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The Role of Word-of-Mouth Communication and Role Models in Course Selection Decisions of Students *

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Abstract

Herein, the aim of the current study is a) to determine the effect of students' word-of-mouth communication and their role models on their course-selection decisions, b) to determine the mediation effect of word-of-mouth in role modeling and students' intention to select a course, and c) to reveal which kind of role model is more effective in physical education and sports (PES) course selection. A total of 1445 students (\overline{X}_{age} =14,43±1,42), of whom 813 (56.3%) were male and 632 (43.7%) were female, were enrolled in four different districts (Osmangazi, Yildirim, Nilufer and Inegol) were obtained. In the data analysis, IBM SPSS and AMOS 20 package programs were performed to determine the structural relations (frequency, percentage, mean, standard deviation), explanatory factor analysis (EFA), confirmatory factor analysis (CFA). Structural equation modeling (SEM) was used to determine structural relationships among variables. The reference groups which are effective in the selection of courses related to PES are as follows; fathers, peers, PES teachers and sports celebrities. In the structural equation model, role model and word-of-mouth communication explained the change in the intention of course selection in the range of 67% to 77%. Additionally, there was a mediating effect of word-of-mouth communication between role modeling and course selection decision. Findings of this study were discussed in context of the literature by making some recommendations for future studies.

Keywords

Physical Education and Sports Course Selection Decision Primary and Secondary Education Mediator Effect SEM

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Introduction

In parallel with global developments and changes in education systems in recent years, there have been radical changes in the Turkish educational system (Yıldırım, 2018). Law No. 6287 on Primary Education and Education, which was passed on March 30, 2012, prolonged the duration of compulsory education to 12 years. In this system, students complete the primary education period in 4+4 (primary and secondary school) years and the high school period in four years (Erçaçan, 2014; Karadeniz, 2013; Memişoğlu & İsmetoğlu, 2013). This change in the education system has led to changes in the teaching style of physical education and sports (PES¹) courses and its position in the curriculum. Previously, PES was included in curricula throughout the eight years of primary education, but it was replaced by games and physical activities course in primary education. Additionally, PES remained compulsory in secondary and high school curricula and an elective PES course was added to curricula (Küçükibiş, 2016; MEB, 2018a; Resmi Gazete, 2012). It has been stated that, besides its benefits, such as improving self-discipline and reasoning, and decreasing tension (Baltacı, 2008), PES is an experience that contributes to both personal and social development (Pehlivan & Daşdan Ada, 2011). Therefore, students should be directed to choose the elective PES course. In other words, it is important that children develop a positive attitude and behaviors toward PES.

Attitude is one of the most widely investigated issues in the fields of sociology, psychology (Allen, Guy, & Edgley, 1980), behavioral sciences, and, to be more specific, consumer behaviors (Helgeson, Kluge, Mager, & Taylor, 1984). Defined as an expression of positive or negative evaluations of objects, people, or events (Schiffman & Kanuk, 2000), attitude is a set of ideas or feelings that an individual forms toward a phenomenon through experience. It is stated that family, environment, and direct personal experience have an effect in the formation of an individual's knowledge, skills, and attitudes (Moschis & Churchill, 1978; Ward, 1974) and, according to social learning theory, this effect occurs as a result of interactions such as imitation and reinforcement (Bandura, 1977, as cited in Rich, 1997; Kağıtçıbaşı, 1999; Madran & Bozyiğit, 2013).

The interactions with various people or groups have a key role in the formation process of an individual's attitudes. The literature shows that other people and groups are reference groups (Makgosa & Mohube, 2007), socialization agents (Funk, Alexandris, & McDonald, 2008), and role models (Basow & Howe, 1980; Nauta & Kokaly, 2001; Martin & Bush, 2000). The concept of the role model is described as an adult whose lifestyle and actions are worthy of being imitated (Pleiss & Feldhusen, 1995; Basow & Howe, 1980). Role models are a part of daily life, therefore, it is considered that they have an important effect on individuals' beliefs and actions (Payne, Reynolds, Brown, & Fleming, 2003). Basow and Howe (1980) classified role models as positive (someone whom the individual actively wants to be like) and negative (someone whom the individual actively refrains from being like), while Pleiss and Feldhusen (1995) and Funk et al. (2008) categorize role models into two groups depending on who they are, and the interaction with them. In the first group is the normative role model, with whom the individual is in direct interaction, such as family members (mother, father, siblings), peers (classmates), and teachers (Bristol & Mangleburg, 2005; Haroon, Amin ul-Haq, & Anil, 2015; Özabacı & Özmen, 2005). The second group is the comparative role model, who is relatively distant socially and inspires the individual to achieve the same success, such as athletes and celebrities (Makgosa & Mohube, 2007; Martin & Bush,

¹ The elective courses related to physical education and sports are carried out in accordance with Law No. 6287 on Primary Education and Education, which was passed on March 30, 2012, are included in the category of "Art and Sports" by the name of "Sports and Physical Activities" in primary education. In secondary education, elective courses related to physical education and sports are included in the category of "Sport and Social Activity" by the name of "Elective Physical Education and Sports". In this study, the abbreviation of "BES" was used to identify related courses in order to prevent confusion.

2000; Subramanian & Subramanian, 1995). In this study, role modeling is considered to be the proper behaviors perceived by students in line with the norms and values adopted by normative and comparative role models.

There is no proof in the literature regarding the long-term effects of role modeling behavior on students (consumers) (Pleiss & Fleidhausen, 1995); the effects of role models on young consumer groups' selection or decision-making processes (Braunstein & Zhang, 2005) remain to be clarified. The changes in the education system involve students in a complex decision-making process. Choice is described as a complex, multidimensional, and recursive process which has many different effects on a decision (Foskett, 1999, as cited in Maringe, 2006). While Becker (1975) argues that students make rational choices regarding course selection, some other researchers (Roberts, 1984; Ryrie, 1981) claim that the process is not rational, that students make their choices based on socio-economic and cultural limits (as cited in Maringe, 2006). Another point of view highlights the importance of subjective judgment and personality in the decision-making process (Maringe, 2006). According to this, decision-making is a rational process that is limited by students' perception of the opportunities available and their personality (Payne, 2003). In this respect, pragmatic reasons are influential on students' course-selection processes, and these reasons are mainly a result of prejudices which originate in the effects of family history, culture, and life cycle (Hemsley Brown, 1999). To sum up, making course choices can be considered a problem-solving process undertaken by students.

Chapman (1986, as cited in Maringe, 2006), the first researcher to apply buying behavior theory to education, stated that students or their parents may face several uncertainties while choosing an institution (such as a high school or university) or a field of study (the courses in which students will specialize or classes and/or courses that will contribute to their personal development). These uncertainties generally include a set of stages: stimulation, search for information and evaluation of alternatives, decision, and feelings as a result of the experiences after the choice is made (Kotler, 2000). During the search for information and evaluation of alternatives, individuals need ready sources of reliable information (family, friends, teachers, etc.) (Kılıçer & Öztürk, 2012). Word-of-mouth (WOM), a form of interpersonal communication, is an important source of information. As in many other service sector fields, WOM communication sector, which is a complex and competitive environment (Herold, Sipilä, Tarkiainen, & Sundqvist, 2017; Herold, Tarkiainen, & Sundqvist, 2016; Sweeney, Soutar, & Mazzarol, 2014). Individuals consult others to seek advice or guidance. Berger (2013) stated that since this social interaction is convincing, credible, and targeted at an interested group, it produces a significant effect and affects behaviors.

It is a known fact that students' role models are "real and alive people" (Pleiss & Feldhusen, 1995), they can be found at home, in school, in wider society, or in the mass media (including mass media and social media tools), and they can enter into communication and interaction with their role models (Herold et al., 2017). In the current study, this is an important first step toward understanding the importance of role-taking behavior on WOM and course selection intentions from the perspective of middle school and high school students in the context of social learning (Rich, 1997) and purchasing behavior theories (Maringe, 2006). Therefore, the purpose of this study is a) to determine the effect of students' WOM communication with their role models on their course-selection decisions, b) to determine the mediation effect of WOM in role modeling and students' intention to select a course, and c) to reveal which kind of role model is more effective in PES course selection. In line with this purpose, the following hypotheses were tested:

H1: Students' role modeling has a statistically significant effect on their PES selection intentions.

H₂: Students' role modeling has a statistically significant effect on their WOM communication behaviors.

*H*₃: Students' WOM communication behaviors have a statistically significant effect on their intention to select PES.

*H*₄: WOM communication has a mediating role between students' role modeling and their intention to select PES.

Method

Research Design

The current study utilized correlational research design. The purpose of this study was to determine the impact of role model and WOM on the choice of elective courses, to assess the mediating effect of WOM in the relationship between role model and course selection intention and to reveal which role model is more effective in the preference of PES course. In order to investigate inferential relationships simultaneously, structural equation modeling (SEM) was used (Fraenkel, Wallen, & Hyun, 2012). In this study, role modeling behavior is an independent variable while PES course selection intention is the dependent variable. WOM communication is the mediator variable whose effect on the dependent and the independent variable is measured (Figure 1).

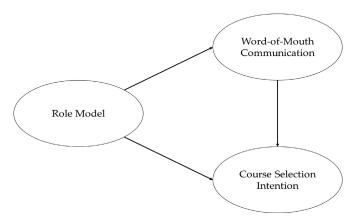


Figure 1. General Research Design

Participants

Participants were selected in Bursa for ease of availability and because Bursa is the fourth largest city in Turkey in terms of population. The four most populous districts of Bursa (Osmangazi, Yıldırım, Nilüfer, and İnegöl), which have different socio-economic levels, were selected for the sample of the study (TUİK, 2018). In these four districts, approximately 243,850 students attend secondary and high school (except Vocational and Technical High Schools) level (MEB, 2018b). It was determined that 664 students should be reached with a 99% confidence interval and 5% margin of error. In addition, it is stated that there should be 5, 10 or 20 times the number of expressions for adequate sample size in the studies in which multivariate analysis methods will be used (Hair, Black, Babin, & Anderson, 2009). Considering these criteria, four secondary schools and high schools were randomly selected in the schools affiliated to the relevant district directorate of national education (Coşkun, Altunışık, & Yıldırım, 2017). The data were collected from these schools in the 2016-2017 academic year, from 1,445 students (813 male [56.3%] and 632 female [43.7%]) who volunteered to participate by means of a survey. The participants were aged between 12 and 18 (mean age 14.42±1.40).

Instruments

With a view to collecting the data appropriately, a comprehensive literature review was first conducted to determine the best data collection tools considering the characteristics of the sample (e.g. attention deficit). As a result of the literature review, a two-section data collection tool was developed based on 14 expressions. In the first section, a role modeling scale consisting of five expressions developed by Rich (1997) was used to determine the level to which participants were affected by a role model. A sample expression is: *My role model is a positive role model that others can follow*. The scale's validity and reliability have previously been tested by Eskiler and Altınışık (2017). A high score on the overall scale indicates a high level of role modeling.

During the scale development study, the Cronbach's alpha internal consistency coefficient was calculated as .96. Additionally, confirmatory factor analysis revealed that the goodness of fit index values confirmed the model as valid to measure role modeling level ($\chi^2/df=2.22$, CFI=.96, TLI=.95). In order to determine students' WOM communication behaviors regarding PES, three expressions adapted from Zeithaml, Berry, & Parasuraman (1996), and Bush, Martin, and Bush (2004) were included in the scale along with two expressions to determine course selection intentions adapted from Zeithaml et al. (1996). The internal consistency coefficient of the WOM communication scale was found to be .87 and the items explained 80% of total variance. The higher the score on the WOM scale, the greater the individual's tendency to engage in WOM communication (e.g. I suggest physical education and sportsrelated courses to people who ask for my advice). Finally, Zeithaml et al. (1996) determined the Cronbach's alpha coefficient for course selection intention scale to be .94. High scores on this scale imply greater intention to select PES-related courses (e.g. I will select one of the physical education and sports-related courses next term). The descriptive statistics, factor loadings, and internal consistency coefficients of the related expressions are presented in Table 1. Additionally, the correlation matrix of the variables of the scale, construct validity, and reliability test results are given in Table 2. In the first section of the scale, the items are answered on a 5-point Likert scale (1=strongly disagree; 5=strongly agree). In the second section, participants provide background information (gender, age) and respond to instructions such as "Please write the three most important characteristics of a role model in order of importance" and "Please write three of the elective courses that you like in order."

Data Collection and Analysis

After obtaining the required legal permissions [Sakarya University Rectorate Directorate-Institute of Educational Sciences (Number: 81179084/044) and Governor of Bursa Provincial Directorate of National Education (Number: 86896125-605.01-E.5469714)] to collect data from the aforementioned institutions, these schools were visited. The questionnaire, which took 5-7 minutes to complete, was administered to participants during class hours after a brief explanation of the study. In total, 1,800 printed copies of the questionnaire were distributed. After evaluation, 355 forms were ignored because of incorrect and/or missing responses, and 1,445 valid questionnaires were kept for analysis.

The data obtained were entered into the IBM SPSS program for statistical analysis (f, X, sd). Exploratory factor analysis (EFA, varimax orthogonal rotation method), confirmatory factor analysis were then conducted, and SEM to determine the structural relationships among the variables. In the analysis of the data, IBM SPSS and AMOS 20 package programs were used.

The second	T	C 1		Factors			
Items	X	Sd.	1	2	3		
Role model 2	4.31	1.23	.937				
Role model 1	4.33	1.24	.913				
Role model 3	4.28	1.20	.913				
Role model 4	4.31	1.21	.909				
Role model 5	4.35	1.21	.891				
PES course selection intention 2	3.73	1.41		.911			
PES course selection intention 1	3.71	1.35		.896			
WOM communication 1	3.77	1.35		.406	.866		
WOM communication 3	3.55	1.38			.800		
WOM communication 2	3.74	1.37		.426	.773		
Cronbach's Alpha			.952	.858	.837		
% Variance			41.905	30.521	10.642		
Kaiser-Meyer-Olkin (KMO)				.890			
Bartlett'Test of Sphericity		χ ² =11647.	753 df=45 p=.000				

Table 1. De	escriptive	Statistics	and	EFA	Results
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N=1445

EFA was conducted for ten items in the measurement tool. The Kaiser-Meyer-Olkin (KMO=0.890) value, which indicates applicability of factor analysis, was found to be at the proper level. When item loadings were investigated, it was found that the loading of each item was above .50 (Hair et al., 2009). At the end of the analysis, it was found that the best-explained factor structure comprised three factors and explained 83.07% of variance. The internal consistency coefficients of the variables were found to be higher than .70 (Fraenkel et al., 2012) (role modeling α =.952, course selection intention α =.858, and WOM communication α =.837). Considering the EFA results, CFA was implemented in order to confirm a previously determined structure (Sümer, 2000) and/or explain the patterns of latent structures (Bayram, 2013; Meydan & Şeşen, 2011) (see Table 2).

Variables	CR	AVE I	Role model	WOM communication	Course selection intention
Role model	0.952	0.798	0.894		
WOM communication	0.844	0.648	0.159**	0.805	
Course selection intention	0.859	0.753	0.131**	0.848**	0.868
CR = Composite Reliability AVE = Average Variance Extra		$(\lambda^2) / (\Sigma^2)$			

AVE = *Average Variance Extracted* = $\Sigma(\lambda^2) / \Sigma(\lambda^2) + \Sigma e$

χ²/sd=2.702, SRMR= .038, GFI= .988, AGFI= .980, NFI= .993, CFI= .995, TLI= .993, RMSEA= .034 N=1445; **p<.01

After obtaining goodness of fit values, reliability and validity analyses for each structure were conducted. In order to test the reliability of each structure, along with internal consistency coefficients (Cronbach's alpha), Average Variance Extracted (AVE) and Composite Reliability (CR) values were investigated. Regarding the reliability of the model, both internal consistency coefficients and CR values were found to be above .70, which is the recommended threshold (Fornell & Larcker, 1981; Fraenkel et al., 2012; Hair et al., 2009). The findings showed that the model was reliable. To test the measurement model's structure validity, convergent and discriminant validity were used. According to Hair et al. (2009), for convergent validity, CR>.70, AVE>.50, and CR>AVE should be achieved. Table 2 shows that

the recommended conditions for CR and AVE were achieved, in other words, the convergent validity of the tested model was ensured. To ensure discriminant validity, the factor correlation coefficients must to be lower than .85 (Kline, 2005). The highest correlation between variables was found between WOM communication and course selection intention (*r*=.848), which is lower than the recommended threshold. Based on these values, it can be stated that the discriminant validity between the variables was ensured. When the relationship between the variables was investigated, a low-level positive relationship between role modeling, WOM, and course selection intention, and a high-level positive relationship between WOM communication and course selection intention. In summary, the test results suggest that the measurement model is reliable and valid (Bayram, 2013; Meydan & Şeşen, 2011).

Results

In this section, the main findings will be analyzed and discussed. The elective courses that participants liked most, their role models, and their considerations regarding the characteristics of a role model are summarized in Tables 3, 4, and 5 respectively.

	Option 1		Option 2		Option 3		Weighted	
Groups of optional course	f	%	f	%	f	%	Score	
Sport and Social Activities	811	56.1	396	27.4	336	23.3	3561	
Mathematics and Science	219	15.2	214	14.8	239	16.5	1324	
Language and Expression	90	6.2	136	9.4	140	9.7	682	
Fine Arts	87	6.0	186	12.9	176	12.2	809	
Foreign Language and Literature	84	5.8	154	10.7	128	8.9	688	
Social Science	61	4.2	155	10.7	128	8.9	621	
Religion and Ethical Values	79	5.5	94	6.5	112	7.8	537	
Information Technology	14	1.0	52	3.6	66	4.6	212	

Table 3. The Elective Courses that Participants Liked Most

Table 3 shows that sports and social activities were the first preference of more than half of the participants (56.1%), and second and third preferences also included these courses. These courses were followed by mathematics and science, language and expression, fine arts, foreign languages and literature, social sciences, religion and ethical values, and information technologies.

Important characteristics	Importan	ce Level 1	Importan	ce Level 2	Importan	ce Level 3	Weighted
of a role model	f	%	f	%	f	%	Score
Smart/Intelligent	309	21.4	208	14.4	112	7.7	1455
Hardworking	222	15.4	203	14.0	153	10.6	1225
Tidy/Organized	119	8.2	97	6.8	90	6.3	641
Ambitious	114	7.9	110	7.6	49	3.4	611
Honest	55	3.8	54	3.7	50	3.5	323
Disciplined	54	3.7	29	2.0	22	1.5	242
Respectful	42	2.9	37	2.6	39	2.7	239
Patient	30	2.1	42	2.9	39	2.7	213

Table 4. The Characteristics of a Role Model²

² The participants provided 106 different characteristics for the *"Please write three most important characteristics of a role model in order of importance."* item. The characteristics repeated by at least 40 participants after the synonym statements were merged are included in the table.

Most of the participants thought that a role model should be smart/intelligent, and stated that a role model should be hardworking, tidy/organized, ambitious, honest, disciplined, respectful, and patient.

Role Models	f	%	
Sports celebrities	371	25.7	
PES teachers	370	25.6	
Peers	207	14.3	
Sibling	149	10.3	
Mothers	137	9.5	
Fathers	123	8.5	
Famous people	88	6.1	
Total	1445	100	

Table 5. Role Models

Table 5 shows that the role models who have the highest influence on students' decisions are gathered under seven categories. Sports celebrities were the most frequently mentioned (25.7%), followed by PES teachers (25.6%). Peers were the third group taken as role models, followed by family members. Famous people were found to be the least frequently role modeled group (6.1%).

Testing the Structural Model

After the relationship between the variables was investigated, the structural model was tested for seven different groups which were formed considering the role models shown in Figure 2.

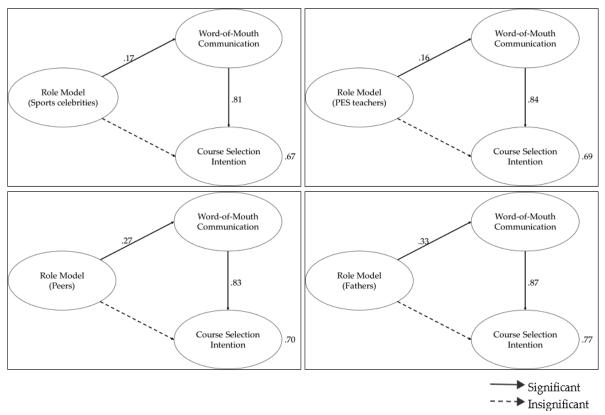


Figure 2. Testing the Structural Model Regarding Course Selection Intention³

³ The results of the sample groups who takes sibling, mother, and famous people as role models were not included in Figure 2 and Table 6 since the results were found statistically insignificant.

Figure 2 shows that the goodness of fit indexes of the model are at a good or acceptable level (χ^2 /sd=2.301, SRNR=.064, GFI=.94, AGFI=.90 NFI=.96, CFI=.98, TLI=.97, RMSEA=.030) (Bayram, 2013; Meydan & Şeşen, 2011). The predictive effects of the variables in SEM, which is formed after grouping people who were taken as a role model by the participants, are summarized in Table 6.

Cuerta	Hypothesiz	ad mathe	Stand	L	Std.	D 2		
Groups	Gloups Hypothesiz		Total	Direct	Indirect	t	error	CSIR2
s ies 1	WOM 🔶	RM	.175	.175	-	3.016**	.050	
Sports celebrities n=371	CSI 🔶	RM	.158	.016	.142	.369	.045	.67
S _J cele	CSI 🔶	WOM	.814	.814	-	11.634***	.084	
rrs 0	WOM 🔶	RM	.158	.158	-	2.708**	.051	
PES teachers n=370	CSI 🔶	RM	.085	048	.133	-1.114	.048	.69
tea	CSI 🔶	WOM	.837	.837	-	11.186***	.094	
5	WOM 🔶	RM	.271	.271	-	3.303***	.056	
Peers n=207	CSI 🔶	RM	.239	.014	.226	.254	.066	.70
L L	CSI 🔶	WOM	.832	.832	-	7.580***	.195	
3 LS	WOM 🔶	RM	.328	.328	-	3.362***	.076	
Fathers n=123	CSI 🔶	RM	.318	.033	.285	.506	.070	.77
Fa	CSI 🔶	WOM	.867	.867	-	7.152***	.169	

 Table 6. Model Test Results

RM: *Role model*, WOM: WOM communication, CSI: Course selection intention **p < .01, **p < .001

The results of the analysis revealed no statistically significant effect (p>.05) of the role model variable on WOM communication or course selection intention among participants who take siblings, their mother, or famous people as role models.

The role model effect of fathers was found to best explain course selection intention: role modeling and WOM communication variables explained 77% of change in course selection intention (β =.867, *p*<.001, *R*²=.77). Peers were the second best group (β =.832, *p*<.001, *R*²=.70). PES teachers ranked third in explaining course selection intention, accounting for 69% of change in course selection intention (β =.837, *p*<.001, *R*²=.69). Finally, sports celebrities were ranked fourth, predicting 67% of course selection intention (β =.814, *p*<.001, *R*²=.67). When the correlation matrix of variables is investigated, in the tested structural model, the effect of role modeling on course selection intention for all groups was found to be statistically insignificant, even if role modeling has a positive correlation with WOM communication and course selection intention. By means of the Sobel, Aroin, and Goodman tests, the mediator effect among the WOM communication, role modeling, and course selection intention was tested (Table 7). To be able to identify a mediator effect, the following conditions need to be fulfilled (Baron & Kenny, 1986; Hayes, 2013):

- 1. The independent variable needs to have a significant effect on the dependent variable.
- 2. The independent variable needs to have a significant effect on the mediator variable.
- 3. When both independent and mediator variables are included in the model, the effect of independent variable needs be reduced (partial mediation) or removed (complete mediation).

Type of Test	Sports c	Sports celebrities		PES teachers		Peers		Fathers	
Type of Test	Z	p	Z	р	Ζ	р	Z	р	
Sobel test	2.92	.003	2.63	.008	3.03	.002	3.04	.002	
Aroin test	2.91	.003	2.62	.008	3.00	.002	3.02	.002	
Goodman test	2.93	.003	2.64	.008	3.05	.002	3.07	.002	

Table 7. Mediator Effect Results

Sobel test: z- *value* = $a*b/SQRT(b^{2*}s_{a^{2}} + a^{2*}s_{b^{2}})$

Aroin test: z- value = $a*b/SQRT(b^2*s_a^2 + a^2*s_b^2 + s_a^2*s_b^2)$

Goodman test: z- value = $a^*b/SQRT$ ($b^{2*}s_a^2 + a^{2*}s_b^2 - s_a^{2*}s_b^2$)(QUANTPSY, 2018)

Table 7 shows that the Sobel, Aroin, and Goodman test values for each of the four groups are higher than ± 1.96 , and WOM communication has a complete mediator effect between role modeling and course selection intention.

Discussion, Conclusion and Suggestions

Physical activity is a social phenomenon that affects individuals' physical and mental health and social behaviors. The physical and mental benefits, especially during childhood and youth, are considered important for an individual to lead a healthy life. Indeed, primary, secondary, and high school education must be considered the period when physical activity habits can be taught which will last a lifetime (Baltaci, 2008). In this respect, along with the compulsory PES classes in the curricula of primary, secondary and high schools, the students should be directed to choose the elective PES and related courses and to develop a positive attitude toward physical activity. This study determined the effects of role models and WOM communication on students' selection intention regarding PE-related courses. It also determined the most influential kind of role model in students' PES course choices. The findings reveal that fathers have the strongest influence on course selection intention as a role model, followed by peers, sports celebrities, and PES teachers (see Table 6). Additionally, it was found that siblings, mothers, and celebrity role models do not have a statistically significant effect on PES course selection intention.

Although it has been empirically proven in the international literature that family members (mothers, fathers, and siblings) have a positive effect on directing children toward physical activity (Güven & Öncü, 2006), Ünal (2014), and Güven and Öncü (2006) state that negative attitudes toward participation in physical activities with the family affect children's academic success and may lead to injury in Turkish society. The fact that no statistically significant effect of mother or sibling role models on PES course selection was found in this study may be explained by negative attitudes and beliefs toward physical activity. Additionally, according to Payne et al. (2003), individuals who are encouraged by family members show higher participation in physical activities and sports than their peers who have no support from family members. Incorporating social marketing applications may help to fully determine and remove the negative attitudes and beliefs towards physical activity (Unal, 2014). On the other hand, according to the principles of role theory, "a child identifies himself/herself with the father because father is very powerful in the child's perception as he has control over both reward and punishment" (Mussen, 1967, as cited in Orlick, 1974). Orlick (1974) states that love, affection, approval, attention, and praise are effective encouragements for children, and from the perspective of social learning, a young child's willingness to participate in physical activity may largely derive from an effective role model, such as a father, and the child's wish to make him happy.

Fisher and Griggs (1995) and Nauta and Kokaly (2001) worked with participants in the USA and stated, in line with the findings of this study, that family members and peers are the two role model groups with the highest effect on students' career development. In line with this, peers are important in encouraging physical activity in young people, and perceptions of friendship and peer acceptance in a sporting environment can contribute to the formation of positive attitudes and behaviors regarding physical activity (Smith, 1999). The findings of the present study reveal that along with peers, PES teachers also have a positive effect on students' course selection intention. Payne et al. (2003) stated that in general PES teachers are perceived as good role models by their students and encourage participation in physical activities. Along with teachers' attitudes and behaviors, the environment created by them determines whether the sporting experiences of students are positive (Perkins, 2000a, 2000b). In a study conducted in Canada, McTeer and White (1991, as cited in Payne et al., 2003) stated that students who perceive PES teachers as an important role model show higher participation into physical activities. In another study, Melville and Maddalozzo (1988) stated that teachers who wear sportswear and are physically fit are considered to be more knowledgeable and are better role models than overweight teachers. In a study which investigated around 5,800 students who abandoned a physical activity program found that the five most important reasons they gave for leaving were "loss of interest," "not enjoying it," "the need of more time," "poor trainer," and "too much pressure" (Perkins, 2000a). In this sense, considering the effects of teacher and peer role models, an enjoyable, rewarding learning experience in which friendship ties are improved, rather than a competitive environment, can positively affect PES course selection intentions. Additionally, informing PES teachers on how to become better role models, and their effects on students not only with their attitudes and behaviors but also with their physical appearance, may lead to positive results.

It was found that sport role models had a statistically significant effect on course selection while famous role models did not. Sport role models can be perceived to have attractive and admirable characteristics. For instance, the character, lifestyle, and image of a sports celebrity can lead many young people to admire him and identify themselves with him, and so wish to resemble him (Nauta & Kokaly, 2001; Makgosa & Mohube, 2007; Subramanian & Subramanian, 1995). It is obvious that marketing communication efforts frequently exploit sporting role models (Bush et al., 2004; Kim & Cheong, 2011; Martin & Bush, 2000). Positive feelings toward the role model are transferred to the product advertised (goods, services, or ideas) (Schiffman & Kanuk, 2000). Kim and Cheong (2011) determined that the stronger the positive attitudes toward a role model, the more positive the attitudes toward the product by which he is sponsored. In line with social marketing principles, sporting role models can direct students toward PES courses and physical activities.

Another finding obtained in this study is that WOM communication has a statistically significant positive effect on the intention to select PE-related courses. Berger (2013) states that WOM communication reduces the risks, simplifies the complexity, and boosts consumer trust in decision-making. Therefore, in important decisions, individuals need to trust WOM communication more than other sources of information. The literature offers findings which agree with those of this study (Herold et al., 2017; Herold et al., 2016; Sweeney et al., 2014). Bush, Bush, Clark, and Bush (2005) found that women have a tendency to communicate with the people around them about sports celebrities they admire and their lifestyle. On the other hand, WOM communication was found to play a complete mediator role between students' role models (fathers, peers, teachers, and sports celebrities) and their PES course selection intentions. In this respect, the findings reveal that the change in students' cognitive structure which occurs as a result of their interaction with their role models regarding their course selection intentions. In their sports positively reflected in their course selection intentions. In

the social sciences, especially in studies examining individual behaviors, it has been found that the relationship between dependent and independent variables can be affected by different variables (Baron & Kenny, 1986; Hayes, 2013). The findings of the present study echo this view.

In conclusion, the results obtained in this study regarding the effects of role models and WOM communication in directing students toward physical activity or PES-related courses will contribute to the limited literature of this field. It should be borne in mind, however, that this study was conducted under certain limitations. Similar studies can be conducted with different groups in different regions to ensure the generalizability of the results. Positive experimental studies regarding how to benefit from role models and determining other factors that can affect attitudes and behaviors should be conducted in the future.

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