

**IMPROVING HEALTH SKILLS AND HEALTH LITERACY AMONG ADOLESCENTS**

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**ABSTRACT**

Adolescent health literacy and adolescent health in general have received very little attention compared to adult or even child health. Consequently, it is important to analyze how health literacy can be improved. Identifying the key factors that influence the health literacy of adolescents is a beginning step toward improving their health literacy. In addition, identifying the most effective way of getting the health information to them is an important step to equipping them with the right skills to encourage behavior change. This study main aim was identifying the health literacy predictors among adolescents. It was based on review of past researches; the study was able to identify the factors that resulted to better health literacy among adolescents. From the study it was found that adolescents who had general knowledge, some general knowledge of infectious diseases, health idea and whose school performance was high had better health behavior and health skills. As a result, health practitioners can use the information to improve health among adolescents particularly those who show weak academic performance.

**KEYWORDS:** Adolescents, Health Literacy, Health Skills, Health Behavior

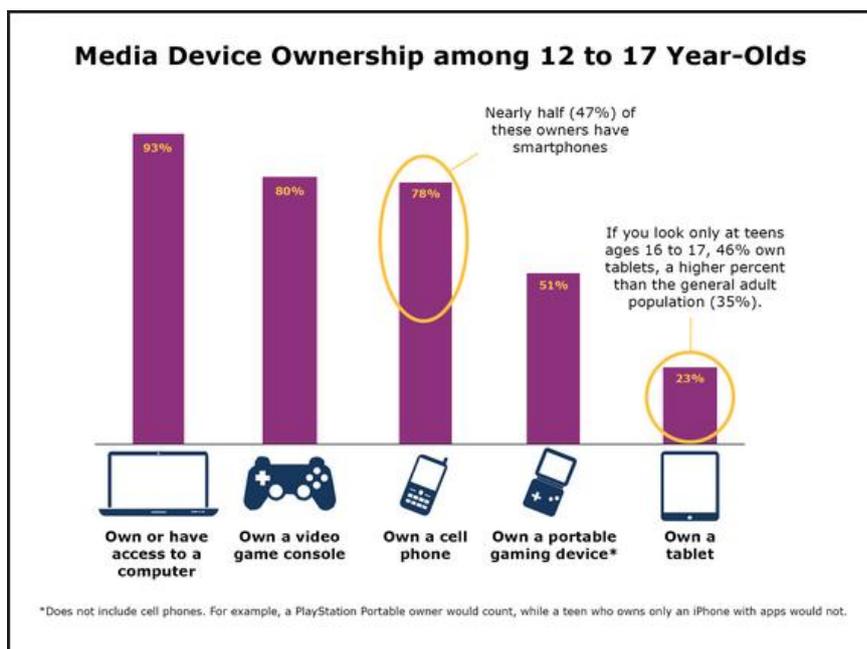
**INTRODUCTION**

Improving health literacy is important for public health and is a major goal for public health professionals. However, much of the attention on how to improve health literacy has focused mainly on adults (Guo, 2014). According to the National Network of Libraries of Medicine (2013), health literacy is defined as "the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions." However, it is important to pay attention to adolescent health literacy in equal measure.

There are two main reasons why it is important to improve health literacy among adolescents. First, adolescents may fail to benefit in full from education programs or messages on health since they cannot understand or get access to the messages (Schalet et al., 2014). Second, adolescents are at a time when many physiological and psychological changes are occurring meaning they are at an important stage of human development (Shaffer and Kipp, 2013). In order to comprehend the concept better, this paper focuses on a study done to determine the predictors of health skills and behavior among adolescents.

Studies on adolescent health literacy reveal that despite availability of information adolescents are still prone to sickness. For example, despite availability of information on sexually transmitted, adolescents continue to engage in risky sexual practice particularly those from ethnic minority (Champion and Collins, 2013). One of the problems that lead to such a situation is the use of numbers and statistics to pass public health information which often confuse the public (CDC, 2014).

In order for health literacy to improve four aspects must be kept in mind. According to Sorensen et al. (2012), the four elements are access, understanding, appraisal and application. Access is the ability to find health information while understanding is the ability to comprehend the information obtained. Appraising the information is the ability to interpret information, and application is making use of the information that has been obtained. The first step in improving health literacy and health behavior among adolescents is determining the best way to get the message to its users (Garcia-Retamano and Galesic, 2013). The image below shows the show the usage of various types of devices among adolescents.



Source: U.S. Department of Health & Human Services (2013).

## MATERIALS AND METHODS

In order to investigate the issue a review of a past studies on the issue was done. In this study using keywords health literacy, health skill and adolescent, five studies from 2008 to 2014 in Iran (Madex, IranDoc, PubMes, Medlib, SID) and google scholar were reviewed. According to Rocco and Hatcher (2011), peer-reviewed articles are a good source of information since they undergo rigorous scrutiny to ensure the reliability of the information. Peer reviewed articles are also a useful means of finding disseminated research (Abrams and Hays, 2013).

The table below clearly shows the characteristics of the students who participated in these five studies:

**Table 1.** Baseline characteristics.

Baseline variables	Category or range	n	Per cent
Gender	Female	1577	42.0
	Male	2177	58.0
School performance	Poor	340	9.1
	Good	3414	90.9
Student classification	High school students	1606	42.8
	University students	2148	57.2
Prestigious school	No	1906	50.8
	Yes	1848	49.2

n, number of participants surveyed.

Source: Ye et al., (2014)

## RESULTS AND DISCUSSION

The table below flawlessly shows the results of the study on the predictors of health behavior and health skills among adolescents

**Table 2.** Description statistics of health literacy (n = 3754).

Variables	Range	Mean	SD
General knowledge	0-6	4.1	1.4
Knowledge on infectious diseases	0-12	8.1	2.3
Health concept	0-9	6.7	1.7
Health skills	0-10	7.8	2.2
Health behaviors	0-14	8.5	2.4

Source: Source: Ye et al., (2014)

Using path analysis multi-linearity went undetected as the bivariate correlations did not go beyond 0.80 and the VIF of each student fell below 5. All the skews were also below 3, and the coefficients of kurtosis for all the variables examined was below 8. Path coefficients were also calculated using multiple regression analysis from a hypothesized model. The information is provided in the table below

**Table 3.** Path coefficients based on the final model.

Outcome variables	R <sup>2</sup>	Predictor variables	Unstandardized coefficient estimate	SE	p-value	Standardized coefficient estimate
Health behaviors	0.43	Health skills	0.246	0.016	<0.001	0.222
		Health concept	0.277	0.021	<0.001	0.195
		Knowledge on infectious diseases	0.266	0.016	<0.001	0.259
		General knowledge	0.265	0.025	<0.001	0.153
		School performance	0.396	0.079	<0.001	0.064
Health skills	0.24	gender	0.574	0.060	<0.001	0.119
		Health concept	0.215	0.021	<0.001	0.169
		Knowledge on infectious diseases	0.279	0.016	<0.001	0.301
		General knowledge	0.196	0.026	<0.001	0.126
		School performance	0.267	0.081	0.001	0.047

SE, standard error.

Source: Source: Ye et al., (2014)

The model had a good fit for its chi-square = 2.2 (df=2, P 0.325). AGFI = 0.998. GFI = 1.0, NFI = 1.0, RFI = 0.996, IFI = 1.0. CFI = 1.0 and RMSEA = 0.006. Knowledge of highly infectious disease ( $\beta = 0.15$ ), health concept ( $\beta = 0.20$ ), general knowledge ( $\beta = 0.15$ ) and health skills ( $\beta = 0.22$ ) had a positive effect on health behavior. The path model used in the study showed that health ideas, health skills, knowledge of infectious diseases and general knowledge had a direct impact on health behavior.

## CONCLUSION

The study found that adolescents who had general knowledge, some general knowledge of infectious diseases, health idea and whose school performance was exceptional, had better health behavior and health skills. The information is important since it can help health personnel to design health interventions that will be effective in improving the health skills and behaviors of students, particularly male students with weak academic performance.

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