

Adapting Intrinsic Motivation Scale: Assessing Prospective Teacher's Motivation

Dr. Muhammad Luqman Khan¹ Dr. Saba Farooq² Riaz Kamal³

1. Assistant Professor, Riphah International University, Faisalabad Campus, Faisalabad, Punjab, , Pakistan, luqman.khan@riphahfsd.edu.pk
2. Creative Writer and Data Analyst, Creative Business & Social Research (CBSR), Rawalpindi, Punjab, Pakistan, sabafarooq9999@gmail.com
3. M.Phil Scholar, Department of Education, Benazir Bhutto Shaheed University Liyari, Karachi, Sindh, Pakistan, riazkamal999@gmail.com

Abstract

The current paper was carried out to evaluate the psychometric properties of Intrinsic Motivation Scale (IMS), originally developed by IBRAHIM AND AL-ALI in the year 2016 in Arabic. IMS was consisted of 35 items originally, which were reduced to 25 items after reviewed by experts. It was on the 5-point Likert scale. After translating, validating and incorporating the changings IMS was administrated on 450 students of B.Ed. Hons and M.A Education of public universities situated in Lahore, to confirm the structure of the IMS in locale scenario, Confirmatory Factor Analysis (CFA) was run. In the light of results of factor loading against each item four items EL2, EL3, EL4 and D5 were excluded. Twenty one items were remained in the overall scale. Both AVE and CR values of each factor are laying in the accepted range. Value of Cronbach alpha for focus on performance was 0.903, 0.897 for enjoy learning, 0.883 for determination, and value of overall scale is 0.934. However, there is also need to validate IMS in other educational fields with some other sample to fully test it in educational context.

Key Words: Adaptation, Intrinsic Motivation Scale, Permission, Translation, Validation

Introduction

Research instruments holds a significant position in whole research study. Data collection can't be possible without an instrument. Their adaptation across different cultures also facilitate researchers to investigate psychological and social phenomenon in more efficient way in minimum time. However, there are several things that need attention while using standardized questionnaires for instance, maintaining consistency and constructs validity. It provide assistance for effective contribution in existed literature as well as in identifying some particular phenomenon.

Language plays an important role in understanding and communicating with others. Instruments that are in Urdu language or in simple English language are easily understandable for Pakistani population, and they feel comfortable to give their responses against such questionnaires. Current paper aimed to adapt Arabic version of Intrinsic Motivation Scale (IMS) after translating it in English to make it comprehensible for university students.

The current study was carried out with intention to have a platform to measure students' intrinsic motivation, considering the importance of motivation in every walk of life. Exhibition of certain behavior of human beings to accomplish some goal is associated with term motivation (Akhtar, Iqbal, & Tatlah, 2017). From childhood till dotage, there are some fundamental motives that gave direction to the human behavior needs which push them to act in certain manner. A difference occurs while performing task such as a person who is highly motivated. He has concerned to his task as he exhibited commitment in the performance of task. In comparison to the individual who is less motivated. He showed commitment during the performing a task to not a greater extent (Weiner, 2013). A person could perform to put an effort to accomplish the assigned task due to psychological factor of need. It allows the individuals to keep themselves engaged in the certain activities of their interest (McKenna, 2000).

The inner states of a person that forces him/her to remain engaged in activities of their desires, implied as motivation. On the same pattern, if people have some sort of the incentives behind the execution of some acts along with the facilities to be part of certain activities than it also represents the

motivation of individuals for that certain activity. Similarly, incentives create interest amongst people; facilitate them for participating in certain activities, thus illustrate the manifestation of the phenomenon of motivation (Akhtar et al., 2017; McKenna, 2000). Motivation is a comprehensive phenomenon, as individuals can be motivated due to various factors and also experience different levels of motivation. Because of this background, the researchers examined and identify the different types of motivation; two major categories of motivation were suggested by researchers: intrinsic and extrinsic motivation (Akhtar et al., 2017). It is categories as one of the most important and interested topic to the educators in psychology that enables the teachers to know about the motivation level and attitude of their students. Low level of motivation in the students is continues and significant issue in educational system and teachers became frustrated due to lack of excitement and interest showed by student to grasp the concepts (Koca, 2016)

Students of a classroom possess different level of motivation, some showed their keen interest towards studies, while others did not express the same level of motivation for studies. This concept could be developed in them with help of learning activities (Saeed & Zyngier, 2012). Friar (1995) concluded that students having high intrinsic motivation learn excitedly and energetically and they put their best efforts to get the highest degrees as cited by Ibrahim and AL-Ali (2016).

Hesek (2004) stated that in educational environments students having intrinsic motivation want to learn more, it could also be said that pupils enjoyed every moment of learning. Intrinsic motivation is the energy emanate from inquisitiveness and students with self-motivation get higher marks as compared to the average students during examinations on the abilities, despite of the fact that internal and external factors are involved to motivate the student at same time (Ibrahim & AL-Ali, 2016).

Students need no external reward for a learning if they wants to reach at a desired goal because motivation of learners comes from inside. As this type of learning came from natural inquisitiveness, not from toil; in this learning personal experience of human are involved so it is easy to retained this learning (Ryan & Deci, 2017). As a result of this, learners having intrinsic motivation become bolder and accept the views of others, they set realistic targets for himself, shapes and reshapes their peculiarity by learning process, through this they became more self-confident and independent (Lei, 2010).

Intrinsically motivated individual exhibit behavior that is inspired by the inner (Cherry, 2018). It propel a person to complete his task to get his own fulfilment and pleasure (Coon & Mitterer, 2012). A student got motivation when he received responsibilities, when other people have confidence on his aptitude, when he completed his works with the collaboration of his peers and when he is strengthen to complete the assignment in a proficient manner (Liu & Devitt, 2014; Ryan & Deci, 2017). For effective learning of students they need motivation, which could be possible through realization the importance learning, but also required a set of guidance that told them how to learn it if an activity do not have interesting contents (Naima, 2013), she gave some suggestions for development of intrinsic motivation that are given below:

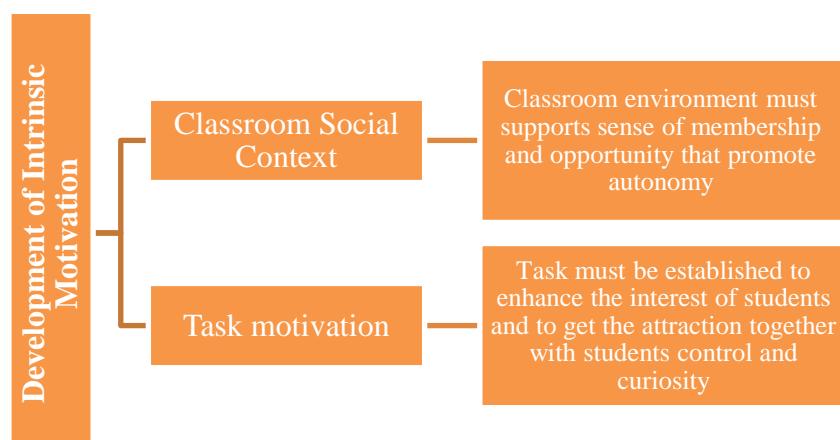


Figure1 1 Ways to Develop of Intrinsic Motivation

Material and Methods

Research Design

In the current research, quantitative data was collected through distribution proper questionnaire. Quantitative survey technique was used to measure the results. The quantitative research method involves the collection, analysis and interpretation of numeric data from a large number of population.

Sample

The sample of 450 students of B.Ed. Hons and M.A Education of public universities situated in Lahore was drawn, to confirm the structure of the IMS in locale scenario. Sample was selected by two stage sampling technique. In first stage, public universities were selected who has education department by utilizing purposive sampling. In second stage, students of B.Ed. Hons and M.A Education were also selected through purposive sampling. Confirmatory Factor Analysis (CFA) was run to investigate factor loading against each item of adapted IMS.

Instrument of the Study

IMS was consisted of 35 items originally, which were reduced to 25 items after reviewed by experts. It was on 5-point Likert scale ranging from "Strongly Agree =5 to Strongly Disagree = 1". The following items are examples for each sub-scale "I focus well on the difficult learning materials to learn" (Focus on Performance); "I enjoy to learn new things related to my studies" (Enjoy Learning); "I preferred to complete my assignment without considering criticism" (Determination).

Procedure

To determine the changes in the intrinsic motivation, researcher adapted Intrinsic Motivation Scale (IMS) developed by Ibrahim and Al-Ali in 2016. Researcher got permission from author and translated it from Arabic to English language to make it understandable for the participants of the study. IMS was firstly validated from Ibrahim and Al-Ali after translating it, and then two experts of university of education and the supervisor to finalize it. Translated and adapted version of IMS was circulated among participants to check its validity and reliability in Pakistani context.

Confirmatory Factor Analysis

Initially, cleaning and screening of collected data was done after entering it into SPSS-23. After this psychometric properties of IMS were determined. The results of confirmed that IMS was consisted on three factors for this AMOS-20.0 was utilized.

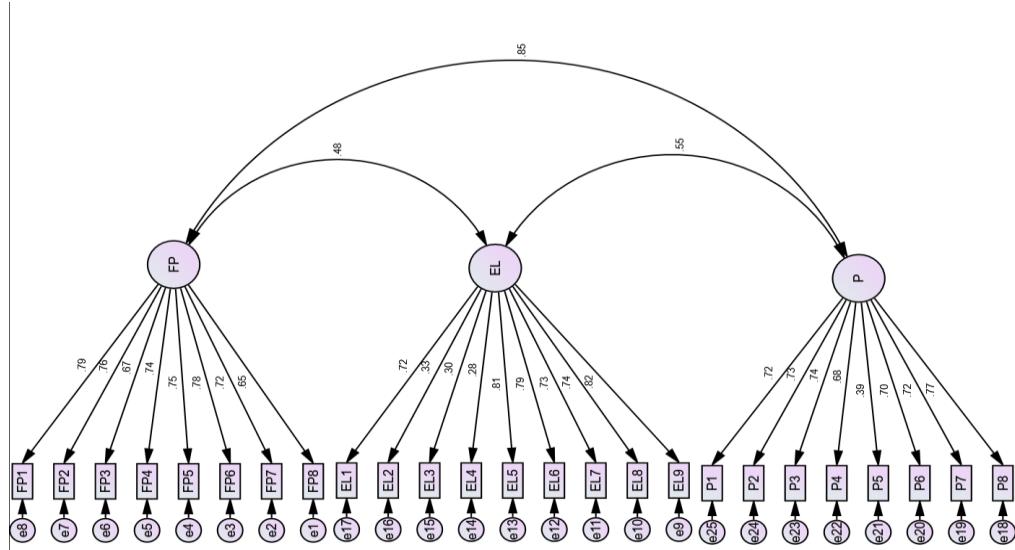


Figure 2: Confirmatory Factor Analysis

Results and Discussion

Table 1
Factor Loading, AVE and CR of IMS

Factor	Item Coding	Factor Loading	Decision	AVE	CR
Focus on Performance	FP1	.794	Included	0.540	0.903
	FP2	.765	Included		
	FP3	.668	Included		
	FP4	.740	Included		
	FP 5	.749	Included		
	FP 6	.785	Included		
	FP 7	.718	Included		
	FP 8	.648	Included		
Enjoy Learning	EL1	.722	Included	0.589	0.896
	EL2	.329	Deleted		
	EL3	.297	Deleted		
	EL4	.280	Deleted		
	EL5	.809	Included		
	EL6	.790	Included		
	EL7	.726	Included		
	EL8	.738	Included		
	EL9	.817	Included		
Determination	D1	.716	Included	0.523	0.884
	D2	.730	Included		
	D3	.737	Included		
	D4	.682	Included		
	D5	.385	Deleted		
	D6	.700	Included		
	D7	.722	Included		
	D8	.773	Included		

Table 1 show the results of factor loading against each item. Four items EL2, EL3, EL4 and D5 were excluded as their loading value < .05. After deleting items with poor loading, 21 items were remained in the overall scale. All items are uni-dimensional and having no negative item. Convergent validity (CV) of IMS was assured by calculating Average Variance Extracted (AVE) and Construct Reliability (CR) after factor loading estimate. Both AVE and CR values of each factor are laying in the accepted range.

Table 2
Reliability of Each Factor of IMS

Factor	Items	Cronbach Alpha Value
Focus on Performance	08	0.903
Enjoy Learning	06	0.897
Determination	07	0.883
Total	21	0.934

The number of items in IMS (after deleting items having lower loading value) are 21, there were eight items in first factor (focus on performance), six items in second factor (enjoy learning) and seven items in third factor (determination). Internal consistency of IMS was calculated with the help of Cronbach alpha. Its value against each factor of IMS as well as its overall value is presented in above mentioned table, these are 0.903 for focus on performance, 0.897 for enjoy learning, 0.883 for determination, and value of overall scale is 0.934.

Discussion

The IMS was translated into English language to make it understandable as it was in Arabic language. While translating the instrument experts of both languages were consulted to know their views. In the light of their suggestions 10 items were reduced to consider the purpose of current paper. Four items EL2, EL3, EL4 and D5 were excluded as their loading value was poor. After deleting items with poor loading, 21 items were remained in the overall scale. All items are uni-dimensional and having no negative item. The reason behind poor loading may be due to difference between Saudi and Pakistani context. The abovementioned results reflected that IMS has acceptable validity and reliability. The IMS was test specifically in educational context that can be tested in other contexts of Pakistani scenario.

Implication

The translated and adapted version of IMS can be used across the world, because English is an international language and understand all over the world. It can be used for collecting data under different research designs like survey and experiment etc. This scale is not gender specific, therefore, can be used for both male and female students.

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