Curiosity Levels of University Student Studying In The Various Departments

Mehmet Behzat TURAN, Zafer KÖMÜR, Mehmet AYDOĞAN, Mehmet DEMİREL [1]

[1] Physical Education and Sports School Dumlupınar University Turkey

***Bu çalışma TAFİSA (Uluslararası Herkes İçin Spor Federasyonu) 22. Dünya Kongresinde yayınlanmıştır.**

ABSTRACT

The purpose of this study is to examine the curiosity levels of university students studying in various departments. For this purpose, 532 university students who are studying in different departments at the University of Dumlupinar randomly selected as samples of this work.During the evaluation of the data, frequency (f)and percentage (%)was used. To add these statistical methods, in order to understand wheter there is any difference among participants sexes, the Independant Samples Test was used and to understand if there is an important difference among students who are studying in different departments, One way Anova analysis was made. As a result of the analysis, the average score is normally =223.38 and the participants' curiosity levels are higher than the average scale.Also according to the study, the curiosity levels of the students vary according to the gender. But no difference is found among participants in different departments.

Keywords: *Curiosity level, university, student*

PREFACE

Curiosity is a concept which tells to desire to learn the anything of a person. The humanbeing is a being who thinks, judges, interrogates, argues by its nature; so that, he/she wonders too things and wants to learn. There are very reasons of the curiosity on a person. When studies on this area are analysed researchers emphasize concepts which cause to the inquisitiveness like that. Coming down new, interesting, abnormal or mystic items, giving the positive input such as inquiry and direction, expressing willingness and desire for learn much more about environment or his/her ownof the individual,inquiring new experiences by following the environment and insisting on inquisition and examination for attain knowledge muc more(17).

Piaget expresses that curiosity is a necessity to grow the knowledge (15). Bruner expresses that is a abligatory point which matters to exist both humanbeing and specieses. They define as the premise studies in connection with curiosity(3).

The premise studies in connection with are made about 1960s. Maw and Maw have arrived the result that children who have high curiosity level remember longer time things which they learn accoding to children who have low curiosity level(13). Hogan and Greenberger have also observed that there is a connection between academic achievement and curiosity levelson a similar study which they have made with teacher(10). Berlyne has explained that particularly creative artist, interpreter,, listener or reader live processes in connection with the curiosity, display performances in result of perceptual and cognitive activities(1). The theor, Vilder and Berlyne realising the premise studies in connection with curiosity motive have explained, have been adopted by a large environment(17,18). Berlyne expresses the curiosity theory with two kids inquisitiveness. These are perceptual and knowledge inquisitiveness(1). Many researchers have used the inquisitiveness characteristic to evaluate the academic achievement, or learning performance(2, 17, 12)

The perceptual inquisitiveness causes to expand the impulsivity perception. In other words, the organism

composes to be achieve a knowledge its own. Knowledge inquisitiveness also expresses a motivational aspect which occurs in the result of relaxation with researching and realizing of the knowledge(14,9).Berlyne defends that the perceptual inquisitiveness is a common characteristic, is an animals and humanbeings but the knowledge curiosity exists much more on humanbeings due to learning and memory characteristics(9). Nevermore; studies just continueing on neuropsychology area are within the explanation effort the near biologic-neuropsychologic factors which is just unknown in vonnection with curiosity(11). Berlyne expresses that second kind curiosity which he defines has two dimensions as original and dissocrative curiosity. While the original curiosity is defined as a researching action to a special knowledge item dissociative curiosity is a general research, analysis manner which come out in the result of boring sense. The dissociative curiosity is seen on activities such as game and entertainment much more but the original curiosity is expressed with the curiosity impulsive in relation to a topic(12). Pearson deals with the curiosity as a newness necessity(16), Zuckerman deals with ist as a learning sense(20). However, Gestalt psychologists have explained that the curiosity is an important item of signifance search in organism and a fulfilment movement as coherent to totality. Berlyne has explained the curiosity as a motivational state, Day who is the student of Berlyne has anayzed the curiosity as a personality trait(4). Therefore, he has explained that a person having to a high curiosity level is much more curious on some conditions(orginality), fusses about the topic faster on some conditions(re-activeness), points out a movement continueing an inquisitiveness statue in a long time(12).

Vidler, Derek C, Rawan and Hashim R. Have analyzed the relation between academic curiosity and performance of the university students in the similar research which is made in 1975. The curiosity levels of the students has been determined with Academic Curiosity Scale. Test poists of English and Biology lessons are used for academic performance of the students. On the research result, it is discovered a meaningful affair between points which is get from Academic Curiosity Scale and academic performance.

THE AIM OF RESEARCH

The aim of this research is to determine the curiosity levels of university students and to state whether it refers to a difference or not in terms of variant of the curiosity levels between gender, faculty.income level and the other departments with Physcal Ed. Department. This study is performed because of being thought to the curiosity characteristic will suplement to this area by being analysed in Turk sample group and in terms of the other variants. With this aim, the study which is adapted to Turkish of “Correlation of Inquitiveness” which is formed by Erwin(1998) is implemented to university students in different departments.

Sub-problems of the research are pointed like this;

1.What is The curiosity levels of university students?

2.Have the curiosity levels of university students been varying according to gender and faculty which is srudied?

3.Is there any difference between Physical Education Sport Upper-School and the other faculties’departments in terms of the curiosity levels of the students?

THE METHOD OF RESEARCH

The screening method has been used on this study because determining to thecuriositylevels of university students and evaluating to in terms of some variants to this state have been aimed. In the ways; the state of play is determined with quantity analysis of datas which is achieved from the curiosity scale.

Working Group

Table 1: Demographic characteristics of the working group

FACTOR	VARIABLE	f	%
Age	17-19	188	35,3
	20-22	211	39,7
	23-25	115	21,6
	26 and older	18	3,4
	Total	532	100.0
Gender	Men	312	58,6
	Women	220	41,4
	Total	532	100.0
Department	Faculty of Economics and Administrative Sciences	94	17,7
	Faculty of Fine Arts	39	7,3
	Faculty of Engineering	43	8,1
	Faculty of Education	31	5,8
	Department of Sport Management	49	9,2
	Department of Education Coaching	64	12,0
	Recreation	25	4,7
	Physical Education Teacher Education Department	82	15,4
	Vocational School	105	19,7
	Total	532	100.0
Level of Prosperity	Worst	20	3,8
	Bad	41	7,7
	Normal	262	49,2
	Good	173	32,5
	Very Good	36	6,8
	Total	532	100.0
Weekly Free Time	1-10	82	15,4
	11-20	69	13
	21-30	108	20,3
	31 and over	273	51,3
	Total	532	100,0

The personal datas' variant of students who are joined to the research are given. Accoring to datas, 58,6 percent of students who stand on the sample group are male (f=312), 41,4 percent of them are female (f=220). Age distance is used as four items. When the age category of the sample group is aveluated students between 20 and 22 ages are tense with percent 39,7 rate and age group between 26 and upper participate in the lowest rate with percent 3,4 rate.

It is detected that the most participating to research are vocational high school with percent 19,7 rate, the lowest participating to research are the students of recreation department with percent 4,7 rate. It is seen that the sample group have "normal" prosperity level at the most with percent 49,2 rate and they have "very good" prosperity level with percent 6,8 rate. When weekly free times of the sample group are evaluated it is determined that "31&upper"hours are the most around them with percent 51,3 rates "between 11-20" hours are the lowest with percent 13 rate.

The Data Collection Tool

The first version of the Curiosity Scale was improved by Erwin, Coleman and Orlando(1998) ın James Madison University. The second and third versions are improved in the result of studies improved at the later time. The third version of the scale which is also used in this study is held again according to the criosity property depicted by Ainley (1987). The Sale consists of two child size. These are called as width(27 items) and depth (20 items) the width is the analysis to datas in wide scope and diversity. The person wants tol ive impulsive diverse experiences on this size of the curiosity property. Depth is intersted in specific topic, opinion or person and knowledges in connection with these try to learn continuely. So, the person wants to do a research in connection with a specific area and topic which is in the area of hid/hrt own and to enhance his/her acquisition. (Fulcher,2004:44). The curiosity level consists of a total of 47. The answer for scale item is likert-type rating scale as "the first very fit",the second particially suitable", "the third very few appropriate", "the fourth very very litte is not eligible","the fifth partially match", "sixth doesn't fit at all." According to that, when the starting point is taken one 3,5 value is assumed as middle dot of "very few appropriate" and "very little is not eligible" values. It is determined that min score is (47x1)47, median score is (47x3,5)165 and max score is (47x6)282 which will be get from scale in the general averageof the scale the confidence of curiosity index third version is detected as p<0,01 at level of 0,093.

Therefore, the information form is preperated for determine demographic features of the students. the informatin form is preperated for determine demographic features of the students. ıt is wanted to specify by marking one of options such as gender,age, faculty, prosperity level and weekly free time zone.

Diagnosises And Comments

Table 2: The Descriptive Statistics in connection with Curiosity Level of Students

	n	x	ss
Point of curiosity	532	223,38	23,74

The highest score which is able to get from the curiosity scale is 282, the lowest score is 47 and the median score waited is 165. According to that, when scores which is taken from curiosity scale are examined it is detected that the lowest score is 119, the highest score is 273, the average score is also 223,38. According to that, the curiosity levels of the university students are on upper of scale medium scale medium score. This state comes out that the university students have the high curiosity level. Having the high curiosity level of the university students can't explain alone to concentrating in which direction of the curiosity feature. For this reason, datas which is achieved from the sub-dimension of the curiosity scale of the students are examined. These datas are given in Table 3.

Table 3: The descriptive statistics in connection with sub-dimension of the curiosity scale.

Scale Sub-dimensions	x	n	ss
Width	127,83	532	15,007
Depth	95,55	532	11,51

When statistics in connection with sub-dimension of the curiosity scale are analysed it is realised that score average in connection with wdth dimension of students (x=127,83) is higher than average of depth sub-dimension. (x=95,55). According to, the university students don't concentrate on a single issue which they are interested in; despite this, it is thought that they try to deal with every topic interesting in. Because, inquisitiveness is a positive proverty as a general on learning to a new knowledge, it is also analysed in two styles. People who have to width proverty spend time to find a new knowledge from many information resources and they want to reach the different knowledges. People who have to depth property want to do detailed research in connection with a specific area or topic interesting in. Curious motive is considered as one of important variants which affect to learning process. The average belongs to sub-dimension of width in curiosity scale is higher that the average belongs to sub-dimension of depth. This status shows that Professional interests and trends of students aren't specific enough. This status could be commented with style that the topics which the students are interested in are multifarious but they aren't consistent.

Responses given to items to the width dimension of the scale are analysed it is seen that the students participate to items in connection with this dimension more than items reflect to the depth dimension. These are examples to items which reflect to this dimension of the scale and have to high average: "M4: When I learn a new thing I try to achieve the knowledge on every topic in relation with its. (x=4,97)" ; "M12: I try to new things continuously. (x=5,07)"; "M25: I'm interested in any topic (x=5,15)"; "M45: I enjoy to knowa little bit from everything.(x=5,25)." It can be said that the curiosity of the students range, the students want to interested in every topic, but they don't have enoug experience in connection with this topic and they have propartionally the negative ideas about participating and moving to activities in connection with they are interested in and learn. These are the examples to items having to lower average than width dimension and reflecting to depth dimensions: "M13: I can concentrate to the school and work projects easily (x=4,95)": "M35: I can spend to search a topic which I want to learn deeply to major part of my time. (x=4,94)" "M24: The thing which is banal for me is to live new experiences (x=3,80)."

It is thought that the students give the negative answers proportionally about observing to the activity of learning and participating as a voluntary to activities. Nevermore, this state should be examined in terms of socio-economic status of the students and possibility to arrive activities around them. As a result, it can be said that the students can have variable topic areas, they are the positive about newness and learning, they want to evaluate chances in connection with topics interesting in but they don't interested in topics have details, is routine, demand patiance.

Table 4: Independent groups' test result in connection with the curiosity levels according to gender

	Gender	n	x	ss	f	p
Total Of Curiosity	Men	312	220,04	24,43	-3,923	,000
	Women	220	228,13	21,91	-3,997	,000
Total Of Width	Men	312	125,91	15,28	-3,542	,000
	Women	220	130,55	14,20	-3,588	,000
Total Of Depth	Men	312	94,12	11,79	-3,447	,001
	Women	220	97,58	10,81	-3,499	,001

p<0,05

When it is examined in terms of the gender the score average in connection with the curiosity level is 220,04; 228,13 for the males. It is seen that the scale average score of the students in every two groups is on upper of 164. When the curiosity levels is compared the average scores of female and male students show difference and the differentiation is high on the female students (t=-3,997; p<0,05). This state gives to ideas that the curiosity characteristics of the female students are more dominant than the curiosity characteristics of male students. Width score average is 125,91 for the male students; it is 130,55 for female students in connection with sub-dimension. According to that; females have width score average higher than male in width sub-dimension average.(127,83). Thereby, it is seen that width dimension of female students are more dominant.(t=3,588;p<0,05). When scores of the depth dimension are examined it is seen that the average score and the female students arehyper than it.(95,55). According to this results, the depth dimension characteristic of female students is more dominant than male students' depth dimension.

Table 5: Descriptive Statistics in connection with Curiosity Levels according to Faculties

	n	x	ss
Faculty of Economics and Administrative Sciences	94	225,68	20,62
Faculty of Fine Arts	39	228,	19,74
Faculty of Engineering	43	219,97	24,95
Faculty of Education	31	222,09	22,03
Department of Sport Management	49	222,42	25,01
Department of Education Coaching	64	222,89	24,38
Recreation	25	233,2	28,14
Physical Education Teacher Education Department	82	224	20,78
Vocational School	105	219,33	27,13
Total	532	223,38	23,74

We can see in Table 5, that the highest average is belonging to the students of recreation department (x= 233,2) the lowest average is belonging to the students of vocational highschool. **(**x=219,97). The results of anova(the analysis of variance) in connection with the curiosity levels according to faculties are given in Table 6.

Table 6: The results of anova test according to faculties in connection with the curiosity levels scores

Source of Variance	Sum of Squares	sd	Average of Squares	f	P
Between Groups	6100,55	8	762,56	1,360	,211
Within Groups	293183,68	523	560,58		
Total	299284,23	531			

p<0,05

We can see in Table 6 that there isn't an excessive difference between the curiosity levels according to faculties which the students continue their educations and the average scores in connection with the curiosity levels (F=1,36, p<0,05). According to that, it could be said that the curiosity scores of Dumlupınar University's students don't change according to departments; but, the different department's students have the similar curiosity levels.

DISCUSSION AND INTERPRETATION

It is determined that the curiosity levels of university students are on upper of the average score of the scale; the average scores in connection with width dimension are higher than the average of depth sub-dimension in the result of the study which purposes to determine the curiosity levels of the university students who will give the direction to the future of society. It is determined that the curiosity medium score of the female students is 228,13, the male students' is 220,04 on the result of comparison according to genders of the curiosity scale which we make on, the sample group.

According to that, it could be said that the curiosity levels of the female students are more dominant than the male students'.

Demirel M& Coşkun Y.D have reported that the average scores of the female students are 231,12 and the average scores of the male students'. They have expressed that the curiosity level of the male students are more dominant than the female students according to comparisons which they have made. This study comes out some contrasts with our study.(6)

Deringöl Y and her friend have determined that the curiosity average scores of the female students are 216,60, and the male students' are 203,71 in the studies which they have made tp teacher suitor of elementary education.

According to these results, they have expressed that the curiosity levels of female teacher suitors are more dominant than the male teacher suitors'. This study is paralel with our study (7).

In our studies which we have made, it is determined that the width dimension average score in connection the curiosity sub-dimension of the student is 130,55 for females, it is 125,91 for males and the depth dimension average score is 97,58 for females, it is 94,12 for males and depth dimension of females are more superior than the width and depth dimension of males.

Deringöl Y and her friend have determined that the width dimension score of female teacher suitors is 119,94, males' is 89,77 on the studies which they have made. According to these results, they have reported that the width and depth dimension of female teacher suitors are more superior than male teacher suitors'. This study has supported to our study(7). In the result of the curiosity levels' comparisons of university students according to departments, while it is determined that the total of squares among groups is 6100,55 average of squares is 560,58. ıt isn't determined that the curiosity level's average scores between F=1,36&p<0,05 have an excellent difference on the study which they have made on the university students(6).

This study hasn't supported to our study. According to these results, there is the excellent difference between genders; furthermore, the study comes out that the curiosity levels of students are the high level because the curiosity levels of students are much more than the medium score which is produced from the scale, depth dimension's average score and width dimension's average score. It is evaluated that the students who have high curiosity level is individuals who learn throughout their life and this statue is positive.

It is determined that the average score in connection with width dimension is greater than average score in connection with depth dimension. This statue is commented in the style that the curiosity university students aren't limited on the title of one topic much more, it includes the diversity, the students are interested in every topic which they want but they don't live to enough experiences to there topics.

SOURCES

Berlyne, D. E. (1960). Conflict, arousal, and curiosity. New York: McGraw Hill.

Berlyne,D.E(1954).Knowledge and stimulus response psychology, Psychological Review Vol 61(4), Jul 1954, 245-254.

Bruner, J. S. (1966) Toward a Theory of Instruction, Cambridge, Mass.: Belkapp Press. 176 - 179 pages.

Day, H. I. (1982). Curiosity and the interested explorer: Performance & Instruction Vol 21(4) May 19-22.

Day, R. (1971) Epistemic curiosity and incidental recognition in relation to degree of uncertainty: Some general trends and intersubject differences British Journal of Psychology Volume 72, Issue 1, Volume 72, Issue 1, Volume 72, Issue 1.

Demirel M. Coşkun Y.D (2009) Üniversite Öğrencilerinin Meraklılık Düzeylerinin Bazı Değişkenler Açısından İncelenmesi Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, Yıl 9, Sayı 18, Aralık 2009, 111-134.

Deringöl Y ve ark.(2010) İlköğretim Öğretmen Adaylarının Meraklılık Düzeylerinin İncelenmesi, International Conference on New Trends in Education and Their Implications 11-13 November, Antalya-Turkey4.

Edelman, S. (1997). Curiosity and exploration. California State University,Northridge,http://www.csun.edu/~vcpsy00h/students/explore.htm adresinden 10 Aralık 2011 tarihinde indirilmiştir.

Fulcher, K. H. (2004) Towards measuring lifelong learning: The curiosity index. Unpublished doctoral dissertation, James Madison University, Department of Graduate Psychology, USA.

Hogan, R., & Greenberger, E. (1969) Development of a curiosity scale; The development of new measures of curiosity for children. The Johns Hopkins Univ.

Kang M., J.H. Ming.,Krajbich, I. M.,Loewenstein,G.,McClure,S.M. ,Wang, J.T.& Camerer, C.F. (2006). The hunger for knowledge: neural correlates of curiosity. The Southern California Innovation Project.

Loewenstein, G. (1994) The psychology of curiosity: A review and reinterpretation. Psychological Bulletin , 116(1), 75-98.

Maw and Maw. (1966) Children's Curiosity and Parental Attitudes Author, Journal of Marriage and Family, Vol. 28, No. 3 August, pp. 343-345.

Noone, S. M. (1994) Mandatory versus voluntary adult learners: implications for trainers. Unpublished doctoral dissertation, Oregon State University, USA.

Piaget, J. (1952). The Origins of Intelligence in Children (Cook, M., Trans.). New York: International Universities Press.

Pearson, P. (1970) Relationship between global and specified measures of novelty seeking. Journal of Cansulting Psychology, 11, 199-204.

Reio, T. G. (1997) Effects of curiosity on socialization-related learning and job performance In adults. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, USA.

Ünal, H. (2005) The influence of curiosity and spatial ability on preservice middle and secondary mathematics teachers' understanding of geometry. Unpublished doctoral dissertation, The Florida State University, College Of Education, USA.

Vidler, D. C., & Rawan, H. R. (1975). Further validation of a scale of academic curiosity: Psychological Reports Vol 37(1) August, 115-118.