

# EGYPTIAN VALIDATION OF SMARTPHONE ADDICTION SCALE SHORT VERSION FOR ADOLESCENTS (SAS-SV)

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**Abstract:** The purpose of this study is to evaluate the psychometric properties of the Egyptian translation of SAS-SV for adolescents. The SAS-SV (Kwon et al., 2013) is a 10 items with a 6-point Likert scale from 1 = strongly disagree, 6 = strongly agree. Total scores typically range from 10 – 60, with higher score indicating Problematic Smartphone Usage. Item analysis of Smartphone Addiction Scale for the participant students is shown in Table 1. The internal consistency of the scale was adequate. Cronbach's alpha ranged from 0.745 to 0.893 to all items. Reliability coefficient for all the scale was high (alpha = 0.904). Content validity was confirmed by statistically significant differences between heavy and light users ( $p < .001$ ). The use of this instrument can be used conveniently in the screening process to determine those who are likely to be labeled " Smartphone Addicted" in Egypt.

**Keywords:** validation, smartphone addiction scale, SAS-SV, adolescents

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## INTRODUCTION

Worldwide, smartphones were used by 1.85 billion people in 2014. This number is expected to be 2.32 billion in 2017 and 2.87 billion in 2020 (Statista,2017). Smartphone as a tool is supposed to be a source of enjoyment, pleasure and entertainment for the users, including students in their middle of adolescence. Nevertheless, it can have some negative effects on socially and academically. Academically, excessive use of smartphone is likely to distract them from doing their academic homework, lecturers and in general from their study (Ifeanyi & Chukwuere,2018). Socially, is likely to distract them from personal engagement with peers and close friends (Tokelo &Joshua ,2018). Becoming a smartphone dependent might lead to development of certain behavioural and mental problems among adolescents It can lead experience higher level of depression, trait anxiety and state anxiety compare to normal smartphone users (Manvin & Narina 2018).

Problematic smartphone use might be a serious problem for many students (Taymur, 2016), as they are not paying attention to their class lecturer because they are spending too much time on texting (Lopez-Fernandez 2017; Manvin & Narina ,2018). The *Diagnostic and Statistical Manual of Mental Disorders (DSM-5*, American Psychiatric Association (APA), 2013) introduced the diagnostic criteria for Internet gaming disorder and encouraged further research for listing it as a formal diagnosis. Adolescents would be more at risk of smartphone addiction as compared with adults because adolescents are yet to develop self-control in smartphone use (Alosaimi et al., 2016; Lee, Cho, Kim & Noh 2015; Seong-Soo & Bo-Kyung 2018; Young 2015).

Smartphone Addiction Scale (SAS), as indicated by Kwon, Kim, Cho & Yang (2013) is designed to identify the level of the smartphone addiction risk and to distinguish the high-risk group. For 2017, the number of smartphone users in Egypt is estimated to reach 23.6 million, and could reach almost 28 million by 2019 (statistics, 2017). Therefore, this study aims to evaluate the psychometric properties of the Egyptian translation of SAS-SV for adolescents.

## METHODS

### PARTICIPANTS AND PROCEDURE

The recruited participants were mainly from middle school in Baltim Educational Edra. They were in grades 1-3. Prior to administering the scales, the researcher informed students' parents with the help of social work teacher. They were given the option of accepting or refusing to allow their children's participation in the study. Students were also informed about purpose of the study. The researcher instructed them to honestly complete the scale. They were told to keep their identities anonymous on the scale paper to ensure honesty and sincerity. They also were told that their participation in the study was voluntarily and their responses were for research purposes only. A total of 223 out of 526 eligible students completed the Survey (response rate=42.39%), with 90.7% (205/226) reporting owning a smartphone.

### MEASURE

The SAS-SV (Kwon et al., 2013). The aim of this scale is to identify the level of the smartphone addiction risk and to distinguish the high-risk group in adolescent. It is a 10 items with a 6-point Likert scale from 1 = strongly disagree, 6 = strongly agree. Total scores typically range from 10 – 60, with higher score indicating Problematic Smartphone Usage. A native Egyptian assistant professor at department of methodology and instruction (English Language), college of education translated the English SAS-SV into Arabic with local adaptations. Backward translation was conducted by a full professor of English. Discrepancies were resolved by discussion and further modification before the instrument was finalized for use in this study.

### STATISTICAL ANALYSIS

Content validity was performed. The reliability estimates were also performed through Cronbach's alpha, using the SPSS V. 22.0 software.

### FINDINGS

#### FINDINGS ITEM ANALYSIS AND RELIABILITY

Item analysis of Smartphone Addiction Scale for the participant students is shown in Table 1. The

internal consistency of the scale was adequate. Cronbach's alpha ranged from 0.745 to 0.893 to all items. Reliability coefficient for all the scale was high (alpha = 0.904).

Table 1. Item analysis of smartphone addiction scale for the participant students

Scale Mean= 36.071 Sample(N=223) Inter-Item Correlations= 0.517 alpha = 0.904 SD= 6.501				
	Mean	Std. Deviation	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	3.197	0.732	0.701	0.745
2	3.735	0.868	0.812	0.885
3	3.533	0.889	0.700	0.893
4	3.591	0.953	0.788	0.886
5	3.569	0.812	0.772	0.888
6	3.726	0.940	0.807	0.885
7	3.596	0.781	0.753	0.890
8	3.748	0.810	0.833	0.885
9	3.605	0.780	0.729	0.891
10	3.766	0.919	0.773	0.887

## VALIDITY

Content validity was confirmed by statistically significant differences between heavy and light users ( $p < .001$ ).

## CONCLUSION AND DISCUSSION

The purpose of this study was to test the validity of the Smartphone Addiction scale (Kwon et al., 2013) in a sample of adolescents from middle school in Baltim Educational Edara. The internal consistency of the scale was adequate. Cronbach's alpha ranged from 0.745 to 0.893 to all items. Reliability coefficient for all the scale was high (alpha = 0.904). This scale can be a useful tool for determining those who are likely to be labeled "Smartphone Addicted" in Egypt. Adolescents use the internet extensively (Valkenburg, Schouten, & Peter, 2005). As a result, they may postpone or not to carry out their duties and responsibilities related to school (Yasin& Mustafa, 2018). They may have problem with academic performance (Serkan& Ece, 2018). The use of this instrument can be used

conveniently in the screening process to determine those who are likely to be labelled " Smartphone Addicted" in Egypt.

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