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Pre-service Teachers' Leisure Preferences: A Model Analysis

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ABSTRACT

The scarcity of the sound path analyses regarding the leisure preferences of pre-service teachers was an inspiration to conduct the current study. The research aimed to explore the role of gender, SES, and exploiting information and communication Technologies in shaping the leisure time of the prospective teachers in comparison with reading and sports activities. The participants of the study were 269 pre-service teachers attending faculty of education in Turkey. The data collected through a questionnaire form were analyzed through descriptive statistics and Path analyses. The findings revealed that reading seems to be the most important activity for the respondents though ICT is gaining a precipitous role in leisure time. The models developed support the idea that gender and SES are important factors in understanding the nature of leisure preferences. The Path analyses also revealed that there is a positive relation between SES and the time devoted to ICT, reading, and sports.

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Keywords:
Information and communication technologies, ICT, reading, sport, leisure time, path analysis

Introduction

De-stressing a person and carrying the attention away from occupational burdens, leisure activity is perceived as freely chosen, intrinsically satisfying, optimally arousing, and requiring a sense of commitment (Dumazedier, 1974; Tinsley & Barbara, 1995). However, tremendous changes seen in cultural, economic, social and educational aspects of the current era re-unified the 'professional and leisure rivers of the human beings life' as in the metaphor postulated by Godwin (1831; 9). In today's constantly changing economic and technological climate, young people are to evolve and synthesize their professional and leisure preferences to pursue their learning, retain employment, and attain a satisfying level of well-being.

Current life conditions of human being underline the critical importance of 'sustainable learning' or 'lifelong learning' for all periods of life which can be attached to leisure time activities. Lifelong learning is just any learning that has been done after or during compulsory education, including community activities, physical exercise classes, independent learning, volunteering, accredited and non-accredited courses. Leisure is currently being considered as a vital media for designing lifelong learning programs for the individual, the community and society as a whole (Jones & Symon, 2001). Many administrative and educational organizations and institutions take all leisure activities under lifelong learning programs and divisions. Universities have leisure centers equipped with Internet access and PCs. Respectively, most colleges and universities offer programs and facilities that promote participation in recreational sports, physical activity, and overall physical health within leisure activity organizations. Jones and Symon (2001; 270) maintain that 'if lifelong learning is encouraged as a serious leisure activity, the potential exists for benefits not only for the

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individual but also for the wider community and society with enhanced self-efficacy, citizenship, participation and social capital'. In this respect, prospective teachers as the potential change agents and the preliminary builders of the lifelong learning skills to the pupils deserve to be asked about their leisure preferences, which is mainly the scope of the current study.

The relationships between learning and leisure are rather under-emphasized in terms of Turkish government regulations and the resources that are allocated to learning through leisure. The substantial inter-relation between learning and leisure puts a vital importance on teachers as the leisure coaches of the pupils. In relation to this, a great part of the literature posits that it is teachers who should acquire the necessities of change in order to disseminate it through the society (Dreher, 2003; Çuhadar & Yucel, 2010). Teachers are also seen as one of the leading factors affecting pupils' leisure preferences by guiding them to manage their times and orientating them to various leisure based activities. If young people are to learn the skills and strategies necessary to become lifelong learners then lifelong learning must provide an underlying philosophy not only for practicing teachers but also for those trained to become teachers (Chapman, et al. 2003). Although links between learning and leisure have been examined in the past (Deem & Gilroy, 1998; Payne, 1991; Stebbins, 1997, 1998), a domain that yet to be fully examined is the pre-service teachers' preferences of leisure as a youth group and teachers who are supposed to orientate pupils to leisure learning in the future. This study mainly aims to explore leisure activities of pre-service teachers and unfold the relations between pre-service teachers' preferences of ICT use, sports and leisure reading which were intensively discussed through the leisure research literature in an identical way (Greaney, 1980; Kanters, 2000; Knoefel & Jankowiak, 2006; Mokhtarian, Salomon, & Handy, 2009; Nie, Hillygus, & Erbing, 2002; Sandeen, 1996; Yi, 2009; Vandelanotte, Sugiyama, Gardiner, & Owen 2009). The following sections will elaborate on the concepts of ICT, sports, and reading within leisure studies discipline.

ICT as Leisure

As a result of numerous free choices for people to experience leisure, prevalence of ICT has modified the concept of leisure as an integral part of social, cultural and economic wellbeing (Yi, 2009). Mokhtarian et al., (2006) discuss four kinds of ways by which ICT can affect leisure activities: the replacement of a traditional activity with an ICT counterpart, the generation of new ICT activities, the ICT-enabled reallocation of time to other activities, and ICT as a facilitator of leisure activities.

ICT offers opportunities for many leisure activities, such as playing games on a mobile phone, downloading, watching, and listening to music, movies, web/radio/TV, games, uploading self-created content, p2p file sharing, podcasting, and browser-based news feeds (Lidström, Ahlsten, & Hemmingsson, 2011). Furthermore, sharing ideas in virtual environments, connecting people from all over the world, creating communities, ICT enlarges individuals' leisure activity domain. Respectively, social communication and sharing platforms such as YouTube, Facebook, and Twitter possess a profound influence on the leisure time - mostly for young people. Millions of people utilize blogs or message boards as a means of communication and for the sharing of ideas. People use chat, messaging and e-mail to make and stay in touch with friends worldwide,. Hemmingsson and Lidström, (2010) summarize the benefits of ICT as an educational tool and a platform for leisure activities and social participation. Multiplayer gaming, as an important area of leisure on the Internet, has also transformed the way many people interact and spend their free time on Internet. ICT as a leisure provider leads people to create communities, allowing them to experience the fast-paced environment of multiplayer games. Similarly, many use the web to get access news and sports reports, to plan and book holidays and to find out more about their random ideas and casual interests.

However, ICT related leisure-time behaviors have the potential to impact negatively on health outcomes. In their study examining associations of leisure-time ICT use with overweight and obesity, Vandelanotte et al. (2009) claimed that it may be necessary to decrease time spent in sedentary behaviors, such as leisure-time Internet and computer use, in order to reduce the prevalence of overweight and obesity problems. While Graham, Rodger and Ziviani (2009) maintain that computer and Internet use decreases physical activity, Kautiainen (2005) underlines its effect on increasing the risk for obesity.

The ICT literature in Turkish context generally focuses on its integration into teaching (Yanık, 2010), self-efficacy levels of teachers (Demiralay, 2008), and computer literacy levels of student teachers (Korkmaz & Mahiroğlu, 2009) rather than how it is exploited in leisure times. Hence, there is still a gap on Turkish pre-service teachers' ICT use in leisure times.

Leisure Reading

Since words are metaphorically regarded as the building blocks of life, there is nothing more important for a person than the ability to read. As a fundamental skill to function and find a job in today's society, reading develops the mind, imagination, creativity, and of course literacy. Throughout the written history besides being a means of having information, reading has always been an enjoyment, pleasure and/or learning activity for human being.

Knoefel and Jankowiak (2006) label the top three leisure activities in their study as watching television, playing board games, and reading. Leisure reading was assumed to be any reading done outside of work, or any reading activities pursued as a hobby (Hughes-Hassell, & Rodge, 2007). Greaney (1980, 340), in his study on the factors related to amount and type of reading for children, defines leisure reading as an out of school activity, and notes that leisure reading requires a certain level of reading proficiency. Leisure reading is usually done for enjoyment, but that does not mean that leisure reading does not include learning as a purpose. Moyer (2007) puts the credibility of leisure reading within a theory called incidental information acquisition in which information is gathered from leisure reading material that at some point becomes useful to the reader and results in some type of learning experience. Bozpolat (2010) also underlines the expanding power of leisure reading habit on 'lifelong learning' skills which is perceived as the revolutionary education model in the future. However, Greaney (1980) found that out of nine leisure activities reading ranked seventh representing only 5 % of overall leisure time.

Many enthusiastic readers note that they had a teacher who promoted reading for fun (Nathanson, Pruslow, & Levitt, 2008). Reading is, of course, the bedrock of education and is the single most important factor in fostering literacy. In addition to their personal leisure reading habits and attitudes, a teacher's ability to encourage reading in pupils may be influenced by how well they can suggest a book to a student and discuss that book based on familiarity with the book, author, or genre (McCutchen et al. 2002). If teachers are not devoted readers, they probably will not be adequately motivated to encourage their students to read (Applegate & Applegate, 2004:560–561; Dökmen, 1994; Dreher, 2003: 338). Teacher knowledge of reading development and student reading achievement are significantly inter-related (Foorman & Moats, 2004; McCutchen et al. 2002; Piasta et al. 2009; Spear-Swerling & Bruckner, 2004). Recent research has also pointed out that teachers' classroom teaching techniques may be related to their leisure reading habits (Baker, Dreher, & Guthrie, 2000; McKool & Gespass, 2009; Morrison, Jacobs, & Swinyard, 1999). Sweet, Guthrie and Ng (1998) underline that providing an opportunity to read text is the primary mechanism for motivating them to become independent and fluent readers.

In general, researchers have admitted disappointment with the leisure reading habits of teachers. In their study surveying 65 elementary school teachers, McKool and Gespass (2009) reported that less than half of the teachers perceive reading for pleasure on a daily basis and 26 % declared no time spent for leisure reading. Furthermore, Mour (1977) found that 21% of the students enrolled in a graduate reading course reported reading no books for pleasure during the past six months. Other researchers have found that teachers are not usually enthusiastic readers and report little or no pleasure in reading (Applegate & Applegate, 2004; Draper, Barksdale-Ladd, & Radencich, 2000; Mueller, 1973; Smith, 1989). In this respect, literature of reading research in Turkish had a narrowed scope just focusing on teachers' reading habits and levels and generally agreeing on medium and poor reading levels of participants (Geçgel & Burgul, 2009; Gömleksiz & Telo, 2003; Sağlam, Suna & Çengelci, 2008; Saracaloğlu, Bozkurt, & Serin, 2003; Topuzkanamış, 2009).

Sports as Leisure

Attitudes towards leisure time physical activity, similar to other health behaviors, are established during childhood and adolescence (Michaud, Jeannin, & Suris, 2006; Perkins, et al. 2004). The relevant literature clearly posits that physical activity forms a valid part of life-long learning (Deem & Gilroy, 1998) due to its positive impacts on student health conditions, including physical fitness, strength, and well-being; stress reduction; and decreased alcohol consumption (Kanters, 2000; US Dept of Health and Human Services, 2000). The relationship between participation in physical activity/sport and academic achievement is considered to possess a positive correlation. Sibley and Etnier (2005) argue that there is a positive association between physical activity and cognition in elementary and high school levels. Some other studies also maintain that physical leisure activities may help overcome loneliness and thus contribute to people's well-being (Coleman & Iso-Ahola, 1993; Sandeen, 1996). Botta, (2003) makes a significant connection between sport and reading by stating that magazine reading, social comparisons, and critical body image processing are important predictors of body image and eating disturbances for adolescent boys and girls. Respectively, rather than exploring what kind of sports prospective teachers do, the current study also focuses on the inter-relation between the weekly durations participants devote to the sport, reading, and ICT.

Gender and SES in Leisure Studies

The current study also aims to respond to the question of how gender and socioeconomic status affect the young peoples' leisure time preferences. Numerous studies in the field of leisure have elaborated on the effects of gender and socio-economic status on leisure involvement especially physical activity (Jin-Hyung, Scott & Floyd, 2001; Kay, 2000; Kelly, 1996; Lindsey & Ogle, 1972; Raymore et al. 1994; Stamps & Stamps, 1985). The influence of gender roles in leisure (Colley, 1984; Hirschman, 1984) and socio economic status as a barrier in leisure behavior (Godbey, 1985; Howard & Crampton, 1984; Raymore, Godbey, & Crawford, 1994; Searle & Jackson, 1985a, 1985b) have also been prominent topics of research interest.

Research on the effect of gender in leisure studies has noted that most females have higher levels of physical inactivity than boys (Nader et al. 2008; Pugliese & Tinsley, 2007; Sallis et al. 2000). Females were also observed with less enjoyment from physical activity and lower physical self-confidence than males (Morgan et al. 2003; Phillipp, 1997). Kay (2000) mentions about a need of deeper reconsideration of the way in which gender investigated within leisure studies. Witmer, Bocarro and Henderson, (2011) argue that biological and psychological changes that happen during adolescence provide some insights on the probable reasons of females' inactivity.

An individual's level of income has been regarded as an influential factor on leisure participation. Kelly (1996) also pointed out that income is directly related to opportunities and limitations to leisure participation. A low income may keep individuals from being able to allocate the necessary financial resources that are required for participation in some kinds of leisure. In the same breath, Scott and Munson (1994) maintain that income is a predictor of perceived constraint to recreation. Low income prevents costly recreation participation and affects participation that requires additional costs such as travel.

The purpose of this survey and causal-comparative study was threefold. First, it focused on the details of ICT, reading, and sport in pre-service teachers' leisure times. Second, the current study targeted to build two different preliminary Path models to delve into the role of gender and socio economic status (SES) into Turkish pre-service teachers' ICT use, reading, and sport activities in the leisure times. The research questions of the study were formulated as follows;

1. What are general leisure activity preferences of pre-service teachers regarding;
    a. ICT?
    b. Reading?
    c. Sport?
2. What are prospective teachers' rankings of ICT, reading, and sport as leisure options?

The hypotheses of the study were expressed as follows;

1. There is a significant direct effect of gender on the time devoted to ICT use.
2. There is a significant direct effect of gender on the time devoted leisure reading.
3. There is a significant direct effect of gender on the time devoted to sports.
4. There is a significant direct effect of SES on the time devoted to ICT.
5. There is a significant direct effect of SES on the time devoted to leisure reading.
6. There is a significant direct effect of SES on the time devoted to sport.

Methods

Participants

A questionnaire including items to elicit participants' profiles in ICT use, reading, and sport was developed by the researcher and administered to 300 pre-service teachers randomly selected among those who were attending Primary Education Department of a Turkish state university. The gathered data were checked prior to the statistical analysis and results belonging to 31 participants who ignored to respond at least 5 % of the total items in the instrument and/or showed central tendency errors were removed from the data set. Hence, the participants of the current study consisted of 269 prospective teachers out of which 141 were females and 128 were males. The mean of the participants' ages was calculated as 21.4 and the standard deviations and means of the data were provided within tabulations.

Analysis

The data gathered were analyzed via Statistical Package for Social Sciences version 15.00 and LISREL 8.7 software. Frequencies were exploited to portray the demographic features of the participants and their responses to the items in the data collection instrument. The gender of the participants was coded as females: 0 and males: 1 (dummy variable). The SES was identified according to participants' self-declarations and grouped into two levels according to the standards of living index determined yearly by the ministry of economy in Turkey. The SES groups were coded as low: 0 and High: 1 (dummy variable). The duration weekly devoted to ICT, reading, and sport by the participants is obtained in 'hours' and converted to minutes in the analysis process.

In the current study, data were collected within lecture times of (45 minutes) the participants with the consents of both the lecturers and the students without seeking for any information about their identities. The instrument was administered within 15 to 30 minutes.

Findings

This section is devoted to descriptive statistics portraying the dependent and independent variables, and the findings of Path Analysis developed for the current study. The data were reported in accordance with the research questions and the hypotheses postulated above. So, after providing the results about the general leisure time preferences of participants in terms of ICT, reading, and sport, Path models on gender, and SES will be reported. Lastly, the rankings of the participants toward ICT, reading, and sport will be elaborated.

Descriptive Findings

Participants' declared preferences and perceptions on their leisure activities were tabulated and reported in this section. All the identical items reported with descriptive statistics were designated in the questionnaire in 'you may choose more than one options' format. Table 1, below, depicts the frequencies and percentages of participants' ICT use preferences.

Table 1. Descriptives on participants' ICT use preferences

	Yes		No	
	f	%	*f*	%
Web design	24	8.9	245	91.1
Blogs, Wikis, etc.	63	23.4	206	76.5
Animation development	20	7.4	249	92.6
Programming	70	26.0	199	74.0
Using professional software	40	14.9	229	85.1
Listening music	58	21.6	211	78.4
Playing computer games	209	77.7	60	22.3
Sending e-mails	187	69.5	82	30.5
Using social networks such as Facebook, twitter, MySpace, etc.	249	92.6	20	7.4
Doing homework	253	94.1	16	5.9
Multiplayer gaming	32	11.9	237	88.1
Reading newspapers and magazines online	167	62.1	102	37.9
Sharing self-created content	88	32.7	181	67.3
Downloading software	84	31.2	185	68.8
Downloading movies and music files	188	69.9	81	30.1
Watching TV online	123	45.7	146	54.3
Communicating through MSN, Skype, etc.	145	53.9	124	46.1

A fast scan of the responses given in the table points out a discrepancy between the mostly chosen options and those preferred rarely by the participants. In this sense, prospective teachers declared that except for doing homework (94.1%) as a non-leisure activity, they exploit ICT mostly for using social networks (92.6%), downloading movies and music files (69.9%), sending e-mails (69.5%), reading newspapers and magazines online (62.1%), communicating through MSN, Skype, etc. (53.9%), and watching TV online (45.7%). On the other hand, the options chosen at a rate below 20% were regarded as rarely done ICT related activities in leisure times. Thus, the options what participants not to prefer doing even occasionally are animation development (7.4 %), web design (8.9%), multiplayer gaming (11.9%), and using professional software (14.9%). The other activities neither highly preferred nor noted as rarely done are; using blogs and wikis, listening music, programming, downloading software, and sharing self-created content. Table 2 portrays participants' leisure reading preferences.

Table 2. Descriptive statistics on participants' leisure reading preferences

	f				%				M	sd
	1	2	3	4	1	2	3	4		
Newspapers	6	108	113	42	2.2	40.1	42.0	15.6	2.71	.75
Comics	94	125	34	16	34.9	46.5	12.6	5.9	1.89	.83
Science & Technique	75	147	39	8	27.9	54.6	14.5	3.0	1.92	.73
Various Magazines	35	145	77	12	13.0	53.9	28.6	4.5	2.24	.73
Literature	16	88	97	68	5.9	41.1	32.7	20.3	2.80	.88
Scientific Books	65	154	42	8	24.2	57.2	15.6	3.0	1.97	.71

A Likert-type scale of never (1), every month (2), every week (3), and everyday (4) was utilized to identify the leisure reading types and frequencies of the participants. The percentages of the participants' responses indicate that the highest rates are observed in the every month (means of the rates are approximately 50 %) and every week columns. Additionally, participants affirm their reading preferences in favour of 'newspapers' (15.6 %) and 'literature' (20.3 %) as can be observed from the first column. In contrast with the reading frequency levels of newspapers and literature, comics, scientific books, various magazines, and Science and Technique Magazine (most popular science magazine in Turkey) were rated at very low

levels (less than 5 %). Table 3 reports on participants' perceptions of the barriers preventing them to read in leisure times.

Table 3. Descriptives on participants' perceptions of reading barriers in leisure times

	f				%				M	sd
	1	2	3	4	1	2	3	4		
Time constraints	32	88	57	92	11.9	32.7	21.2	34.2	2.77	1.04
Tiredness	44	101	70	54	16.4	37.5	26.0	20.1	2.49	.99
Preferring watching TV	87	138	22	22	32.3	51.3	8.2	8.2	1.92	.85
Preferring chat with friends	39	137	55	38	14.5	50.9	20.4	14.1	2.34	.89
Books are so expensive	57	115	41	56	21.2	42.8	15.2	20.8	2.35	2.05
Preferring Internet	44	108	39	78	16.4	40.1	14.5	29.0	2.13	.87

The scale utilized to determine participants' ideas on the reading barriers is as follows; not appropriate at all (1), slightly appropriate (2), appropriate (3), and very appropriate (4). Firstly, the results shown in the table posit that participant teachers do believe that the time constraint (34.2%, very appropriate) is the most important barrier against reading. The secondly most important factor affecting their reading negatively was declared as 'preferring Internet' with a rate of 29.0% in 'very appropriate' (4) column. Then, preferring watching TV and chatting with friends were checked by a minority of the participants (nearly 20% for both items) at the 'very appropriate' level. Besides, the prizes of books were not considered as a barrier as much as the other options mentioned above. Table 4 depicts the descriptive findings on participants' sport preferences.

Table 4. Descriptive findings on participants' sport preferences

	f	%	sd
Soft Ball	16	5.9	.31
Wrestling	20	7.4	.23
Fitness	70	26.0	.43
Boxing	40	14.9	.35
Tennis	21	7.8	.41
Jogging	187	69.5	.46
Cycling	97	36.0	.23
Body Building	32	11.9	.32
Football	133	49.4	.45
Table Tennis	88	32.7	.44
Swimming	84	31.2	.41
Basketball	123	45.7	.39
Volleyball	145	53.9	.46

In terms of the sports preferences, prospective teachers were asked to jot down three main sport types they like to do. Hence, the sport types given in the Table 4 were obtained with the number of the people doing them. The table shows that the highest frequency belongs to the jogging with 187 people. Additionally, nearly half of the respondents declared the same three sport types as Volleyball, Football, and Basketball. There are also many who noted cycling, table tennis, and swimming. However, tennis and body building are declared by just 10-13% of the prospective teachers. Table 5 explains the frequencies and percentages of participants' perceptions of sport barriers.

Table 5. Descriptives on participants' perceptions of sport barriers

	f				%				M	sd
	1	2	3	4	1	2	3	4		
Financial problems	191	50	22	6	71.0	18.6	8.2	2.2	1.41	.73
Health problems	217	36	6	10	80.7	13.4	2.2	3.7	1.29	.68
Time constraints	67	49	61	92	24.9	18.2	22.7	34.2	2.66	1.18
Not to like sports	154	75	18	22	57.2	27.9	6.7	8.2	1.65	.92
No people doing sports around	103	90	30	46	38.3	33.5	11.2	17.1	2.07	1.08
Preferring Internet	171	58	18	22	63.6	21.6	6.7	8.2	1.59	.932

Participants' perceptions of the factors preventing them from doing sport mainly tend on the options of 'time constraints' and the rareness of people around motivating them on sports. A minority of the respondents (8.2%) also checked the options of 'preferring Internet' and 'not to like sports' though, the other reasons of not having sport (health problems, 3.7%, financial problems, 2.2%) habit are not perceived as very serious. Table 6 explores on what the prospective teachers' rankings towards ICT, reading, and sports are in terms of the importance they attach to them.

Table 6. Participants' rankings of importance towards ICT, reading, and sports

	f			%			M	sd
	1	2	3	1	2	3		
ICT use	73	112	84	27.1	41.6	31.2	2.04	.76
Leisure reading	146	71	52	54.3	26.4	19.3	1.65	.78
Doing sport	48	88	133	17.8	32.7	49.4	2.31	.75

More than half of the participants' ranked the reading (54.3%) as just having the prior importance in their lives while ICT (27.1%) was viewed as the first activity by the one fourth of the respondents and sport (17.8%) was regarded as the first just by a minority. Participants' ratings in the second column imply that ICT (41.6 %) is ranked as the second most important leisure activity. On the other hand, nearly half of the participants declared that third rank belongs to the sport (49.4%) in comparison with ICT and reading. The following section will elaborate on the findings of the two Path analyses.

Path Analysis

In the area of social sciences, interest on using structural equation modeling technique has been increased, especially for the model analysis. Structural equation modeling, as a sophisticated statistical method, is exploited in various disciplines to figure out research problems concerning casual relationships between implicit structures measured by the observed variables (Anderson & Gerbing, 1988). As an analysis model concurrently exerting both the mediation and direct effects, Path Analysis with Observed Variables was utilized in the current study to test the developed model at a. 05 significance level. While the dependent variables of the study were ICT, reading and, sport, the independent variables of the study were gender, and socioeconomic status (SES) of the participants. The following table indicates the good fit values obtained in the current study and the acceptable values through the literature.

Table 5. Evaluation of the path analyses

Index	Good fit	Analysis on gender	Analysis on SES	Rationale
χ^2	$0 \leq ⊚^2 \leq 2df$	65.36 < 96	65.36 < 96	Yılmaz & Çelik (2009)
p value	$0.05 \leq p \leq 1.00$	0.05	0.05	Hoyle (1995)
$\chi^2/\delta\phi$	$0 \leq ⊚^2/df \leq 2$	1,36	1,36	Tabachnick & Fidell (2007)
RMSEA	$0 \leq RMSEA \leq 0.05$	0.038	0.038	Raykov & Marcoulides (2006)
SRMR	$0 \leq SRMR \leq 0.05$	0.043	0.043	Sümer (2000)
NFI	$0.95 \leq NFI \leq 1.00$	0.95	0.95	Thompson (2008)
NNFI	$0.95 \leq NNFI \leq 1.00$	0.97	0.97	Raykov & Marcoulides (2006)
CFI	$0.95 \leq CFI \leq 1.00$	0.98	0.98	Thompson (2008)
GFI	$0.95 \leq GFI \leq 1.00$	0.96	0.96	Hu & Bentler (1999)
AGFI	$0.90 \leq AGFI \leq 1.00$	0.93	0.93	Yılmaz & Çelik (2009)

The following figure will explore the structural equation model developed to investigate the effects of gender on leisure time preferences of teacher candidates under the headings of ICT, reading, and sport.

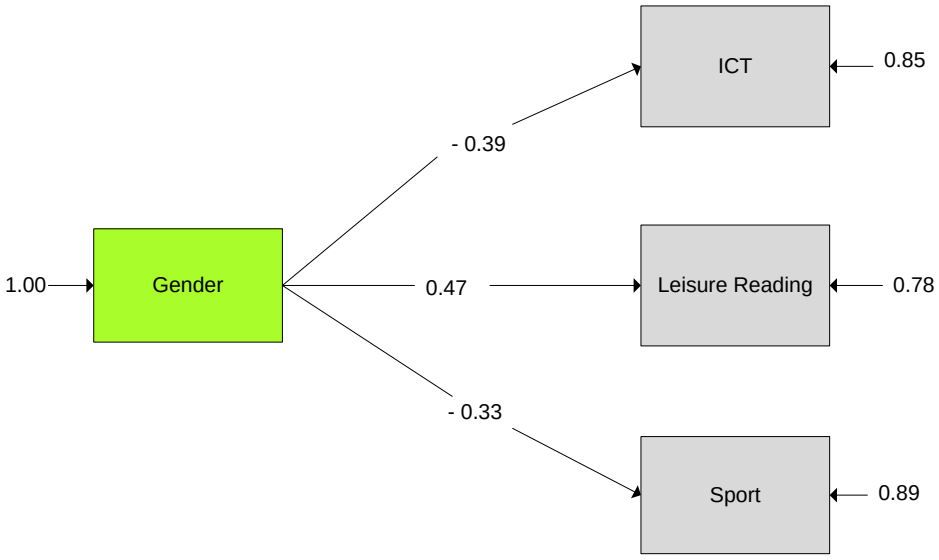


Figure 1. A structural equation model on gender and the weekly time devoted to ICT, reading, and sport by the prospective teachers

The Chi-square/sd rate calculated for the model of ICT, reading, and sport is found to be 1.27 (p= .28) which simply points out that the proposed model showed a solid consistency with the data. The Path coefficients throughout the model fluctuate between the values of .33 and .47. According to the model, the direct relations imply some critical outcomes. Namely, gender influences; ICT and sport (standardized coefficient = -.33) in a negative way at a medium level (standardized coefficient = -.39), and leisure reading (standardized coefficient = .47) in a positive way at a medium level. The fit indexes values belonging to the model are clearly at reasonable levels (Kline, 2005). Measurements pointed out that NFI is .91, RMSEA is .052, and AGFI is .92. The p value is set for less than .001 level.

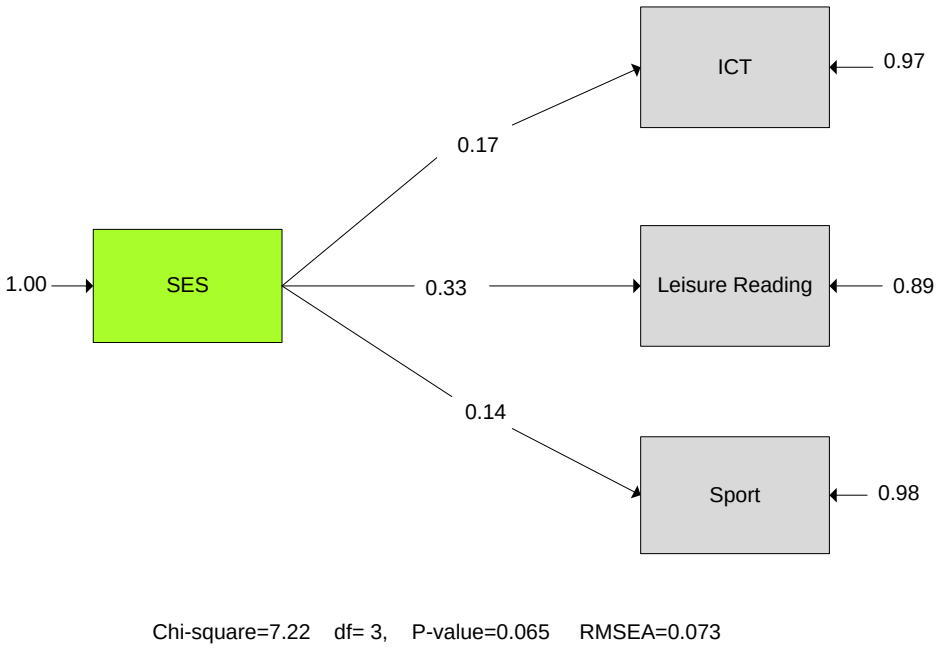


Figure 2. A structural equation model on SES and the weekly time devoted to ICT, reading, and sport by the prospective teachers

The chi-square/sd rate for the proposed model is measured as 2.40 (p= .06) which indicates a well cosistency between the model and the data obtained. In terms of the direct relations, model reveals that SES influences ICT in a positive way at a low level (standardized coefficient = .17), reading in a positive way at a medium level (standardized coefficient = .33), sport in a positive way at a low level (standardized coefficient = .14). The fit indexes values of the model are at the acceptable level (Kline, 2005). To elaborate; NFI value is .91, AGFI is .92 (p<.001).

Discussion

The main goal of this study was to explore two preliminary path analyses to better understand the effect of gender and socioeconomic status (SES) on the time pre-service teachers devote to leisure activities inluding ICT use, reading and sport. The findings of the current study will be elaborated in line with the research questions and hypotheses mentioned previously. As underlined by the Rifkin (1995), the furious evolution of technology and the enormous proliferation of leisure opportunities pose new preferences to the indiviuals. The role of ICT in leisure times of prospective teachers is questioned in this study. The findings shed light on the fact that teachers of the future perceive ICT as a set of tools to have fun in their leisure times. They prefer to listen to music through ICT, get access to social networks and do their readings online as well. That also means, as Yi (2009) argued, ICT has altered the meaning of the 'leisure' and the way people have fun. On the other hand, advanced level ICT use such as programming, and exploiting professional software did not take place in the forms of prospective teachers' ICT use as a leisure activity platform. The ICT types preferred by the participants (listening music, social networks, etc.) are also in accordance with the four ways postulated by Mokhtarian et al., (2006) by which ICT may affect leisure activities. In contrast with the general tendency, Turkish teacher candidates are not observed as very fond of online multiplayer gaming.

As one of the critical domain in leisure studies (Knoefel & Jankowiak, 2006), reading frequencies of the prospective teachers are also interrogated within the current study. Participants' self-declarations of their reading frequencies toward various types of pieces indicated that Turkish prospective teachers do not read frequently and intensively. The evidence that we used to imply this result is that they generally checked the 'every month' option in the instrument which shows the scarcity of their reading frequencies. Previous researchers also noted the weakness in teachers and teacher candidates' leisure reading habits (Applegate & Applegate, 2004; Dökmen, 1994; Draper, Barksdale-Ladd, & Radencich, 2000; McKool & Gespass, 2009; Mour, 1977; Mueller, 1973; Smith, 1989). Additionally, newspapers and literature pieces are acknowledged as

the commonly read sources similar to the research of Dokmen, (1994). Hence, we can conclude that prospective teachers prefer to read for fun rather than purposive reading for academic or occupational motives. The participants' reasons of not being able to read as much as they want are declared as time constraints and preferring to spend time on Internet. Besides, teacher candidates pointed out that they do not perceive watching TV and chatting with friends as barriers against reading.

The evidence from this study suggests that prospective teachers perceive the time constraints and not seeing anyone doing sport around as the reasons of not being able to do sport. On the other hand, in contrast with the case in reading and ICT, use of ICT is not regarded as a reason of not doing sport.

The current findings of the study add substantially to our understanding of how prospective teachers rank basic leisure activities as ICT, reading, and sport. The findings of this study show that participants do rank reading in the first line as a leisure activity. The difference between reading and ICT is nearly two times more in favor of reading. ICT is assessed as second most important leisure activity and sport is perceived as the third one.

Sociodemographic and socioeconomic variables, such as age, gender or socioeconomic status have been found to be associated with basic leisure activities among adults (Colley, 1984; Godbey, 1985; Hardy, Bass, & Booth, 2007; Howard & Crampton, 1984; Hirschman, 1984; Raymore, Godbey & Crawford, 1994; Searle & Jackson, 1985a). The Path analysis which is developed to explore the latent effects between gender and basic leisure activities including ICT, reading, and sport revealed that gender does have some influences on ICT, reading, and sport at a medium level. The results of this analysis indicate that while males prefer to exploit ICT and sports more than females do, females are observed as much more interested into reading comparing to the males. Taken together with the chi square results, the postulated hypotheses on the effect of gender on the devoted time to ICT in leisure times are accepted.

Studies usually explore gender differences in the amount and level of physical activity; males are linked with more involvement, particularly in regular and heavy physical activity (Vilhjalmsson & Thorlindsson, 1998). More recent data point out that no gender differences are measured when all domains of activity practice are thought (Hallal et al. 2003). Few studies, however, have focused on the variables related to physical inactivity among men and women separately, and most of these were conducted in developed countries, where activity patterns are not same with those observed within low and middle-income societies.

The findings of the Path Analysis conducted on SES and basic leisure activities as ICT, reading, and sport enhance our understanding of how SES affects prospective teachers' involvement in mentioned activities. The outcomes of the structural equation model imply that there is a crystallized positive relation between SES and the use of ICT, reading, and doing sports. In other words, the more income people have, the more they devote their times to leisure activities. If we now turn to the current study's hypotheses on the effect of SES on the time devoted to leisure activities, all three hypotheses maintaining the significance direct effects of the SES are accepted respecting the chi-square results given in the findings section. The present findings seem to be consistent with other research which found that socioeconomic status has been a prominent factor in leisure research. Respectively, Searle and Jackson (1985) found that increases in education and income were related to reduce perceived barriers to beginning recreation participation. Moreover, Godbey (1985) suggested that people from low or middle-low SES groups may be less likely to be aware of public leisure services, thus eliminating the possibility of participation in some leisure activities. Howard and Crompton (1984) noted that people in the lowest income category of their study were the least frequent users of recreation facilities; use was found by the authors to increase as level of income increased, while lack of interest was found to be the most common constraint to participation in leisure activities.

Social inequalities in health usually appear in health behavior patterns: youth from higher SES engage in more leisure time physical activity than their peers from lower SES groups. In addition to the higher family income that may be associated with being an active member of certain sports clubs (Vilhjalmsson & Thorlindsson, 1998), high parental education may contribute to youth's being physically more active (Kantoma et al. 2007).

Conclusion

The initial aim of this study was to explore leisure-time activity profiles and associated variables of pre-service teachers attending a teacher education faculty in Turkey. The findings of the study revealed that ICT become more prevalent as a leisure tool among the prospective teachers. The social networks invade a significant time frame of the youth. ICT modifies the traditional leisure forms and presents an alternative way of conducting a leisure activity which is chosen when the utility of the ICT-based form of the activity exceeds that of the other forms. In other words, when individuals spend more time on ICT-based activities, it means they are devoting less time on non-ICT-based activities whether leisure or not (Nie, et al. 2002).

The results of this study expand the current knowledge base regarding the Turkish prospective teachers' reading habits and their perceptions of reading barriers. The current study confirms previous findings and contributes additional evidence that underlines the reading levels of the educators are poor. The present study, however, makes several noteworthy contributions to understanding the prospective classroom teachers' perceptions of barriers against doing sports. The structural equation models developed within the current study supports the idea that gender and SES are important factors in understanding the nature of leisure preferences among adults.

Several limitations should be noted in the present study. The sample size, although representing a sample of 269 teachers, does not permit an examination of various branches because there is just one discipline as primary education-classroom teachers. Thus, care should be taken in generalizing the results to all prospective teachers within Turkish education system. Our study leaves us with several questions that future research should address. A review of the literature identified no research that examined the relation of ICT and other leisure activities in a deterministic way. Moreover, no research examined whether the relations of teacher reading habits or knowledge of children's literature are differentially related.

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