The Self-Handicapping Scale: Development And Validation In Indian Context

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ABSTRACT

Self-Handicapping is a human tendency that can be defined in terms of behavioral patterns that involve the creation of barriers to human performance, so that in the event of failure, obstacles are caused rather than important personal traits such as skill or intelligence. The main objective of the present study was to develop and validate the "Self-Handicapping Scale" in Indian context. Self-Handicapping of tertiary students will be measured by using this scale. The study sample consisted of six hundred (300 boys and 300 girls) higher education students. Random Sampling was used to select the sample. For content and face validity opinions from experts were taken. Factor analysis was performed on sample responses. The results concluded that Self-Handicapping is comprised of two dimensions namely "Claimed Self-Handicapping" and "Behavioural Self-Handicapping". Cronbach's alpha of "Self-Handicapping Scale" (α=.779), indicators of internal consistency represent good internal integrity. The results revealed the presence of important psychometric features of the structured questionnaire.

Keywords: "Self-handicapping" and Higher Education Students.

INTRODUCTION

"Self-handicapping" is the process where "individuals pull out effort, generate hindrances to success, or make excuses so they can uphold a public or self-image of being competent (Decker & Mitchell, 2016)". Broadly, "self-handicapping" consists of conscious or unconscious thoughts and behaviors that emerge from fear or uncertainty of failure (Bryson, 2019). By self-handicapping, man produces a prior meaning of possible failure. "Self-Handicapping" can also improve personal qualities due to increased personal debt of success where accomplishment was not anticipated (Luginbuhl & Palmer, 1991; Ryska, 2002).

"Self-Handicapping" is a constrct with two distinct elements: "Claimed Self-Handicapping and Behavioural Self-Handicapping"; Claimed Self-handicapping always identify some hindering factors or obstacles and they are not convinced that they can taste failure. Owing to this they did not sabotage performance on a given task through risky behaviors instead they rely on attributional ambiguity resulting from Self-Handicapping (Coudevylle et al., 2008). Claimed handicaps involves issues about physical symptoms or disease (Mello-Goldner & Jackson, 1999), inflated pain (Uysal & Lu, 2010) as well as reference to mood (Baumgardner et al., 1985). Behavioural Self-Handicapping include, such as, impact of drugs (Berglas & Jones, 1978),

procrastination (Ferrari & Tice, 2000) or performing a task without enhancing the level of their efforts (Rhodewalt et al., 1984) or even with less efforts (Thompson & Richardson, 2001). Another specific form of behavioural Self-Handicapping could be the phenomenon of other-enhancement (Shepperd & Arkin, 1991).

ITEM SCALING, CONSTRUCTION AND DEVELOPMENT:

The researcher used deductive approach for generating the items for tool construction. The deductive approach is requiring comprehension of the construct to be investigate and an extensive review of literature to develop the theoretical meaning of the construct under investigation. The first pool of 37 objects was prepared after the construction of the concept framework, distributed over the two dimensions of Behavioral self-handicapping and Claimed Self Handicapping

VALIDITY

A psychological instrument is considered valid if it measures what is expected or said to be measured. In other words, the test's effectiveness is exactly the same as the clearly defined procedure. Both the Facial Verification and Content Verification of the Self-Handicapping Scale were determined based on the expert opinion of the six subject experts.

FACE VALIDITY:

To measure the facial suitability of the "Self-Handicapping Scale", the views of professional experts were noted. Based on their point of view there were systemic errors and there were indirect questions. Based on their ideas, the names of the objects have been changed.

CONTENT VALIDITY

According to academic jurisdiction, the content verification indicator is calculated by Lawshe's Method CVR (content rating) proposed by Lawshe (1975) a straightforward change in the level of the agreement of how many "experts" within the rating scale is calculated. At this point, an item less than 0.75 was rejected.

STANDARDIZATION OF THE SCALE

SAMPLE

For standardizing the "Self-Handicapping Scale" constitutes of 37 items, a pilot study was conducted, and an initial tryout was conducted. For the pilot study, data was collected from 600 higher education students of Punjab which were selected randomly. The sample comprised of 50% male and 50% female students. Data was collected on the hard copies of the tools after getting the permission of administrative authorities of colleges and universities. Investigator personally visited the classes for getting questionnaires filled for the purpose of data analysis.

ITEM ANALYSIS

After Pilot study, Discrimination Index was measured to find out the discriminatory power of 37 items by calculating t-value so that the final tool can be constructed. A Likert –type scale was used with choices namely "Strongly Disagree, Disagree, Not Sure, Agree & Strongly Agree". The individual scores of 600 students were ranked higher to lower order. Further 27% students from upper group and 27% students from lower group were sorted for the calculation of discriminatory power of each of the items of the tool. Next considering each item individually, the number of students was found who answered "Strongly Disagree, Disagree, Not Sure, Agree & Strongly Agree" for the upper group and lower group separately. In this way, for all 37 items, the number of students coming under each category "Strongly Disagree, Disagree, Not Sure, Agree & Strongly Agree" was found out for the upper group and lower group separately, and the

discrimination index was greater than 1.99. All the items possessed more than 1.99 discrimination index, so no item gets deleted.

CONSTRUCT VALIDITY

To access the construct validity of the scale, Exploratory Factor Analysis (EFA) was used using "IBM SPSS Statistics software version 22. EFA was performed with a sample size of 600 students on items with fixing two factors to be extracted after face validity, content validity and item analysis.

EXPLORATORY FACTOR ANALYSIS

In the initial trail of extracting the factors, all the 37 items were made under the "Principal Component Analysis" extraction method with "Oblimin" Rotation method. The investigator allows items to be measured freely and did not specify the number of factors a priori. Numerous repetition cycles of material analysis have been used in the data set for the purpose of improving material composition. The total variability defined and the number of output items were checked after each duplication. Items with a communality value of less than .40 were removed, this resulted in the removal of 25 items. To determine the value of the feature analysis the researcher used Kaiser-Meyer-Olkin (KMO) to assess the suitability of the sample, the calculated KMO value was 0.829 which is above the limit value. According to Tabachnick and Fidell (1996) of fine material the minimum value of Kaiser Meyer-Olkin (KMO) should be 0.60. The overlooked value level was indicated by Bartlett's Sparticity test. Both measures showed that the sample data was sufficient to perform the analysis. Two factors displayed eigen values greater than 1 (Kaiser, 1960) with 48.772% of total variance explained.

Table 1: Total Variance Explained

"Total Variance Explained"								
Compo nent	"Initial Eigenvalues"			"Extraction Sums of Squared Loadings"			"Rotation Sums of Squared Loadings"		
	"Total"	"% of Variance"	"Cumulative %"	"Total"	"% of Variance"	"Cumulative %"	"Total"	"% of Variance"	"Cumulative %"
1	3.993	33.278	33.278	3.993	33.278	33.278	3.661	30.512	30.512
2	1.859	15.495	48.772	1.859	15.495	48.772	2.191	18.260	48.772
3	.957	7.976	56.749						
4	.841	7.006	63.755						
5	.805	6.707	70.462						
6	.669	5.579	76.040						
7	.662	5.517	81.557						
8	.550	4.587	86.144						
9	.489	4.077	90.222						

10	.442	3.685	93.907						
11	.370	3.083	96.989						
12	.361	3.011	100.000						
Extraction Method: Principal Component Analysis.									

Table 2: Factor loading of the Extracted two factors of Self-Handicapping Scale

Rotated Component Matrix[a]		
	Component	
	1	2
SH1		.748
SH2		.682
SH4	.746	
SH5	.705	
SH6	.718	
SH9		.549
SH12	.649	
SH19		.650
SH20		.594
SH22	.714	
SH23	.733	
SH24	.658	

CONFIRMATORY FACTOR ANALYSIS

Verified object analysis is a separate case of Structural Equation Modeling called linear relationship structures (Sorborm & Joreskog, 2004). A validation factor analysis is a mathematical method that has previously confirmed the formation of a feature of a group of notable variables. Investigator used a version of SPSS Amos 22, CFA applied to 2 items extracted from the test material. Model indices were CMIN/DF at 5.796, Comparative Fit Index (CFI) at .860, and Root Mean Square of Approximation (RMSEA) at .093. The total number of model measurement indices does not satisfy threshold values but is close to the limit value. We can therefore say that the model is moderately proportional. Figure 1 gives an overview of the verification model.
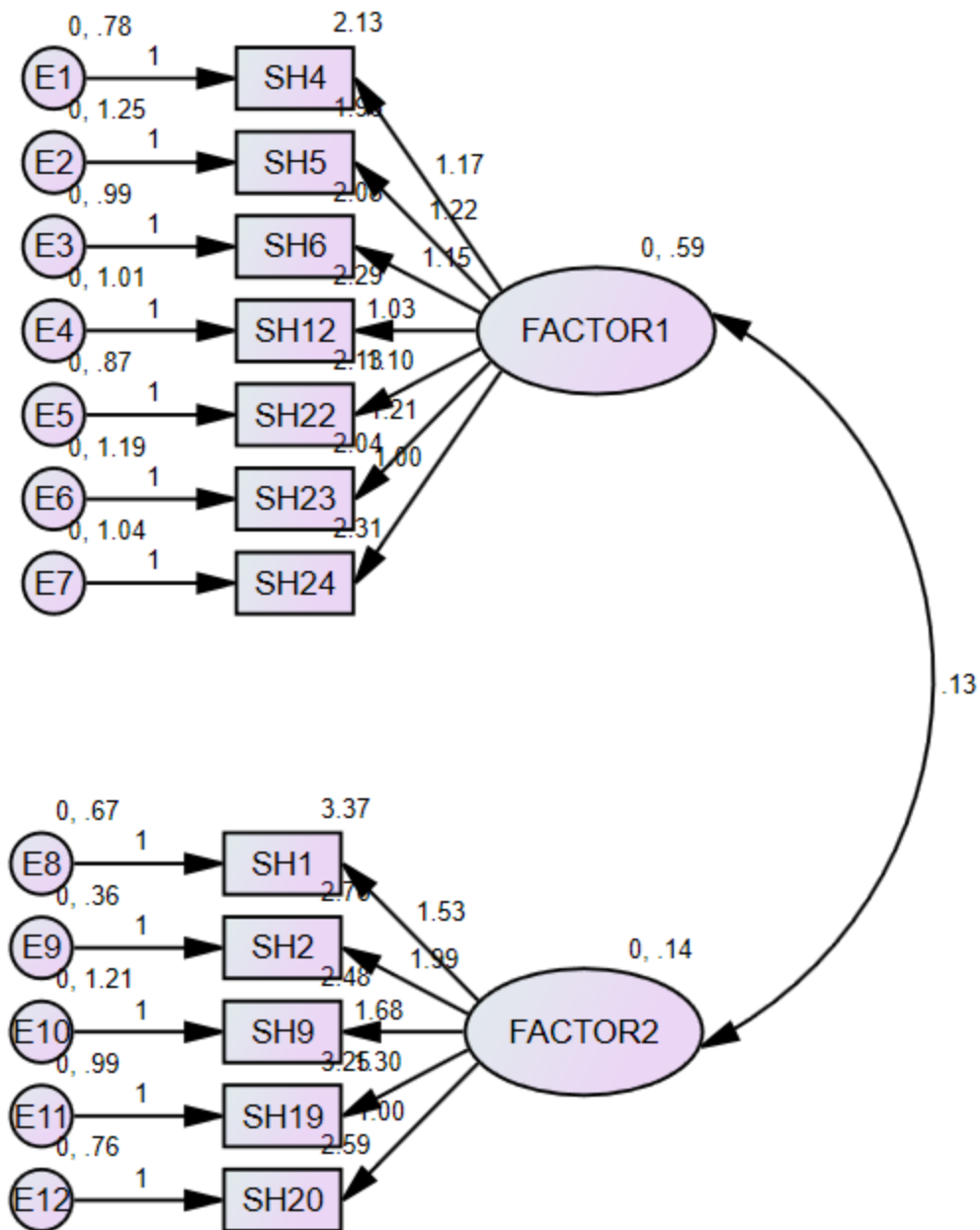
Figure 1: Path Diagram of Self-Handicapping Scale

CRONBACH'S ALPHA RELIABILITY

To determine the internal consistency of the scale

Coefficient of Alpha (Cronbach, 1951) was calculated to measure the internal consistence of

the scale. Results indicated that 0.779 is the coefficient alpha value for the scale which is more than the threshold value 0.60 (Kline,1999). Thus, the scale has internal consistency.

FINAL DRAFT OF SCALE

Final Draft of Self-Handicapping scale constitute of 12 items distributed among two dimensions.

Self-handicapping Scale

"SA - Strongly Agree"   "NS - Not Sure"   "DA – Disagree"

"A – Agree"   "SDA - Strongly Disagree"

NO		SA	A	NS	DA	SDA
1	When I do something wrong, my first intention is to blame the circumstances.					
2	Sometimes I get depressed that even easy tasks become difficult.					
3	I would have done lot better if I tried harder.					
4	I generally hate to be in any condition other than "at my best".					
5	I feared being out of control in a situation					
6	My anxiety interferes with my performance					
7	My worthiness depends on how well I do, so I must do well.					
8	Someday, due to use of medicines I think I might "get it all together".					
9	Sometimes, I participate in final task without increase effort or with reduce effort.					
10	Sometimes purposely, I get involved in a lot of co-curricular activities, so don't do as well on my work as hoped.					
11	Sometimes I suffer with severe headache in a performance situation.					
12	Fearing of making mistakes and trauma in early childhood, are the internal factors which influence my performance.					

SCORING PROCEDURE:

"Self-Handicapping Scale" is a 5 point Likert scale. Each item has five response options namely

"Strongly Disagree, Disagree, Not Sure, Agree, Strongly Agree".

Table 3 SCORING PROCEDURE OF SELF-HANDICAPPING SCALE

ITEMS	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree

	0	1	2	3	4

LIMITATIONS

In present study, researcher has followed the reliable and valid scale development processes but, still the scale has some limitations. The numbers of higher education students can be increased and students from other levels of education can be included. The study is limited to the higher education students studying in Punjab, it can be replicated on the other part of the country. Concurrent can be calculated.

CONCLUSION

The questionnaire developed and validated by the investigator will assess the "self-handicapping" of higher education students. The cardinal aim of this research paper is to develop and validate a scale which would produce reliable and valid results in measuring "self-handicapping" of the students at tertiary level in Indian Context. Current study has employed the meticulous methodological process to quantitatively develop and validate a scale assessing "self-handicapping" behaviour of students at tertiary level. After applying EFA and CFA, final draft includes 12. It is a 5-point Likert scale. The range of the score lie between 0 to 4. Four for "strongly agree" and Zero for "strongly disagree".

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