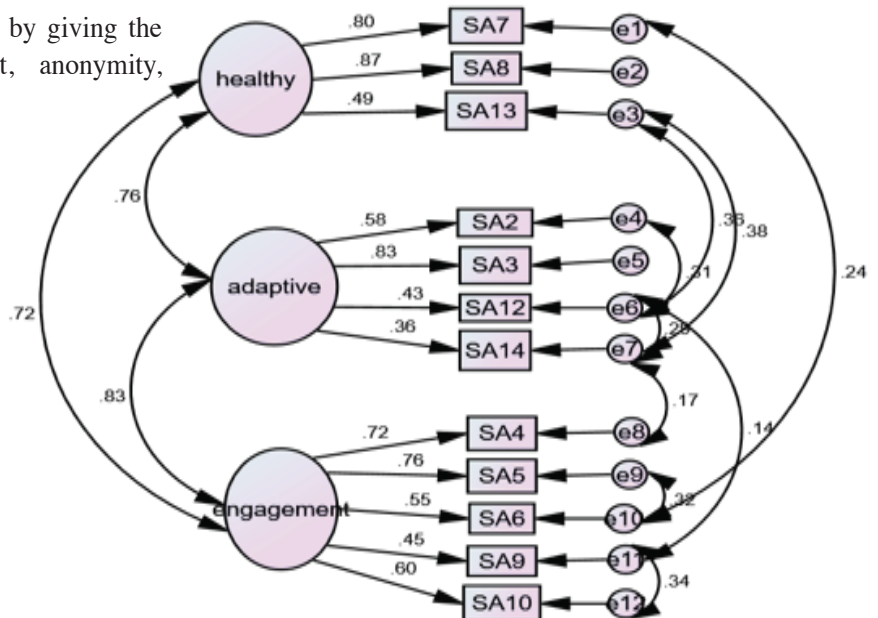
Since the Successful Aging Scale was translated into Urdu language, it was needed to establish its construct validity as well. The other measures used in the present study were already present in Urdu to be more comprehensive for the older adults to answer. Therefore, to validate the structure of Successful Aging Scale, confirmatory factor analysis was done. Results demonstrated that this scale is a valid measure of successful aging among older adults.

Sample. Sample consisted of 300 older adults (men = 150, women = 150) with their age ranging from 50 to 87 years ($M = 58.71$, $SD = 6.91$). In the present study a convenient sampling method was used for data collection ($N = 300$). All data was collected from different cities of Pakistan e.g., Islamabad, Rawalpindi, and Gujranwala. It was ensured that for being included in the sample, participant's age must be above 50 years old. Exclusion criteria was, participants having, a) any terminal diseases, b) disability, c) having any clinically proven cognitive and psychological impairment. Participants having terminal disease and disabilities were removed from the research.

Procedure

Older adults were approached directly in their homes from different cities of Pakistan including Islamabad, Rawalpindi, Gujranwala, and Lahore. All participants were briefed about the nature, purpose, and implications of the study before filling the forms, and their consent to fill the form was taken from them. Data was collected through questionnaires given to the participants and it was sure that none of the question remain unanswered. Ethical protocol was followed by giving the participants voluntary participation right, anonymity, confidentiality, right to quit any time.

Figure 2. CFA model of three factor successful aging scale



Results. Amos version 22 was used to establish the construct validity of the instrument through Confirmatory Factors Analysis (CFA). It was one of the objectives to establish the psychometric validity of the translated instrument. These instruments are used in Western and Central Asian cultural with different population and different cultures across literature, therefore, it was mandatory to confirm the construct validity of the translated instruments in present data. CFA was conducted on the measure as follows:

1. Successful Aging Scale (SAS). For the structural validity of instruments, several fit indices were estimated to see the overall fit model for the measures through structural equation modelling. Chi-Square (χ^2), Incremental Fit Index (IFI), Normed Fit Index (NFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSE), and were included into the model fit. According to the Brown (2006), chi-square model is used to evaluate whether the model exactly holds on the population, and nonsignificant results suggest good model fit.

Confirmatory factor analysis for the Successful Aging Scale (SAS). Successful Aging Scale (Reker, 2009) was translated into Pakistani culture and to confirm its factor structure on the adult's population CFA is performed. Successful Aging Scale had been investigated as three factor structure as well as composite scores. Visual presentation of the model with its factor loading and model fit Table 2 is given below:

Figure 2 indicates that factor loading of the Successful Aging Scale ranges from $\lambda = .36, \lambda = .87$. All items' factor loading is more than .60 which are in good range (Field, 2009) and they were retained except item 1, 11 which were showing very low factor loading, that was aligned with original author's scale loading. So, they were removed from the study variables.

Table 2

Confirmatory Factor Analysis of Successful Aging Scale for Three Factor Structure (N = 300)

	Model	χ^2 (df)	NFI	IFI	TLI	CFI	RMSE	$\Delta\chi^2$ (Δ df)
Successful Aging Scale	Model 1	304.261(74)	.76	.80	.75	.81	.11	
	Model 2	95.69 (42)	.93	.96	.94	.96	.06	208.57(32)

Note. Incremental Fit Index = IFI, Normed Fit Index = NFI, Tucker-Lewis Index = TLI, Comparative Fit Index = CFI, Root Mean Square Error of Approximation = RMSEA, and Chi-Square = χ^2

Model 1 = Default Model of CFA, Model 2 = M 1 after adding error variances.

Table 2 shows model fit indices of the Successful Aging Scales' dimension. It shows that Model 1 fit $\chi^2 = 304.261$, has values of NFI = .76, IFI = .80, TLI = .75, CFI = .81, and RMSEA = .11 the value of the RMSEA is higher than acceptable range and values of the NFI, IFI, TLI, CFI, and RMSEA are lower, so in order to get the better fit, error covariance has been added on the basis of the content overlapping. The value of the RMSEA has been improved in the second model after adding error variance, now its value is .06, and values of the NFI, IFI, TLI, CFI have been also increased to make it a good fit. Therefore, Model 2 well fits the data of this study.

Figure 3. CFA model of composite successful aging scale



Figure 3 indicates that factor loading of composites of the Successful Aging Scale range from $\lambda = .39, \lambda = .90$. All items factor loading more than .60 are in good range (Field, 2009) they were retained except item 1, 11 which were showing very low factor loading, that was aligned with the original author's scale loading. So, they were removed from the study variables.

Table 3*Confirmatory Factor Analysis of Successful Aging Scale as Composite Scale (N = 300)*

	Model	χ^2 (df)	NFI	IFI	TLI	CFI	RMSEA	$\Delta\chi^2$ (Δdf)
Successful Aging for Composite Score 12 items	Model 1	493.23(52)	.65	.68	.59	.68	.16	
	Model 2	76.26 (37)	.94	.97	.95	.97	.06	416.97(15)

Note. Incremental Fit Index = IFI, Normed Fit Index = NFI, Tucker-Lewis Index = TLI, Comparative Fit Index = CFI, Root Mean Square Error of Approximation = RMSE, and Chi-Square = χ^2

Model 1 = Default Model of CFA

Model 2 = M 1 after adding error variances.

Table 3 shows model fit indices of the Successful Aging Scales' composite score. It shows that Model 1 fit $\chi^2 = 493.23$, has values of NFI = .65, IFI = .68, TLI = .59, CFI = .68, and RMSEA = .16. the value of the RMSEA is higher than acceptable range and values of the NFI, IFI, TLI, CFI, and RMSEA are lower, so to get the better fit, error covariance has been added based on the content overlapping. The value of the RMSEA has been improved in the second model after adding error variance, now its value is .06, and values of the NFI, IFI, TLI, CFI have been also increased to make it a good fit. Therefore, Model 2 well fits the data of this study.

Phase III: Convergent validity

Sample. In the present study convenient sampling method was used for data collection. All data was collected from the different cities of Pakistan e.g., Islamabad, Rawalpindi, Lahore, and Gujranwala. It was assured that for being included in the sample, participant's age must be above 50 years old. Exclusion criteria was, participants having, a) any terminal diseases, b) disability, c) having any clinical proven cognitive and psychological impairment. Sample was comprised of the (men = 150, women = 150) taken from different cities including Islamabad, Rawalpindi, and Gujranwala. The age range of the sample is from 50 to 87 years ($M=58.71$, $SD = 6.91$).

Procedure. The present research study was cross sectional research design and quantitative approach was used. A convenient sampling method was used for data collection.

Older adults were approached directly from the different cities of Pakistan e.g., Islamabad, Rawalpindi, Gujranwala, and Lahore. Participants were approached in their houses to fill the survey forms. All participants were briefed about the nature, purpose, and implications of the study before filling the forms, and their consent to fill the form was taken from them. Ethical protocol was followed by giving the participants voluntary participation right, anonymity, confidentiality, right to quit any time. Correlation between the successful aging and image of aging scale is given below.

Results

Correlation Analysis. Bivariate correlation was to assess the association between study variables used in the main study to see the construct validity. Results are described in Table 4:

Table 4*Pearson Correlation Between Study Variables for Main Study (N = 300)*

Sr.No	Variable	1	2	3	4	5	6
1	SA	-	.81 **	.83 **	.86 **	.46 **	-.21 **
2	HLS		-	.60 **	.56 **	.32 **	-.21 **
3	AC			-	.51 **	.43 **	-.62 **
4	EL				-	.40 **	-.61 **
5	PS					-	-.31 **
6	NS						-

Note. SA = Successful Aging, HLS = Healthy Lifestyle, AC = Adaptive Coping, EL= Engagement With Life, PS = Positive aging Stereotypes, NS = Negative aging Stereotypes. ** $p < .01$

Table 4 shows that all the relationships are significant in the proposed direction moderately to highly correlated with each other. Scale and Subscales of the successful aging scale are positively correlated with each other showing evidence for the construct validity. Successful aging is also positively correlated with Positive stereotypes while it is negatively correlated with the negative stereotypes.

Discussion

The objective of this study was to translate, validate and explore convergent validity of the successful aging scale among older adults. The current research was divided into two parts. Part 1 dealt with translation of Successful Aging Scale (Reker, 2009). Thus, it provided the temporal validity of these scales. As it possessed the external consistency of because it provided the consistency of the scores over the time interval. Sample comprised an equal number of the women and men. Results further indicated that Urdu-Urdu test-retest reliabilities are better than the English-English test-retest reliabilities. This provides the support for the cross-language validations of the scales. Part 2 further consisted of three phases. In Phase 1 cross-language validation was determined on a sample of ($N = 60$). Findings revealed that measure has satisfactory consistency over time and alpha coefficients of cross-language administrations provided the evidence for the validity of the translated measures. In Phase II of Part 2, construct validity was established through confirmatory factor analysis on a sample of ($N = 300$) older adults.

Results obtained from CFA of Successful Aging Scale three factor structure indicated that item 1 and item 11 had low factor loading. Descriptive analysis of these items showed that participants scored low on these items. These items were not according to the Pakistani cultural norms. Item 1 is “I am unable to make choices about things that affect how I age, like my diet, exercise and smoking.” Item 11 “I feel that I am not in control of my immediate environment.” In Pakistani culture parent’s major focus is their children. They keep themselves in the least priorities. And due to the equal representation of the women in the research, a lot of variability was seen among the data. According to the original author these items could be deleted from the results to avoid variability of the results. In the model fit indices was achieved for the error variance and hence improving overall fitness of the model.

Error variances were drawn between the different factors which indicated that these factors possess a statistically significant relation with one another. Findings provided us the support that the translated instrument used in the present study was equally applicable and valid on Pakistani culture as they were applicable on their native cultures.

In Phase 3 of part II, convergent validity was established. For this purpose, correlation was computed using Pearson’s Product Moment Correlation to see the relationship between study variables. Results showed significant correlation and in the proposed direction. Earlier research also suggests a positive relationship between successful aging and positive stereotypes about aging (Levy et al., 2004). Relationship between positive stereotypes and successful aging was in proposed direction proposed by literature (see Table 4). When older adults have perceived and have positive beliefs about aging process, they practice more healthy lifestyles and adopt preventive health behaviors which led them to have better longevity, recovery from the trauma (Levy et al., 2004; Levy et al., 2016). According to the Meisner (2012), Asian culture held more positive attitudes. Reason of this relationship in Pakistani culture could be that individuals are having more positive stereotypes regarding the health, that leads to enhance their physical and cognitive performance that leads to successful aging. They show social comparison in which they see other older adults as sick, frail, and dependent, and they engage themselves into the long-term health outcomes, physical, and mental activities to avoid being unsuccessfully aging.

Table further showed that negative stereotypes have negatively negative relationship with successful aging was supported by the findings (see Table 4). These finding are in accordance with the earlier researcher on this relationship (see Table 4). Earlier research also suggests a negative relationship between successful aging and negative stereotypes about aging (Levy et al., 2019). In Pakistani society that gives the view of negative ageing stereotypes when one sees once ‘self in the mirror with wrinkled face. Ageing stereotypes works on behaviorally, psychologically, or physiologically. Psychologically, aging stereotypes generates expectation, and it acts as self-fulfilling prophecy (Levy et al., 2016; Ramírez et al., 2019; Scheierl 2009; Zhang et al., 2018).

When older adults have negative beliefs about the aging process, they do not practice healthy lifestyles and preventive health behaviors which do not lead them to have longevity, recovery from the trauma and good functional health (Levy et al., 2002; Levy et al., 2016). They perceive themselves as sick, helpless, and dependent, because of the fear of being perceived as sick by the others they do not seek medical assistance which eventually forbid them to solve long-term health related outcomes and successful aging.

Conclusion, Limitation, and Implications. Based on findings provided, the support that translated instrument used in the present study was equally applicable and valid on Pakistani culture as they were applicable on their native cultures (see Figure 2, 3). The Urdu translated version of scales measuring, successful aging, will be convenient to use with future studies. Because language restrictions create problem with indigenous population, and older population is not having higher level of the education. Urdu speaking community is living all over the globe, it will be beneficial to use Urdu measures for their better understanding.

In psychology, studies deal with complex human behavior, and they face some problem and limitation. Some of the limitations of the present study are, the sample characteristics and inclusion criteria, sample size was small, and it was restricted to the few geographical areas. It was implemented that results could not generalized on larger population of elderly. It is suggested that for the future geriatrics researches larger sample size and diverse geographical locations should be included so that results could be generalized to broader domains. Future studies should include more vigorous methodological controls (eg., random sampling methods), more sophisticated analytical strategies (i.e., measurement invariance) and cross-cultural designs to test for cultural effects to deal with successful aging confounders.

This study will be beneficial in contributing the gerontology literature in Pakistani community by highlighting the significance of many factors in predicting the successful aging. Pakistan is a patriarchal society, the perception of the men and women are different, so it was needed in the present study to highlight the predictors of successful aging.

Most often, practitioners provide assessment based upon the chronological age and ignore their functional capacity. This will be a fundamental approach in reducing ageistic attitude. This research would have a significant contribution in the gerontology literature. But this study was from a normal sample living on their own or with their children. Future reaches could have deployed samples from the old home setting to see the comparative sample results and protective factor in both communities. This could help to see the effect of successful aging's predictors among normal sample and old home settings. Due to the sample characteristics and inclusion criteria, sample size was small, and it was restricted to the few geographical areas. It was implemented that results could not generalize to a larger population of elderly. It is suggested that for the future geriatrics research larger sample size and diverse geographical locations should be included so that results could be generalized to broader domains.

Declaration

Authors' Contribution. All authors contributed to the conceptualizations of the formulation of research design, literature review, scale translation, data collection and data analysis.

Conflict of Interest. Authors declare that they have no conflict of interest.

Funding Disclosure. This study did not receive any grant from any funding institutions in the public or private sectors.

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