Validating of organizational leadership assessment in post-secondary education

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ABSTRACT: The present study validates the organizational leadership assessment (OLA) instrument. The OLA questionnaire has been widely used in Western countries, and it has also been used in non-western countries. We translated the OLA into Bengali and administered this to 570 post-secondary students. Specifically, it examines the feasibility of its use with Bengali Medium students in West Bengal, India. The Principal Component Analysis (PCA) retained a six-factor solution with a satisfactory

psychometric reliable research instrument (OLA). The psychometric features of OLA supported its feasibility as a sound and reliable research instrument to measure students' perception of teacher's Servant-leadership behavior in the context of West Bengal.

Keywords: Servant leadership, psychometric, principal component analysis

INTRODUCTION

Laub (1999) first successfully defined and developed the organizational leadership assessment (OLA) instrument for measuring servant leadership in organizations. The OLA measures six aspects of servant leadership; value people develop people, build community, display authenticity, provides leadership, and share leadership. More than 80 researchers validated and used the OLA instrument in the service sector, organizations, and their employees in the Western context. In the present study, we validate the instrument that is often used in English-speaking countries in the Western context and distinct context of post-secondary education in the Indian state of West Bengal (Chakrabarty, 2016). The Organizational Leadership Assessment (OLA) is the most used instrument to measure servant leadership characteristics. Laub (1999) developed the OLA through a Delphi survey method. The instrument was revised for the field test. A total of 828 of the respondents participated from 40 organizations from various states of the United State and one from the Netherland. The respondents were instructed to indicate their level of agreement or disagreement from strongly disagree; scoring 1 to strongly agree, scoring 5. The OLA's instrument reliability

test was demonstrated by using a Cronbach alpha coefficient of all six sub-scales ranged from 0.93 to 0.90 and estimated reliability was 0.98. The results indicated the sufficient internal consistency of the items. The OLA's construct validity is demonstrated confirmatory or exploratory factor analysis showing that it measures several distinct scales that reflect a different aspect of servant leadership. In this study, exploratory factor analysis was used to show that a six-factor model provided a good fit to Bengali medium students' responses to the 60-item OLA questionnaire. Previous studies by Miears (2004); Anderson (2005); Thompson (2002a); Ledbetter (2003); Mckenzie (2012); Salameh (2011) utilized the OLA survey and determined a high level of reliability in association with the instrument. With more than twenty years of research, there is now a plethora of instruments being used for measuring servant leadership. One limitation of many scales used to assess servant leadership behavior (Ehrhart, 2004; Barbutto and Wheeler, 2006; Liden, et al., 2008; Sendjaya et al., 2008; Van Dierendonck and Nuijten, 2011) is that no one used these for measuring students' perception of teacher's servant-leadership behavior at the post-secondary

level school. For example, the servant leadership Scale (Ehrhart, 2004) was administered to a sample of 254 employee and university students, Servant Leadership Questionnaire (Burbuto and Wheeler, 2006) was administered to 388 followers, Servant Leadership Scale (Liden et al., 2008) to 283 undergraduate students, Servant Leadership Behavior Scale (Sendjaya, et al., 2008) to 15 senior executives and Salameh (2011) used validated OLA among 432 school teachers. It is mean worthy that insufficient attention has been paid to the role of the students' perception of teacher's servant leadership behavior in the quality endeavor. To the knowledge of the author, the OLA has never been used in the context of West Bengal at the post-secondary level. Given the possible cultural influences, the adapted instrument needs to be validated for its applicability in the new response context. The present study, therefore, presents a good opportunity for the adoption and validation of this instrument. The OLA's internal validity is demonstrated by evaluating the correlations between servant leadership and academic achievement. The OLA survey instrument was employed in discovering the relationship between servant leadership and students' academic achievement.

The OLA in western contexts

The OLA has been mostly used in the United States of America, in different versions: English, French, Spanish, Portuguese, Dutch, and German. Herbst J (2003) administered Spanish version OLA to 884 school principals and teachers in Florida. He found a positive relationship between servant leadership and student achievement. Lambert (2004) used the OLA to 8 principals and 240 faculties in New Jersey for evaluating the qualities of principals, organizational climate, and students' achievement. He found a significant correlation between servant leadership of secondary school principals and gains in student achievement, and even a strong relationship between servant leadership and school climate was also established. Miears (2004) established the educational version of OLA and found that the educational version of OLA was reliable and a strong correlation existed between job satisfaction and servant leadership.

Metzcar (2008) developed the new survey instrument, the Teacher Leadership Assessment (TLA) through the modification of an existing survey instrument OLA. The newly instrument TLA of 60 items was administered to a group of 746 National Board Certificate Teachers from preschool to twelfth grade in the USA. The Cronbach Alpha for the survey instrument, TLA was 0.957 (p.55). The results of the study indicate that there may be a statistically significant and positive relationship between servant leadership and effective teaching. Roger (2012) administered the English version of OLA to 115 high

school teachers in a public school district in the USA. They carried out a factor analysis of their responses and found just six factors. De Woody (2016) administered an English version of OLA to 380 teaching staff of college and university in the USA. Confirmatory factor analysis showed a good fit for the intended six factor structure.

The OLA in a non-western context

The OLA has been mainly used in the USA. However, the OLA has also been used in some non-western contexts. Cerit (2009) administered a Turkish version of the OLA of 60 items to 700 primary school teachers from 29 schools in Turkey. Descriptive statistics of the study revealed the six-factor solution of servant leadership. Moreover, the correlation results (ranging from $r=0.372$ to 0.542 ; $p<0.01$) indicated that servant leadership sub-scales were positive and significantly correlated with the job satisfaction of teachers. The coefficient of Cronbach Alpha value 0.89 for the whole instrument, OLA showed strong reliability. The results of regression analysis revealed the servant leadership was a strong predictor for teacher's job satisfaction. Salameh (2011) administered a short English version of the OLA to 432 school teachers who worked in Ibrid directorates of education in Jordan. This version contained 54 items intended to measure six scales. It should be noted that Arabic is the official language of written documents and media. A pilot study conducted regarding the reliability and validates the instrument OLA. Unatan et al. (2016) administered the OLA to a total of 310 teachers who worked in primary schools in the Betong Division of Sarawak, Malaysia. They were carried a pilot study to test the suitability of the instrument OLA of 59 items and found a high Cronbach alpha value of 0.96 for OLA.

The context for this study

West Bengal is situated in eastern India. The state shares international borders with Bangladesh, Bhutan, and Nepal. The State capital is Kolkata (Calcutta), one of the largest cities in India and also the gateway of Whole Eastern India. So, different communities of people are living here. The modern education system of West Bengal began under the period of colonial administration. But, they wanted to create a class of people Indian in blood and color but English in tests in opinion, in moral and in intellect. Therefore, such an education system failed to meet up the national requirements.

The excavation of Nalanda near the old capital of Magadha 40 KM away from Patlipatra (Patna) reveals the fact that India has a glorious past endowed with a highly developed culture and education. The opening balance on the eve of freedom in every sector of education was extremely scanty and disappointing in all aspect of

educational disparities and imbalance were very large between urban and rural, between men and women, between rich and poor. After Independence, the important Education Commissions and committees have been set up for reviving the lost glory in education. Education in West Bengal is provided by the public sector as well as the private sector. Most of the private schools are in English medium and follow the C.B.S.E. (Central Board of Secondary Education) or I.C.S.E. (Indian School Certificate Examination). These private schools are mostly dominated in the urban areas, whereas, the number of students' in Bengali medium schools under the WBBSE (West Bengal Board of Secondary Education) are decreasing rapidly.

Most of the urban parents thought that Bengali Medium schools are the second graded school. It is noteworthy to mention that most of the science students in higher secondary don't follow Bengali books. However, there is a demand for them in Arts' (West Bengal Education Committee Report, 2014, p.76). It is seen that performance of the students of the state in All India entrance Exams like JEE Main, JEE Advance AIPMT, CLAT, etc is not very good (WBEC, 2014, p.74). Moreover, two national surveys- the Annual State of Education Report (ASER) 2017 and the National Achievement Survey (NAS) 2017 found that a large number of adolescents in West Bengal are not adequately prepared for the future.

Aims of the study

The present study aimed to identify the main constructs underlying students' perceptions of teacher's servant leadership behavior at higher secondary schools in West Bengal. We employed the conventional survey method to investigate the psychometric properties of the OLA in this new context. In particular; we focused on its construct validity, its criterion validity, and its discriminative validity.

METHODOLOGY

Fourteen Bengali-medium higher secondary schools were randomly selected under the West Bengal Council of Higher Secondary Education (WBCHSE) and the class XI students in each school were surveyed about their starting of course. Out of 640 respondents; the study yielded 570 responses, 316 (55.44%) were boys and 254 (44.56%) were girls' of whom 33.86% lived in urban areas and 66.14% lived in rural areas. Their response rate was 89%, mainly because students did not complete their responses. The participants were instructed to answer each item keeping in mind their best teacher's behavior. The data was collected on a five-point liker scale (1-Strongly Disagree to 5-Strongly Agree). The 60-item version of the OLA constructed Laub (1999) is

employed. The English version of the questionnaire is translated into Bengali and the minor correction and necessary changes are made to make the instrument more comprehensible to the students. This drafted Bengali version instrument was used in a pilot study of 186 students and this led to additional amendments for the Bengal context. The Bengal version OLA is shown in appendix A.

Data analysis

IBM SPSS statistics 21 was then employed to carry out the exploratory factor analysis upon the students' responses to the 60-items. First, the sample size criterion was estimated; these values greater than 5:1 indicate the sufficient sample size. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy also was calculated; this varies between 0 and 1 and values greater than 0.5 indicate that the data suited for factor analysis. The number of factors to be extracted was determined by Cramer's rule (thumb's rules) with the parallel analysis of 10000 random correlation matrices using the program written by O'Connor (2000). Principal axes factoring with varimax rotation (orthogonal) was conducted to extract the relevant number of factors, loadings greater than 0.03 in absolute magnitude were regarded as being salient for interpretations. The factors were labeled based on the items that showed the highest loading.

Descriptive statistics were calculated from these scales and their reliability was estimated using the values of Cronbach's coefficient alpha. We examined the scores and their academic achievement and second-order exploratory factor analysis were carried out to investigate a common factor.

RESULTS

The sample and item ratio was 10:1; which indicated that the sample size (N=570) criterion was sufficient. The KMO measure of sampling adequacy was 0.855, which implied that exploratory factor analysis was appropriate. The parallel analysis of 1000 random correlation matrices indicated that six factors should be extracted using exploratory factor analyses. Their Eigenvalues were 7.965, 2.174, 1.855, 1.628, 1.578, and 1.423. The proportion of variance explained by each factor was 10.847%, 5.909%, 5.097%, 4.371%, 4.185%, and 4.010% respectively. The pattern factor matrix for the rotated solution is shown in Appendix A, where the items have been sorted in descending order of their salient factor loadings.

Factor 1 showed salient loadings on four of the twelve items from values people, two items from develops people, three items from displays authenticity, and three items from shares leadership. It was interpreted as

measuring values people. Factor 2 showed salient loadings on one item from values people, six from builds community, one item from displays authenticity, and one item from shares leadership. Despite this scenario, it was labeled as developed people.

Factors 3 showed salient loadings on one item from builds community, two items from values people, two items from develops people, three items from providing leadership, and two items from job satisfaction. This factor was therefore interpreted as measuring builds community.

Factor 4 showed salient loadings on two of 9 items from displays authenticity, one item from shares leadership two items from develops people, one item from builds community, and three items from shares leadership. This factor is therefore interpreted as displays authenticity. Factor 5 showed salient loadings on two of eight items from provides leadership and two items from each of develops people, displays authenticity, and shares leadership and values people.

This factor was therefore interpreted as provides leadership. Factor 6 showed salient loadings on two items from builds community, two items from displays authenticity, and four items from providing leadership. Despite this scenario, this factor was interpreted as shares leadership.

Out of the 60 items in the OLA; one item (57) from values people, one item (20) from develops people, and one item (3) from displays authenticity failed to show any salient loadings. Descriptive statistics of the participants' scores on these scales and values of coefficient alpha are shown in (Table 1). The values of coefficient alpha for the first five scales would be regarded as satisfactory on conventional research-based criteria, but the value for the sixth would not satisfactory. Though the value of coefficient alpha for the whole OLA (57 items) would be considered a satisfactory level. Cronbach's alpha method was used to test the reliability of the research instrument.

The results are shown in (Table 1) which also indicates the mean and standard deviation of scale scores and item scores. It is found that Cronbach's Alpha ranges from 0.544 to 0.756.

The results indicated that the internal consistency of the items. The intrinsic validity of a test indicates interrelationships of each sub-scale with one another and also to the entire test (Chakrabarti, 2017, p.159). Pearson product-moment correlation coefficients for sub-scale are estimated as a measure of intrinsic validity. Inter correlation matrix is given (Table 2).

The inter-correlations between the sub-scales of the Bengali version OLA-test showed that the different dimensions of OLA are highly correlated. Table 2 shows the correlation coefficient among the scores on the six factor-based scales, these two were all positive and statistically significant. The last column in (Table 2) shows the loadings of the six-factor-based scales on this were loaded on a single factor.

DISCUSSION

Results of Laub' (1999) original study are taken for a comparative study to understand the present scale reliabilities concerning the pioneering study; whereas, the results of Jordan's study on forty-five teachers participated in the pilot study. Laub (1999) developed the OLA through a Delphi survey and the data were collected from 828 leaders from 41 different organizations. In 2011, Salameh used the same OLA instrument in his study after validation. Regarding the reliability of the instrument, a Test-Retest method was used and found reasonably satisfactory values of Cronbach's alpha ranged from .83 to .91 to support that study. As cited in Salameh (2011), Horseman (2001), Thompson (2002b), and Miers (2004) all found similarly high levels of reliability in conducting research using OLA. Though, the alphas values of the present study are compared to the other studies are low, but satisfactory.

In the present study, data were collected from 570 students of class XI, of Bengali medium school in West Bengal. Moreover, students first faced these types of questionnaires. Though Swami Vivekananda, Mahatma Gandhi, Mother Teresa are the embodiment of servant leaders. But research in this area is rare to find. So, students perhaps face some hesitation to provide their opinions corresponding to the items. Bengali students may be less aware of their teacher's leadership style. Despite these limitations, it is evident that the reliabilities of the OLA's sub-scale may be considered satisfactory in the present context. Thus the present adopted OLA Test in Bengali version is reliable.

The intrinsic validity of a test indicates interrelationships of each sub-scale with one another and also to the entire test (Chakrabarti, 2017, p.159). Pearson product-moment correlation coefficients for sub-scale are estimated as a measure of intrinsic validity. Inter co-relation matrix is given (table2). The inter-correlations between the sub-scales of the Bengali version OLA-test showed that the different dimensions of OLA are highly correlated.

In over-factoring method the rotated component matrix showed only six factors were satisfactorily laid in salient loading. The same factor structure of OLA was found by Drury (2005), Salameh (2011), and Unatan et al. (2016). The results of second-order factor analysis shown (Table 2) only one component which explains 52.155% of the total variance. It is clear to an indication that the Bengali version of OLA (perception of teacher's servant-leadership behavior) is constructed by six components (VP, DP, BC, DA, PL, and SL) and it also predicts a single domain.

To test the *Discriminant Validity* of OLA, Univariate Analyses of Variances (ANOVA) was conducted on the scale scores for the student of different gender and habitat areas. Thus it was found that the OLA scales can capture the differences of students' (boys' and girls') perception of teacher's servant-leadership behavior.

Table 1: Descriptive statistics for sub-scales along with the coefficient of Cronbach's Alpha of perception of teacher's servant-leadership behavior (OLA) Test (N=570).

OLA Scales	Mean	Mean (Item Mean)	S.D	Cronbach's Alpha
Values People	47.173	3.931	6.857	0.756
Develops People	36.640	4.071	4.946	0.705
Builds Community	38.408	38.840	5.248	0.674
Display Authenticity	33.305	3.700	5.255	0.632
Provides Leadership	31.950	3.550	5.392	0.596
Shares Leadership	31.882	3.985	4.164	0.544

Table 2: Pearson correlation coefficients analysis of OLA test

Scales	No. of item	VP	DP	BC	DA	PL	SL	Entire Test	Second order factor loadings
VP	12	-							0.809
DP	9	0.562**	-						0.775
BC	10	0.491**	0.394**	-					0.735
DA	9	0.546**	0.481**	0.496**	-				0.733
PL	9	0.457**	0.321**	0.395**	0.394**	-			0.637
SL	8	0.378**	0.393**	0.380**	0.383**	0.250**	-		0.624
Entire Test	57	.825**	0.724**	0.729**	0.764**	0.661**	.607**	-	52.155

* $p < 0.05$, ** $p < 0.01$ (2-tailed test)

VP: Values People, DP: Develops People, BC: Builds Community, DA: Displays Authenticity, PL: Provide Leadership, SL: Shares Leadership

Styles in urban and rural areas in West Bengal; therefore, the Discriminant validity of the instrument is confirmed.

The most common way to estimate the predictive value of perception of teachers' Servant-Leadership Behavior is to investigate the correlation of the said test with academic achievement. The results indicated that all the sub-scales of OLA are correlated with academic achievement (all at 0.01 levels) except Develops People and Displays Authenticity. Moreover, it was cleared that perception of teacher' servant-leadership behavior successfully predicted academic achievement.

This study aimed to identify the main constructs underlying the students' perception of teacher's servant leadership behavior at higher secondary schools in West Bengal. The OLA was developed in Western countries and has mostly been used in the USA (North America, New Jersey, Trinidad & Tobasco, Missouri Columbia, Oklahoma, California, Ontario, Texas, Florida, etc). The instrument has also been translated into multiple languages including Spanish, Dutch, and Japan. So far as we are aware, this is the first time that the OLA has been used in the distinct cultural and contextual situation of India.

But it has subsequently been used in Turkey, Malaysia, and Jordan. The results are interesting both in theory and in practice and they contribute to the growing literature on the students' participation in teacher's servant leadership behavior in a non-Western educational context. Specifically, the results indicate the extent and the

limitations of the construct validity of the OLA, when used in higher secondary education in West Bengal.

Based on the findings of other research in non-Western contexts, we thought it was unlikely that the students' perception of teacher's servant leadership behavior in higher secondary education in West Bengal would show the full range of constructs of the OLA. As we expected, the exploratory factor analysis identified just six factors; values people develop people, builds community, displays authenticity, provides leadership, and shares leadership that was originally proposed by Laub (1999). All six constructs broadly match with the studies of Cerit (2009) in Turkey, Salameh (2011) in Jordan, Unatan et al. (2016) in Malaysia, and Hannigan (2008) in California. But the number of the item that constructs these six factors and their loading in each factor showed a poor fit to the theoretical model proposed by Hannigan (2008). Though, the item configuration according to each scale was not found in Laub (1999).

Conclusion

The results of this study demonstrate the Servant Leadership practices of class teachers able to improve students' academic achievement. From these six dimensions: values people, develop people, builds community, displays authenticity, provide leadership, and shares leadership has a strongest and stout relationship

with students' academic achievement. Therefore, the school teachers are recommended to practice servant leadership to improve the students' outcomes in school. However, the items (3, 20, & 57) may need revisions as it had no significant loading on any factor.

In summary, the results of this study demonstrate that the OLA retained a six-factor solution with West Bengal post Secondary students. However, the robustness of the VP, DP, and BC, DA, PL, and SL factors should be interpreted with caution. The findings of the study may prompt action from both key stakeholders in the study and the scholars in the field of servant leadership. Further research is recommended to conduct similar studies within the populations involving different education sectors to verify the acceptability of the OLA instrument in the Indian context. Finally, the author believes that the present study can be further developed to contribute to the understanding of students' perception of teacher's servant leadership behavior and to the promotion of a research-informed and improvement-led approach to educational management and quality.

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Appendix-A

Table 3 Rotated component matrix of OLA (Bengali Version) (N=570)

Item No.	Item	Factors						Communalities
		1	2	3	4	5	6	
33	Rjœl j kî hm-a Qjœ çæœ aî -hî-Te Hhw Øfœ L-l hÊš² L-lez	.539						.593
35	œe-S-cl pÊjîhÜaî J i¥m...œm üÊLî L-lez	.520						.590
52	pÊîl fÊ-aÊL-Hl pîÜ¹ LbîC jœ çc-u -nî-eœz	.518						.578
53	-ea«a/Æcî-el S-eÊÊ pÊîl -Ljœ çh-no jkNîcî hî Bmîcî -Ljœ pœœ-kîN pœœçhdî -Myî-Se eîz	.473						.527
54	œe-Sî fÊ-uîS-el -Q-u Af-Il fÊ-uîSe-L phîl B-N ...lîa/Æ -cez	.454						.539
1	pÊîl, pqljNÊ Hhw pLm Rjœ RjœÊ-cl çhnÂîp L-lez	.447						.678
43	AeÊ-cl-L jšmÊjuZ Lîl B-N paajl p%œ œe-S-cl jšmÊjuZ Lî-a -nMîez	.442						.504
41	LaN«a/Æ hî rjaî -cMî-eîl -Q-u îî-mî pÇfLÑ UÜîf-el àîlîC Rjœ-cl J AeÊfÊîjçha L-lez	.413						.466
31	pÊîl Hje HLVî fœl-hn pªçœ L-le kî çnrîNÊq-e çnrîNÊq-e Evpîçqa L-lz	.411						.439
4	pÊîl, fÊ-aÊL-L Hhw flØfl-L nÊÜ L-lez	.373						.433
26	AeÊ-cl-L Lî-Sî SeÊ iuiÊœa eî -cœM-u, Qîf pªçœ hî hmfÊ-uîN eî L-l hœçT-u lîçS Lîez	.366						.552
46	Evpîq CçahîQLaî pî-b pqljNÊ-cl J RjœRjœÊ-cl ¸alÊ L-lez	.352						.637
3*	-Mîmîj-e jaja fÊLîN L-le pîî-mîQeî L-le eîz							.206
18	pÊîl, Lî-Sî jîdÊ-j pL-mî p-%œ pœœ-pÇfLÑ N-s -aj-mez		.589					.554
13	pÊîl, œe-S HLî HLî LîS Lîl -Q-u AeÊjœÊ-cl p-%œ HL-œ LîS Lî-a phNcî E-ÿÊîNÊz		.503					.610
9	pÊîl, flØfl-Il fÊœa kaAhîe J pqîeœîœa pÇfæz		.490					.560
12	pL-mî pçqa îî-mî pÇfLÑ l-u-Rz		.487					.468
7	pÊîl, cmhÜ q-u îîmîj-h LîS L-le Hhw Lîez		.416					.532
10	pÊîl -kîe pL-mî p-%œ çîN-a fî-le, -ajœ pv bî-Lez		.411					.479
16	pÊîl , LÔî-p pqS plm îî-h Lbî h-m pœœ%cl fœl-hn pªçœ L-lez		.398					.552
25	Bmîcî eî q-u Rjœ-cl pî-b pî-b -b-L LîS Lîl Hhw œe-Sî L-lez		.375					.520
17	fœlQîmL hNÑ J çpçœul-cl Aeœ-fÊîZju pL-m çî-m çpÜîç¹ NÊq-e Evpîçqa L-lez		.341					.576
57	pÊîl, çpçœul Hje çL Ed/ÆNae LaN«f-rl LîR -b-L Evpîq J CçahîQL fÊnwîp -f-u bî-Lez		.590					.580
55	û¥-m œe-Sî LîSLjN pÇf-LÑ Ed/ÆNae La«f-rl àîlî fÊnwçna qez		.560					.479
49	hcÊîm-ul SeÊ pçWL fœlLÔfœî J mrÊ fœlûîl L-l a¥-m c-lez		.472					.617
56	û¥-m pÊî-Il EdN/Æae LaN«f-r J ayîl Lbî jœ çc-u -nî-ez		.456					.602
59	û¥-mî çpçœul-cl LîR -b-Lî nÊÜî mîl L-lez		.406					.689
38	HLpî-b bîL-a J p%œhÜ q-a pq-kîNÊaî Lîl kîuz		.386					.509
60	HLSe Rjœ RjœÊ Hl LîS-L aîl çjNcîl -b-L -hçn L-l ...lîa/Æ -ce (LîSC Bpm Lbî) hÊçš² euz		.377					.454
50	Rjœ-Rjœ-cl -fnîcîl q-a çh', çhnÂU¹ fljNcîaî Hhw pqîuaîLîlÊ çq-p-h pÇfLÑ N-s -aj-mez		.355					.551
30	RjœRjœ-cl m-rÊ -fîyRî-eîl SeÊ fÊ-uîSeÊu AbN Hhw eîjœe çnrî EflîZ J -cez		.341					.527
45	fÊ-uîSe AeœkîuÊ pçWL pî-u pçWL fc-rf NÊqe L-lez		.318					.606
58*	û¥-mî -ea«a/Æ Efl fœ-lî BÜÜî lî-Mez							.101
44	RjœRjœ-cl Eflîl Lîl SeÊ çæœ œe-Sî rjaî J LaN«a/Æ-L hÊhqîl L-lez				.487			.576
29	RjœRjœ-cl ...lîa/ÆšZÑ çpÜîç¹ NÊqe Lî-a rjaî -cez				.454			.556

15	pÉjl A-eÉl fÉ-u;Se pÇf-LN phNcj p-Qae bj-Lez				.453			.554
28	pÉjl Rjœ-cl pçqa pljpðl -k;Nj-k;N L-le Hhw abÉ Bc;e fÉcj-e Evpjçqa L-lez				.424			.511
51	A-eÉl fÉçá cjuhÜ J c;çua/EnEmz				.389			.554
34	LÓj-pl fÉ-aÉL RjœRjœL-L -ea«a/É c;e (HçN-u Bp-a) Evpjçqa L-lez				.357			.528
47	Rjœ-RjœL-cl HLPj-b LjS Li-a Evpjçqa L-le Hhw H-L Af-Il pj-b fÉçá-kjçNa; Li-a -ce ejz				.355			.502
24	Rjœ-cl Aejçá -ce HC çhcÉjm-ul içhoÉv -Lje;MÉ aj çÜÜL Li;l SeÉ jajja çc-az				.343			.559
42	fÉ-aÉL RjœRjœL-L hÉçš²Na pÇf-LNl à;l; pÇf²ZN pcra; fÉLjn Li;l paa-k;N pªçø L-lez				.324			.580
39	-eaj qJu;l SeÉ Bm;ç; -Lj-e; pÇj;e (ÜÉL«çá) c;çh L-le ez					.566		.553
19	-k jjeao -k Ilj aj-L -pij-hC NEqZ L-lez					.502		.574
32	AeÉ-cl LjR -b-L pj;-m;Qej øe-a J QÉj-m² NEqe Li-a -Mjmij-e fÉÜ²ªa bj-Lz				.458			.574
40	paa-k;NE -eaj-L Aep;lZ L-l çe-S -ea«a/É -cJu;l -r-œ Ec;qle pªçø L-lez				.428			.562
36	hÉbN qJu;l pñ;he; bjLjJ p-šAJ fÉ-aÉL-L Risk(Ty²çL) çe-a Evpjçqa L-lez				.378			.622
23	hcÉjm-u AçnrL LjNÉ-cl -b-L J çe-SI LjR -b-L -Mjmij-e çnM-a Evpjç -hjd L-lez				.346			.523
27	fÉ-u;S-e -ea«a/É çc-a J çàdj L-le ejz				.341			.511
48	çheuÉ qe , çe-S-L Sjçql (-Lhm çe-SI ...eNje) L-le ejz				.334			.572
37	AeÉ-cl LjR -b-L -pIlj hÉhq;l fÉaÉjn; L-le, -kje hÉhq;l çaçe çe-S L-lez				.312			.518
20*	çhçia; jajja NEqZ Li-L -nM; J Eæçal çh-no paa-k;N h-m j-e L-lez							.247
5	pÉjl, Sj-ee HC çhcÉjmu -LjeÜ içhoÉ-al çc-L Qm-Rz					.468		.624
14	Lj-SI mrÉ jçœ;u -f²yRj-e;l SeÉ phNcj c;çua/EnEm bj-Lez					.460		.568
22	hcÉjm-ul içhoÉv pÇf-LN HLVj üµR d;le;² alÉ L-l -cez					.456		.629
11	Lj-S L-jN pÉjl Mªh p;çpÉ Hhw çeiNl-k;NEz					.432		.566
2	hcÉjm-ul jšmÉ mrÉ J E-YnÉ pÇf-LN üµR d;le; l-u-Rz					.413		.580
21	-Lje L-l Rjœ-cl Eæçá-a çhLjn OVj-a qu pÉjl aj -hn ij-m;C Sj-eez					.400		.575
8	pwü«çá J Sjª f;-al fjbNLE-L ...lªa/É -cez					.381		.675
6	pÉjl, Mªh 'jeÉ Hhw BcnN jjeaoz					.350		.531
Eigenvalues		8.48 8	2.2 30	1.8 99	1.65 4	1.584	1.484	Total
% of variance		10.8 47	5.9 09	5.0 97	4.37 1	4.185	4.010	32.419

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization