

## CAREER DECISION LEVELS OF ADOLESCENT WHO ARE INTERESTED IN ESPORT CAREER

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### ABSTRACT

The electronic sports sector has emerged in last decade. In recent years, young generation is desiring to have an esports career more and more. Esports career might be thought as professional gaming with salary and huge prizes. Esports career promises great financial income, while it requires playing MOBA (Multiplayer Online Battle Arena) games for a long time for esports players in their daily life. Nowadays, teenagers can participate in tournaments as a player, a caster, a commentator, an analyzer or a host. Also, they can publish their own games and gameplay videos on twitch and youtube to earn money. While adolescents focusing on esports games to have an esports career, there are some negative effects of excessive play of computer games such as low academic achievements, career indecision, low psychological well-being, health problems. The purpose of this study is to reveal career decision levels of adolescents who are interested in having esports career. The research's study group consists of 11th grade students in high schools in Turkey. Web-based Questionnaire and Career Decision Inventory (CDI) which belongs to Cakir had been used to collect the data. Using data from a survey, we tested adolescents' career decision levels in terms of several variables. According to the results, adolescents' career decision levels were found to be high and effected by daily play time. Additionally, adolescents' desire of having esports career and desire of earning prizes in esports tournaments are separately significant predictor of career indecision. Implications and recommendations for future research, career counseling and educationalist are discussed.

**Keywords:** Esports career, electronic sports, career decision

### INTRODUCTION

Adolescence is one of the periods when individuals make career decisions for their future. In these periods, assisting them in their career choices is one of the most important services that can be given (Cakir, 2004). Career decisions of adolescents are mostly effected by family, peer environment, interests, abilities and life conditions. In last years, factors such as technological innovations, improved communication standards, new business areas, luckiness have become effective in career choices (Pryor & Bright, 2011). People's career development is highly influenced by unplanned events (Borg, Bright & Pryor, 2014). Nowadays, It has become a necessity for the young generation to follow and adapt to new business areas.

In today's conditions in which adolescents are struggling to make career decisions, a new sector that attracts their attention is developing and spreading rapidly. MOBA (Multiplayer Online Battle Arena) games are promising a career option to adolescents. The young generation is dreaming moving away from the education system and desiring to have a career as professional esports player, commentator, analyzer or caster. Becoming professional esports player comes to mind as career option when esports career is mentioned. Esports players participate in tournaments individually or with teams. While some of games like Starcraft require single player, other games such as Dota 2, Lol, CS:GO are played 5 against 5 players.

Nowadays, professional esports players receive salaries of \$ 400-800 in the Asian countries such as China and South Korea, while in Europa and the US they receive salaries of \$ 1500- 5000. Players also receive large percentage of the prizes earned in tournaments (Duran, 2016). Founded in 2014, Gfinity organizes daily tournaments. Prizes reach up to about \$ 50.000 per month (Heaven, 2014). Globally, in all tournaments held in 2017, the prize pools for some games are distributed as follows: Dota 2 - \$ 38 million, CS:GO - \$ 19 million, League of Legends - \$ 12 million (Goldman Sachs, 2018). When considered all this prizes, it is not surprising to see teenagers' desire of having esports career.

Today, most of teachers, parents and adults are unfamiliar to esports sector. On the other hand, there is a young generation whose interest in esports is growing rapidly. Professional esports players spend excessive time of their daily life on esports games. Despite the fact that game addiction hasn't been related to daily play time according to DSM-V, there are many research which are mentioning that people playing video games more than 2 hours per day are addicted, moreover people playing more than 6 hours per day are pathologically addicted (APA, 2001; Chiu, Lee & Huang, 2004; Xing, 2007; Van Rooij, Meerkerk, Schoenmakers, Van den Eijnden & Van den Mheen, 2008; NPD, 2010; Hawi & Rupert, 2015; Choi, Hums & Bum, 2018; Garcia-Lanzo & Chamarro, 2018). 67% of professional esports players or those who are interested in esports play 3 hours daily and 30% of them play more than 5 hours daily (Eventbrite, 2015). In DSM-V fact sheet (2013), internet game addiction has been associated with other behavioral addictions. Game addicted person struggles to control game playing time and increases game playing time in one sitting. When person prevented from playing games, the person is thinking playing games all the time. Extreme play of computer games might cause low interest to lectures and reduce students' academic achievements (Chan & Rabiowitz, 2006; Anand, 2007). Additionally, excessive play of computer games has negative effect on mental health as makes person's decision making unhealthier. However, professional esports teams working with psychologists and physiotherapists to recover their players health. Unfortunately, there aren't any this kind of opportunities for adolescents who are playing computer games with excessive amount of time. On the other hand, Esports career promises great financial income. Esports tournaments have been giving great amount of prizes every year. Considering the existence of millions of adolescents who are interested in esports around the world, it is important to evaluate esports career option realistically for adolescents.

### **Purpose of the Study**

In the literature, there is not a common research that examines the excessive play of esports career related games and career decision levels. In this study, it is thought that the career decision levels of adolescents are affected by esports related games indirectly depending effected academic success. The purpose of this study is to reveal career decision levels of adolescents who play esports related computer games in terms of their daily play hours, their desire to have an esports career and their desire to earn prizes in esports tournaments.

### **METHODOLOGY**

In order to determine the participants of the study, a public announcement had been made on forum pages of popular esports related websites (eslgame.com, joindota.com, voobly.com, strategyturk.com, esportr.com) by sharing a link in June, July and August of 2018. The participants directed to the link through Google Forms which includes personal information form prepared by the researcher and Career Decision Inventory developed by Çakır. Duo to Çakır's reliability and validity study of CDI used on only 1th graders of high

schools, the study group consists of 112 male adolescents (aged 15-16) who are completed 1th grade of high school in Turkey.

In this study, career decision levels of adolescents interested in esports career were examined in accordance with the descriptive research model. In the research, students' daily playing game time, their desire of having esports career and their desire of earning prizes in esports tournaments are independent variables, while the career decision level of adolescents is independent. In this research, SPSS 24 was used for data analyzes. In order to compare the total CDI score of participants and the average score of the study conducted for the validity and reliability of CDI, one sample t test was used. One-way ANOVA was used for valuable differences of career decision levels between the groups which are separated by daily video game play times. Scheffe post hoc approach is used in case ANOVA test come out significant to determine where significance is. Two separate simple linear regression analysis is used to determine relationships between the career decision level and adolescents' desire of having esports career and between the career decision level and adolescents' desire of earning prizes in esports tournaments.

### Measurement Tools

**Questionnaire.** Specifically three important questions are investigated in this study. The first one is related to adolescents' daily play of video game time. Option of this question included three choices. By examining the literature related to gaming addiction, it is considered that playing less than 2 hours per day is not dangerous and causing low gaming addiction behaviours. Playing more than 2 hours per day may cause behavioral issues and gaming addiction behaviours. Also, playing more than 6 hours per day is seen as causing extremely gaming addiction behaviours. Thus, choices were set to "0-2 hours per day", "2-6 hours per day" and "more than 6 hours per day". Second question pertains to adolescents' desire of having esports career and third question is about adolescents' desire of earning prizes in esports tournaments. Second and third item were presented at a 7 point likert-type scale from "Definitely I don't want (1)" to "Definitely I want (7)".

**Career Decision Inventory.** CDI was developed by Çakır (2003) in order to identify career indecisions of high school students. The development of CDI was carried out with general 1th grader high school students. In the validity and reliability study of CDI, mean score was found to be 87,02. The higher score obtained from CDI meant to be higher career indecision level of students. The factor loads of the 30 items ranged from .38 to .73. Total substance correlations of CDI were also examined between 0.23 and .57. The Cronbach alpha coefficient was calculated as .85 and test-retest correlation was calculated to be .83.

## FINDINGS

### *Career Decision Levels of Adolescents into eSports*

One sample t-test was used to compare the score obtained from validity and reliability study of CDI and CDI scores of the participants who are interested in esports career. The mean CDI score of adolescent who are interested in esports career is 109,78 and standard deviation is 18,50. In the validity and reliability study of CDI, mean score was found to be 87,02 and standard deviation was 15,15 (Çakır, 2003). According to the results, career indecisions of the adolescents were significantly higher than the mean value (87,02) obtained from the validity and reliability study of CDI ( $p=0.000<0.05$ ). The high score taken from CDI indicates high level of career indecision. According to one sample t-test result, adolescents who are interested

in esports career are having much career indecision compared to adolescents in the criterion group.

#### *Career Decision Levels of Adolescents into eSport Career by Daily Play Time*

According to the results of the homogeneity of variance test, there was no significant difference between the groups' career decision level scores ( $p=0.467>0.05$ ). According to the One-way ANOVA results, career decision levels of adolescents who are interested in esports career show significant difference between the daily play time groups ( $p=0.000<0.05$ ). One-way ANOVA results are given in Table 1 below.

**Table 1:** ANOVA results used to examine the difference of the CDI scores of the adolescents who are interested in esports career according to the time devoted to play.

ANOVA	Kareler Toplamı	df	Mean Square	F	Sig.
Between Groups	13295.982	2	6647.991	29.332	.000
Within Groups	24704.875	109	226.650		
Total	38000.857	111			

As the career decision levels of the adolescents who are interested in esports career show significant difference between the groups, post hoc test (Scheffe) was used for the groups' multiple comparison and the results given in table 2.

**Table 2:** Results of the Scheffe test conducted to determine which groups differed by daily play time

Groups (i)	Groups (j)	Mean Difference	Standart Error	Sig.
	2-6 hours	-23.325	4.143	.000
0-2 hours	More than 6 hours	-28.175	3.710	.000
	0-2 hours	23.325	4.143	.000
2-6 hours	More than 6 hours	-4.849	3.349	.354
More than 6 hours	0-2 hours	28.175	3.710	.000
	2-6 hours	4.849	3.349	.354

According to the Scheffe test results, career indecision of group with 0-2 hours daily play time was significantly lower than those of the groups with 2-6 hours daily play time and more than 6 hours daily play time ( $p=0.000<0.05$ ). There was no significant difference between the 2-6 hours daily play time and more than 6 hours daily play time groups ( $p=0.354>0.05$ ).

*Predictive Power Effect of Adolescents' Desire of Having eSport Career on Career Decision Levels*

There was significant positive correlation between the adolescents' CDI score and their desire of having esport career ( $R = .533$ ,  $p = 0.000 < 0.01$ ). The simple linear regression analysis was carried out to identify the predictive power of the adolescents' desire of having esport career on their career decision levels and regression coefficients are given in Table 3 below.

**Table 3:** The predictive power of adolescents' desire of having esport career on their Career Decision Levels

Model	B	Standard Error	Beta	t	sig.
Constant	59.508	7.757		7.671	.000
Esport career desire	7.965	1.206	.533	6.04	.000
R=0.533    R <sup>2</sup> =0.284    F <sub>(1-110)</sub> =43.609    p=0.000					

Dependent variable: Career Decision Level

Adolescents' desire of having esport career is significant predictor power of career indecision ( $F_{(1-110)} = 43.609$ ,  $p = 0.000 < 0.05$ ). Adolescents' desire of having esport career explains %28 of adolescents' career indecision. The coefficient of the predictor variable ( $B = 7.965$ ) in the regression equation was significant ( $p = 0.01$ ).

*Predictive Power Effect of Adolescents' Desire of Earning Prizes in eSport Tournaments on Career Decision Levels*

There was significant positive correlation between the adolescents' CDI score and their desire of earning prizes in esport tournaments ( $R = .514$ ,  $p = 0.000 < 0.01$ ). The simple linear regression analysis was carried out to identify the predictive power of the adolescents' desire of earning prizes on their career decision levels and regression coefficients are given in Table 4 below.

**Table 4:** The predictive power of adolescents' desire of earning prizes in esport tournaments on their Career Decision Levels

Model	B	Standard Error	Beta	t	sig.
Constant	53.998	9.001		5.999	.000
Earning prizes desire	8.595	1.367	.514	6.287	.000
R=0.514    R <sup>2</sup> =0.264    F <sub>(1-110)</sub> =39.526    p=0.000					

Dependent variable: Career Decision Level

Adolescents' desire of earning prizes in esport tournaments is significant predictor power of career indecision ( $F_{(1-110)} = 39.526$ ,  $p = 0.000 < 0.05$ ). Adolescents' desire of earning prizes in esport tournaments explains %26 of adolescents' career indecision. The coefficient of the predictor variable ( $B = 8.595$ ) in the regression equation was significant ( $p = 0.01$ ).

## DISCUSSION

According to the results of one sample t-test, career indecisions of the adolescents who are interested in esports career were significantly higher. When the literature is examined, there is no common research about career decision and esports. Computer games cause a decrease in academic achievements (Rabiowiz, 2006; Anand, 2007). The decrease of academic self efficacy indirectly increases career indecision. Some of the professional esports players who have achieved great success in the esports sector started to playing computer games as a result of family or academic problems and they started to participate in esports tournaments (Co, 2014). Having experience of various problems and having successful role models in the esports sector makes esports more attractive for adolescents. Considering the findings of this study and the literature together, it is not surprising for adolescents who are interested in esports career to have career indecisions.

In this study, %20 of the participants are playing 0-2 hours per day, %28 of them are playing 2-6 hours per day and % 52 of them playing more than 6 hours per day. According to research, excessive amount of play seen as pathological gaming or game addiction (Lemmens, Bushman & Kooij, 2006; Meerkerk, Van Rooij, Amadmoestar & Schoenmakers, 2009). Playing excessive amount of games has detrimental effects on health, causing addictive behaviors and decreasing academic success. Moreover, spending more than 2 hours a day on the screen affects school performance (APA, 2001). More than half of the participants of this study play an excessive amount of games. According to literature, these students are seen as pathological game addicted and are in a risk group that is open to all harmful effects.

The interest of young people to esports sector, which promises an esports career, is increasing day by day. Nowadays, millions of young people around the globe are dreaming about esports career and play games for hours to reach high levels as professional esports players have. According to another finding obtained from this research, there is significant positive relationship between the adolescents' desire of having esports career and their career indecision. High career indecision is eventual result for an adolescent who loves playing computer games with dreaming to have an esports career.

Huge prizes in esports tournaments are one of the factors that lead adolescents to have an esports career. Adolescents want to have an esports career as well as to earn prizes in esports tournaments. The fact that there are role models in the esports sector with annual revenue of million dollars attracts young generation to esports career (Kain, 2014). According to another finding obtained from this research, there is significant positive relationship between the adolescents' desire of earning prizes in esports tournaments and their career indecision. Making money from computer games, makes earning prizes in esports games predictor power of career indecision.

### Limitations and Research Implications

Only 1th grader high school students participated in this study duo to the sample of CDI's validity and reliability study. It would be more useful to use proper scale for a larger sample. In addition, only male students participated in the study. The inclusion of female students in a larger scale will reveal the situation more clearly. All participants want to have an esports career and play games related to esports. There is no information about the participation of professional players in the research. Therefore, measuring career decision levels of

professional esports players will provide healthier assessments for the esports sector and education field. The data collected online by Google Forms because of data collection from many schools was difficult to deal with. So that, the research can be repeated by reaching more people who are interested in esports with the contact of esports federation.

### Recommendations

In this study, the relationships between career decision levels and adolescents' daily play times were examined in order to look at the subject in terms of dependency. It will be appropriate to use measurement tools for game addiction in new research.

Esports career is a new option for young people. On the other hand, this may cause hundreds of young people to become addicted to computer games. In the future, it would be useful to develop aptitude scales for esports games to help young people evaluate themselves better. Based on the findings of this study, which indicates that the high school 11th graders who are interested in esports career are experiencing career indecisions, school guidance services working in high schools should have knowledge about esports career. At the same time, it is necessary to inform teachers and families about esports career. Some students might be talented in technology and computer games. An esports career evaluation can be made for students who are interested in sports.

Esports has been popular for almost 10 years and is spreading rapidly. It is unclear how long this trend last. In this case, controlling esports stream is important. For this purpose, clubs might be found and small sized organizations related to esports games can be made in schools and universities. Such activities will help to ensure the control of esports stream as increase the awareness esports sector for adults.

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