

# A Comparative Cross-sectional Study of Religious Behavior in High School and University Students

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**Abstract**—The purpose of this study was to investigate the religious behavior of students in high school and universality in Lamerd, a town in the south of Iran, with respect to increase in their level of education and age. The participants were 450 high school and university students in all levels from first year of junior high school to the senior university students who were chosen through multi-stage cluster sampling method and their religious behavior was studied. Through the revised questionnaire by Nezar Alany from the University of Bahrain ( $r = 0/797$ ), the religious behavior of the subjects were analyzed. Results showed that students in high school in religious behavior were superior to the students of university ( $003/0 > p$ ) and there was a decline of religious behavior in junior high school third year students to second students of the same school ( $042/0 > p$ ). More important is that the decrease in religious behavior was associated with increase in educational levels ( $017/0 > p$ ) and age ( $043/0 > p$ ).

**Keywords**—Academic achievement, education level, religion

## I. INTRODUCTION

RELIGION is a collection of cultural systems, belief systems, and worldviews that relate humanity to spirituality and, sometimes, to moral values. Religious behavior is distinguished, and hence, can be defined as, the communicated acceptance of a supernatural claim. That is, the communicated acceptance of another person's claim as true that cannot be shown to be true by the senses constitutes the necessary and sufficient elements identifying behavior as religious. Although any attempt to know the religion with psychological explanations, according to some researchers such as Dorkhyam, can be misleading because religion is considered to be a sociological phenomenon, after him many authorities failed to resist the temptation to use a psychological explanation to understand religion more [3]. Malynosky can be mentioned as an outstanding example of such thought [5].

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The main viewpoints of the scientific study of religion can be limited to 5 approaches: historical, psychological, sociological, cognitive, and structural [4].

In this study the psychological approach to the scientific study of religion has been used. Through deeper look into human behavior, one can find two distinct behavior classes in their lives. The first class is related to what men do to sustain their lives on Earth such as: eating, drinking, sexual behavior, communicating with others, entertaining and having fun. Men do almost all these types of behavior to continue, balance, and improve their lives. The other class of behavior is related to some things such as, praying, worshipping, ... In this class of behavior, people strongly believe in an almighty spiritual power in their lives. They show their inner necessity toward Him in many ways. If needed, they sacrifice themselves for Him. The second class of behavior, is not only inner but also it restricts the other type of behavior for many people to provide environment more suitable for improving the second type. Researches About Religion show conflicting results. The first problem in measuring religion is making accurate and reliable tools to measure individual piety [3]. Studying religious behavior involves having operational definition for that. These methods are typically quantitative because they give the result in number so that they can be statistically correlated with the other indices. Searching in personality characteristics, attitudes and other religious variables to find out the behavior correlated to being religious is the second main duty of statistical researchers [9]. The more important point is that nobody has found the original dimensions of being religious in spite of the fact that many attempts have been done in the area of the psychology of religion so far.

Every measure should be considered an agreement to resolve the special needs of researchers [6]-[4]. In relation to education degree and belief in God, American scientists a half time more than others were members of a religious cult [1]. In contrast with these results, the higher the status of a scientific authority, the lower is his/her belief rate in God [2]. However, subsequent studies found content fault in questionnaires used by Luba [2]. In relation to religious behavior and increase in age, thinks that religiousness has something to do largely with fluid intelligence, i.e. the ability to solve new problems [6]. He believes that piety always has some relation to age. Young children and the old show higher rate of belief and religious behavior than other age groups.

Fluid intelligence shows an divertive pattern. It increases in the childhood but it decreases in the elderly age. Therefore he concludes that being religious means that one can neither think independently nor they will.

It is now about 33 years that Islamic Revolution of Iran has started its foundation on the growth of morality and spirituality and religion in the society. Now, it is time to survey the religious behavior among girls and women in relation to their educational level and age . It is important to see whether universities and schools have helped students grow in belief in line with the objectives of Islamic republic of Iran or not. Stating the problem Tendency toward education, especially higher education has increased in Iran so greatly that in the farthest parts of the country, we witnessed the opening of one of the university branches: Azad university, Payame Noor In some fields of study, some universities are ready to accept more students than they have graduated so far. Apart from the universities' benefit in higher education, the question is whether they have worked in the same direction as the students' religious behavior promotion or their religious belief is reduced as their educational level increased. How are the religious beliefs in different levels of education from junior high school to universities? In what level of education does falling of religious behavior occur if there is any? The answers to these questions can be used as stimulus for improving the country's educational system at different levels.

## II. RESEARCH QUESTIONS

- Is There A Significant Difference In The Student Religious Behavior In Schools And Universities?
- Is There A Significant Difference In The Religious Behavior Of High School Students In Grade One, Two, Three, And Four?
- Is there a significant difference in religious behavior of the junior high school students in grade one, two, and three?
- Is there a significant difference between religious behavior in boys and girls?
- What is the relationship between religious behavior and educational degree in the subjects?
- Is there a significance difference among in religious behavior among the students of junior high school, high school, and university?
- What is the relationship between age and religious behavior?
- What is difference in religious behavior between the students of Azad and Payam noor University.

## III. METHODS

This research is a good sample of cross-sectional study because it has comparatively studied the religious behavior among the students in different ages and levels of education. In carrying out this study census has been used.

Population and sample Statistical population includes all students studying in Lamerd schools, Peyame Noor ,and Azad university.

The sample consists of 450 students including 90 junior high school students, 30 from each grade, 120 high school students i.e. 30 students from each grade ,120 students from Peyame Noor university,30 students in each grade ,and 120 students from Azad university, 30 from each year. Also due to the large number of participants and lack of access to the list of all students, the multi-stage cluster sampling was used.

## IV. INSTRUMENT

Instrument used in this study was a revised shortened questionnaire by Nazar Alany (2005) about religious behavior in Islam. Since some of the items in the questionnaire were not suitable for specific age group of students and some items were repeated and there were still some items not correspondent to Sonni branch of Islam he decided to revise the questionnaire. The reliability of the final revised 30-item questionnaire was 0.797 according to Chronbach alpha method.

## V. METHODS OF DATA ANALYSIS

To answer the research questions 1-4 for independent group, t-test was used. However, for research questions 5-8, Pearson correlation was used. One way- factor analysis method together with Tukey post hoc test was used to answer the other research questions.

## VI. RESULTS

The questionnaires were completed by the subjects. Then the obtained data was analyzed by statistical methods .The results are presented here in order of the research questions. Q1. Is there a significant difference in the student religious behavior in schools and universities? To answer this question, T-Test for independent groups was used.

TABLE I  
 COMPARISON OF THE RELIGIOUS BEHAVIOR OF STUDENTS

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>T</i>	<i>df</i>	<i>P</i>
Students	210	161/43	20/189	3/187	448	0/003
Students of university	240	155/16	23/205	3/024		

The results of (Table I) showed that Students religious behavior in schools is significantly ( $P < 0/003$ ) higher than the students in universities.

TABLE II  
 COMPARED TO FOURTH YEAR HIGH SCHOOL STUDENTS OF RELIGIOUS BEHAVIOR

	<i>N</i>	<i>MS (Between groups)</i>	<i>MS (With in groups)</i>	<i>df</i>	<i>F</i>	<i>P</i>
First year	30					
Second Year	30					
Third Year	30	152/499	545/54	3/116	0/280	0/840
Fourth Year	30					

Q2 –Is there a significant difference in the religious behavior of high school students in grade one, two, three, and four?

The one-way variance analysis method was used to analyze the students religious behavior in different grades in high schools.

Results of one-way analysis of variance (Table II) showed that there is no significant difference ( $P > 0/840$ ) among the groups. In other words, there is no significant difference in the religious behavior of the high schools students in different levels (grade 1-4).

TABLE III  
COMPARISON OF FIRST YEAR STUDENTS TO THE GUIDANCE OF RELIGIOUS BEHAVIOR

	N	MS (Between groups)	MS (With in groups)	df	F	P
First year	30					
Second Year	30	1105/286	/983 345	/2 87	/3 195	0/044
Third Year	30					

Q 3 -Is there a significant difference in religious behavior of the junior high school students in grade one, two, and three? The one-way variance analysis in (Table III) showed that there is significant difference in the ( $044/0 > P$ ) level among students different grades. A post hoc Tukey test analysis (Table IV) showed that only students in grade 2 are significantly ( $042/0 > P$ ) different from those in grade 3 in religious behavior.

TABLE IV  
RESULTS OF TUKEY POST HOC TEST

	N	Mean	Class	The mean difference (I-J)	Standard error	p
First year	30	161/75	Second Year	-3/106	3/818	0/695
			Third Year	6/094	3/565	0/205
Second Year	30	164/86	First year	3/106	3/818	0/695
			Third Year	200/9	3/772	0/042
Third Year	30	155/66	First year	-6/094	3/565	0/205
			Second Year	-9/200	3/772	0/042

Results of T test for independent groups showed that there is no significant difference between male and female in the amount of religious behavior ( $114/0 > P$ ).

TABLE V  
COMPARISON OF RELIGIOUS BEHAVIOR IN BOYS AND GIRLS

	N	Mean	SD	T	df	p
Female	225	159/92	21/130	1/582	448	0/114
Male	225	154/67	23/353			

Q4 - Is there a significant difference between religious behavior in boys and girls?

Pearson correlation results (Table VI) showed that there exist a negative correlation ( $103/0 = r$ ) with a significant degree of ( $017/0 > P$ ) between religious behavior and education level, i.e. the more education level increases, the more religious behavior decreases in students.

Of course, in this study, educational level is considered a continuous variable.

TABLE VI  
REVIEWS THE CORRELATIONS BETWEEN RELIGIOUS BEHAVIOR AND EDUCATION

	N	Pearson coefficient	p
Religious behavior and education level	450	-0/103	0/017

Q5 - What is the relationship between religious behavior and educational degree in the subjects?

TABLE VII  
RELIGIOUS BEHAVIOR OF STUDENTS, SECONDARY SCHOOL AND UNIVERSITY STUDENTS

	N	MS (Between groups)	MS (With in groups)	df	F	P
Guidance school	90	/655 2416	/543 448	447/2	5/388	0/005
High school	120					
University	240					

Q6 -Is there a significance difference among in religious behavior among the students of junior high school, high school, and university? The results of (Table VII) showed that thee exist a significant difference ( $005/0 > P$ ) among the students in all three levels: junior high school, high school , and university .

TABLE VII  
TUKEY POST HOC TEST RESULTS

(I)	(J)	The mean difference (I-J)	S. error	P
Guidance school	High school	-1.766	2.234	0/709
	University	5.227	2.371	0/071
High school	Guidance school	1.766	2.234	0/709
	University	6.994	2.170	0/004
University	Guidance school	-5.227	2.371	0/071
	High school	-6.994	2.170	0/004

The results of post hoc Tukey test in (Table VIII) showed that there exist a significant difference ( $071/0 > P$ ) between the students of junior high school and university in religious behavior , and also between the students of university and those of high school ( $004/0 > P$ ) . However it was not so ( $709/0 > P$ ) in the case of students of junior high school and those of high schools.

TABLE IX  
THE RELATIONSHIP BETWEEN AGE AND RELIGIOUS BEHAVIOR

	N	Degree of correlation	p
Religious behavior and age	540	-0/087	0/043

Q7 -What is the relationship between age and religious behavior? Results showed that there exist a negative correlation ( $087/0 = r$ ) between religious behavior and age which is significant in the level ( $043/0 > P$ ). In other words, with increasing age, the religious behavior of subjects is reduced (Table IX).

TABLE X  
 COMPARED TO STUDENTS OF AZAD AND PAYAM NOOR UNIVERSITY  
 RELIGIOUS BEHAVIOR

	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>T</i>	<i>df</i>	<i>p</i>
Payam Noor university	120	158/73	24/046			
Azad university	120	151/97	21/691	1/603	238	0/059

Q 8 -what is difference in religious behavior between the students of Azad and Payam noor University? A T-test was used to answer this question for the independent groups and the results showed there is a significant difference (059/0> P) between the students Payame Noor and Azad universities although it was very close to significance point (Table X).

## VII. DISCUSSION

Results showed that there exist no significant difference (005/0> p) in religious behavior among the students of junior high school, high school, and university. Tukey post hoc test also showed that high school students are significantly (004/0> p) higher than university students in religious behavior. Of course the difference between junior high school and university students are also close to significant (071/0> p).

The results also showed no significant difference (114/0> p) between boys and girls of all the students. However, the students of junior high school and high school had significantly (003/0> p) higher religious behavior than university students. But there was neither significant difference among the university students of first to fourth year (840/0> p) nor among high school students of first to fourth year (217/0> p). It is worth saying that the students in second year of junior high school more significantly (042 / 0> p) had higher religious behavior than those of the third year. Although no significant difference (059/0> p) in religious behavior was observed between the students of Payame Noor university and those of Azad university, the difference in the students of Payame Noor university was nearly significant.

The most important part of research findings was that religious behavior and education level had a negative correlation coefficient (103/0- = r) with a significant level of (017/0> p), i.e. Increasing in the level of education was associated with reduction in the religious behavior. A negative correlation coefficient (087/0- = r) with a significant negative relationship (043/0> p) was found between age and religious behavior. It indicated an inverse relationship between these two variables.

In short, the religious behavior of the students in schools was better than the students in universities. And the religious behavior of the students in the second year of junior high school was higher than those of the third year. Increases in age and education level of the subjects were associated with decrease in their religious behavior. It means that firstly, religious behavior has a negative correlation with age and education level secondly, the reduction in religious behavior of the pupils occurs twice: 1) between the students of the second and third year of junior high school and 2) when students enter the university.

The results of this study are consistent with the findings of some of the previous researches. For example, in the case of

getting any relation between educational degree and religion, the higher the scientific status of an authority, the less is his/her belief value in God [2], [6].

In relation to age and being religious, religious growth occurs in puberty [8]. Advocators of the developmental pattern in life believe that spirituality is a natural process associated with physical growth. Brand believes that piety is always associated with age. Young children and the old show higher levels of belief and religious engagement than the other age groups. Meanwhile it is not accidental that fluid intelligence shows the reverse pattern: the peak occurs in childhood and it starts to fall in the middle-aged. Therefore he concludes that being religious means that men neither can think independently nor they will [6].

But unlike the above studies, there are some studies which have reached to a kind of conclusions quite different from what mentioned above. For example, a significant correlation between religious attitudes and academic achievement but no relation between people's religious attitude and control core [10]. Also has shown a positive relationship between religion and educational success although he considers family and social factors and parents and children's same orientation as the cause of it [9]. Also more than half of American scientists were members of a religious cult [3].

Why is it that increase in age and education associate with lower religious behavior? Does religion and education have a negative relationship? Are the results of this study, the negative relationship between religion and education, against Islamic instruction? To answer these questions, it is better to refer to researches that assume a curved relationship between religion and personality variables. Those who got better scores in these researches on the human scale (like racism) and personality (e.g. suspicion) were really those who both practically and theoretically had got the highest score in religion loving. But those who had low and average score in religion loving also had the weakest score in personality and human scales.

For example research on racism, in the amount of suspicion and aggressive nationalism, in the amount of patience and in the field of mental health and wellbeing, as well as many other studies all showed that the believers are really religious if they are adorned with moral, human, psychological, and well-being virtue. According to the holy Qur'an: Satan will deceive all but the true believers. The true religious people are closer to moral virtue only if they are really religious they never want to hide their weaknesses either consciously or unconsciously behind their religions [6], [7].

Hence, the best justification for the interpretation of the present results is that based on the verse of holy Qur'an which says "the majority of people are not true believers", the justification of decreasing in religious behavior with increasing in the education level lies in the subjects participating in the test interpretation. Of course it is one of the weaknesses of cross-sectional studies in which one is unable to compare completely all different stages together. That is why the need for longitudinal research has pointed out.

How should the seemingly contradictory results of this research be interpreted with those of the past researches? Inconsistencies between previous studies regarding the relationship between religious behavior and increasing education and age, can be justified according to type of religion, test, age, education and social environment and social culture and the statistical methods used in research. Sometimes contradictory results can be found in the false interpretation that people have from religion. Some circumstances for some people, the processes of religious dominance may have damaging effects [4]. Encourage people to impose their opinions upon others, using useless and inflexible responses to mental stress are examples of such problem.

The first possible hypothesis that one can draw out of the result review is that the student's entrance in university has been associated with a decrease in religious behavior. This means that increasing education levels and age has been associated with decrease in religious behavior and the universities in Iran have not followed the government policy to increase the religious behavior in the students.

The second possible hypothesis is that the observed differences between students before and after university entrance are because of their different interpretation of the questionnaire items. Hence the need for further research, especially with the interview approach seems necessary to examine more carefully the religious behavior. Also, since "the decreasing in religious behavior associated with increasing in educational level" is not a cause and effect relation but only a correlation, such a thing can not be solely due to the weakness of the university educational system. Other possible reasons can be pointed such as: weakness in the questionnaire, the cultural, social, and economic circumstances and cultural invasion out of the university.

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