Physical Education and Sport Students' Interactions with their Teachers on Facebook

Zekeriya Göktas

Balikesir University, School of Physical Education and Sports, Balikesir, Turkey
E-mail: zgoktas@hotmail.com, zgoktas@balikesir.edu.tr

ABSTRACT This study aims to investigate the level of Physical Education and Sport students' interactions with their teachers on Facebook and the relationship between the level of interaction and factors such as age, gender, year of study and departments of study. The sample group of the study consisted of 416 students at the School of Physical Education and Sports at Balikesir University, Turkey. To collect data, a background questionnaire and a survey instrument were used. The results showed that Physical Education and Sport students exhibited mainly passive behaviors when they interacted with their teachers on Facebook, and the age, gender, grade and department significantly influenced interaction levels.

INTRODUCTION

In recent years, great transformations have occurred in many areas with the advent of information and communication technologies (ICT), such as social life, environment, communication and interactions. These transformations have affected the use of technology (Çoklar 2010). It is evident that social networking sites (SNS), as a significant part of this transformation bring with them certain benefits. For example, they provide opportunities for users to introduce themselves in a social environment, and set up and maintain communication with other users (Ellison et al. 2007). Moreover, they allow users to provide personal information, create a profile page with their photos and videos, establish relationships with people and discover new friendships (Wang et al. 2010). The facilities offered to meet the different needs of individuals and the presence of applications every day provides that more and more individuals with the opportunity to become members of social networking sites. More importantly, SNS brings considerable benefits to education. Facebook, one of the most popular social network sites, has considerable benefits in an educational context, as presented below.

In a review of the literature on Facebook usage in educational contexts, Aydin (2012, 2014)

states that Facebook is an online social networking service and a Web 2.0 technology that has over 845 million active users. It allows individuals over the age of 13 to create and upgrade their personal profiles, add friends, exchange messages and chat online. It also has the potential to positively impact education (Teclehaimanot and Hickman 2011; Wu and Chen 2015). Aydin (2012) reports that research has mainly focused on the characteristics of Facebook users, the reasons why people use it, its harmful effects, its use as an educational tool and environment, its effects on culture and language, and the effects of individual variables on the use of Facebook. Facebook also presents opportunities for members to organize themselves into groups in relation to personal and professional affiliations, which might include educational affiliations, workplaces, interests, hobbies, and political and religious beliefs (Aydin 2012). It is also considered the most popular platform that college students prefer as an SNS, and a rising number of college students often log onto this social network site (Kabilan et al. 2010; Ellison et al. 2007). Aydin (2012) concludes that Facebook may be readily utilized as an educational environment in relation to teaching and learning activities, social learning, e-learning, environmental learning, business and chemistry education.

Physical education is a field that involves a considerable mixture within educational settings due to several reasons, and the impact of these different variables within social networking environments may vary in accordance with what purpose and how individuals use social network-

Address for correspondence:
Balikesir University,
School of Physical Education and Sports,
Balikesir, Turkey
Telephone: +90 266 239 18 38
Fax: +90 266 239 02 85
Mobile: +90 532 568 50 78

ing sites for educational purposes (Cetin 2009). First, physical education contributes to the learners' cognitive developments, as it requires the operation of both cognitive and physical effort at the same time. Second, physical education is also important for the learners' emotional development. Lastly, learners need to communicate effectively during physical activities. On the other hand, social networking today constitutes a significant place for learners' cognitive, psychological and communicational development. Thus, in this sense, how teachers and students communicate and interact with each other remains an area for further research. It is also important to research communication and interaction on social networking sites as current literature indicates that these sites can also be used for educational purposes. In this context, there are several variables that affect communication and interaction on social networking sites, such as academic achievement, motivation, communication and social interaction. Studies on the use of Facebook in education suggest that students may reap social benefits from using the site (DeAndrea et al. 2012). Moreover, social networking sites are used for a variety of educational purposes. For example, in a study, Karlin (2007) found that nearly sixty percent of students use Facebook to discuss educational topics, whereas more than fifty percent use it to talk about specific school works. In addition, nearly 297,000 Facebook members identify themselves as faculty or staff. Facebook use has been highlighted for both social interaction, and instructional and educational material (Roblyer et al. 2010). In addition, a survey conducted in 2010 reached the conclusion that 96.6 percent of students use Facebook. Heiberger and Harper (2008) claim that Facebook holds an eighty-five percent market share of colleges and universities in the USA (Roblyer et al, 2010). Siegle (2011) emphasizes that one out of every 12 people on the planet have a Facebook account. Last, Ergenc (2010) also carried out a study on Facebook to see the effects of the Internet on the socialization among 200 university students. Participants were in the age range of 21-24 years old. They stated that they used it several times within a day (59%). Moreover, they stayed online for nearly an hour (40%) with female students appearing to spend more time than male students. In conclusion, it is obvious that Facebook has been a tool that can be used in both educational and non-educational environments and communications. Yet, how students interact with their teachers on Facebook has remained an unanswered question.

Literature Review

Research shows that Facebook presents both positive and negative effects on social interaction and communication between students and teachers (Butler 2010; Huang et al. 2010; Madge et al. 2009; Pempek et al. 2009; Subrahmanyam et al. 2008). For instance, Charlton et al. (2009) examined connections between college students' communication strategies and found that science students at two universities spent a great amount of their personal time on communication. Moreover, several empirical studies were carried out to investigate the patterns of university students' use of Facebook. The studies concentrated on academic interests (Dba and Karl 2008) and time spent on Facebook (Ellison et al. 2007; Vasalou et al. 2010). As an example, Sturgeon and Walker (2009) noted that faculty members created informal relationships with their students via Facebook (Lewis and West 2009; Roblyer et al. 2010). It also affected learning performance (Sanchez-Franco et al. 2011), self-esteem and social and emotional adjustment (Kalpidou et al. 2011). Hew (2011) found that Facebook was a means to build better relationships with students, whereas it affected their sociability (Ellison et al. 2007; Keenan and Shiri 2009), personality and motivation levels (Ong et al. 2011; Ross et al. 2009). One study emphasized the use of Facebook among employees working in the sport and leisure sector (Wallace et al. 2010), another study focused on physical education and sports students' opinions on the use of Facebook (Hergüner 2011). As a final point, although research focused on various issues, the number of studies on learners' interactions with their teachers on Facebook, specifically in the Turkish education context seemed fairly limited (Aydin 2014).

When it is compared to a number of studies carried out in different settings and why and how students use Facebook, few data and papers exist on this subject within the Turkish context. As an example, Mazman and Usluel (2010) designed a structural model explaining how users utilized it for educational purposes. The sample group consisted of 606 Facebook users in Turkey. The results indicated that Facebook users were mostly between 18 and 25 years old (74.1%) and were

college students (70.1%). The majority of the participants (38.8%) stated that they used it several times within a day and spent approximately 30 minutes on Facebook per day. The study reports no conclusions regarding Facebook's effects within the Turkish education context or on Turkish learners' interactions with their teachers on Facebook.

Facebook has been shown to impact academic settings at various levels (Villano 2007) for both educators and students (Couros 2008) in educational applications (Boon and Sinclair 2009). Moreover, Facebook promotes academic achievement (Violino 2009) and can be utilized for educational purposes such as collaboration, resource and material sharing (Mazman and Usluel 2010). Research also demonstrates that Facebook use increased student involvement (Heiberger and Harper 2008) and engagement (Junco and Cole-Avent 2008). For instance, in a project-based study using social networks, Maguth et al. (2010) found that students who used technology demonstrated improved ability to analyze information and communicate in a project-based approach. Skerrett (2010) stated that Facebook could be used to deepen the teachers' understanding and pedagogical practices in relation to literacy education (Derakhshan and Hasanabbasi 2015). As a concluding point, no data was found on Turkish Physical Education and Sport students' interactions with their teachers on Facebook.

In conclusion, several factors call for an investigation into the level of Physical Education and Sport students' interactions with their teachers on Facebook. First, there is a lack of research on the use of Facebook as an educational resource in the Turkish educational context. Second, no data has been found regarding the level of interaction between Physical Education and Sport students and teachers. It is also significant that the issue has not been examined within a Physical Education and Sport context in Turkey. The last reason for conducting this study is that research is lacking on the effects of age, gender and departments effect on student-teacher interactions on Facebook in a Physical Education and Sport context. Accordingly, this study considers two research questions:

1. What are the levels of Physical Education and Sport students' interactions with their teachers on Facebook?

2. Do age, gender, year of study and departments constitute statistically significant factors that may affect Physical Education and Sport levels of interaction with their teachers?

MATERIAL AND METHODS

This research was designed to be a descriptive research. For this purpose, a survey instrument that aimed to measure the level of Physical Education and Sport students' interactions with their teachers on Facebook was administered to 416 students from three departments in Physical Education and Sport School at Balikesir University in the age range of 18 to 27. The instruments consisted of 46 items in a Likert-type scale ranging from values one to five.

Participants

The participants in this study were primarily students in the Physical Education and Sport department at Balikesir University in Balikesir, Turkey. Overall, the courses in which students were enrolled were Sport Management - 163 (39.2%), Coaching -150 (36.1%), and Physical Education and Sport - 103 (24.8%). The reason why the students in the courses of sport management and coaching were included in the study is that they had official rights to work as physical education teachers after their graduation.

The total number of the students was 860. Of these, 416 students participated in the study. The participants selected for the study were the ones who stated that they had Facebook accounts and added their teachers to their friend lists. As a note, nine teachers who worked in the department had Facebook accounts and allowed their students to 'friend' them. Students were asked to respond to questions about the nine teachers, who represented an age range between 30 and 50. Of the participants, 139 (33.4%) were female and 277 (66.6%) were male. The participants' mean age was 20.9 within the age range of 18 to 27. Of the participants, 153 (36.8%) were first-, 86 (20.7%) were second-, 80 (19.2%) were third-, and 97 (23.3%) were fourth-year students.

Instruments

The data collection instruments were, (1) a background questionnaire probing participants' age, gender, and year of study, and (2) a survey instrument on student-teacher interactions de-

signed by Teclehaimanot and Hickman (2011). The survey instrument consisted of 23 items that were listed on a scale ranging from one to five (Never=1, Rarely=2, Sometimes=3, Usually=4, Always=5). The questionnaire was translated and presented in Turkish. The items represented 23 behaviors on Facebook based on whether they are active or passive.

Data Collection and Analysis

After approvals from the school administration were granted, the significance, purpose, research methodology, rationale behind subject choice, and research ethics were explained to the participants. It was underlined that their privacy would be respected and that participation in the study was voluntary. Then, the researcher introduced the research and the participants' rights. Last, the researcher distributed the instruments and collected them after the students completed them. The questionnaires were administered to the participants at the end of the fall semester of the 2013-2014 academic year.

The data collected was analyzed using the SPSS™ software. Before giving the descriptive, *t*-test and analysis of variance, the reliability coefficient and total variance were computed. The reliability coefficient of the scale was computed using Cronbach's Alpha. The value indicated a high level of reliability (0.96). The results of the reliability coefficient of the scale found by Teclehaimanot and Hickman (2011) was found to be 0.92 and by Aydin (2014) to be 0.88. After obtaining the validity and reliability results, the frequencies, mean scores, and standard deviations were computed to examine the distribution of the items and group homogeneity. Then, a t-test that displays a two-tailed probability of the difference between the means was conducted to examine the relationship between gender and the dependent variable. Finally, the analysis of variance (ANOVA) was used to analyze the mean differences between the items in the scale and subject variables, age department and year of study. An alpha level of .05 was used for the t-test and ANOVA.

RESULTS

The findings obtained from the study are divided into two sub-sections: (1) the levels of Physical Education and Sport students' interactions with their teachers on Facebook, and (2) the relationship between the levels of interaction with their teachers and subject variables, including age, gender, year and department of study.

Physical Education and Sport Interactions with their Teachers on Facebook

According to the findings in Table 1, students from the department of Physical Education and Sport displayed moderately active behaviors while interacting with their teachers. To begin with, Physical Education and Sport students have stated that it was them who usually sent their teachers friend invitations ($x=2.7$). The findings indicated that Physical Education and Sport students sometimes read through their teacher's education info ($x=2.67$), started chats with their teachers ($x=2.61$), read their teachers' status updates. ($x=2.59$), and watched videos their teachers posted. ($x=2.58$). However, the findings presented in Table 1 also show that Turkish Physical Education and Sport students displayed mainly passive behaviors during interactions with their instructors. This passive behavior included reading their teachers' personal information (for example, interests, activities, favorites) ($x=2.39$), and reading through the groups their teachers have joined ($x=2.33$), their teachers' work info ($x=2.32$), their teachers' basic info (for example, political views, religious views, relationship status) ($x=2.30$), and the posts on their teachers' walls ($x=2.29$). Moreover, they rarely sent their teachers messages ($x=2.18$), viewed their teachers' profiles ($x=2.16$), joined the groups their teachers have joined, ($x=2.12$), or viewed photos in which their teachers have been tagged ($x=2.11$). In addition, they stated that they rarely viewed photos their teachers post ($x=2.07$), rarely viewed their teachers' contact information (for example, e-mail, phone number) ($x=1.96$), rarely commented on videos their teachers post ($x=1.91$), photos their teachers posted ($x=1.87$), their teachers' status updates ($x=1.86$) and photos in which their teachers have been tagged ($x=1.76$). Finally, they rarely viewed their teachers' friend lists ($x=1.54$), posted on their teachers' walls ($x=1.47$), and never sent their teachers a "poke" ($x=1.20$).

The findings in Table 2 show the students' perceptions of how their teachers interact with learners on Facebook. As a limitation, it should be pointed out that the data presented in Table 2 is strictly limited to the participants' perspectives. Physical Education and Sport students stated that their teachers rarely send a "poke" ($x=2.10$),

Table 1: Students' perception of their interactions with their teachers on Facebook

Statements (N=416)	Mean	Std. error	Std. deviation
On Facebook, I ...			
Send my teachers a "poke".	1.20	.029	.609
Comment on photos my teachers post.	1.87	.043	.892
Post on my teachers' Wall.	1.47	.038	.794
Read through the groups my teachers have joined.	2.33	.054	1.11
View my teachers' friend lists.	1.54	.043	.887
Send my teachers friend invitations.	2.70	.056	1.15
Comment on my teachers' status updates.	1.86	.044	.904
View photos my teachers post.	2.07	.054	1.11
Start chats with my teachers.	2.61	.056	1.15
Join the groups my teachers have joined.	2.12	.049	1.003
Read my teachers' status updates.	2.59	.056	1.16
Send my teachers messages.	2.18	.048	.989
Read through my teachers' work info.	2.32	.055	1.12
Read through my teacher's education info.	2.67	.059	1.20
Watch videos my teachers post.	2.58	.055	1.137
View photos in which my teachers have been tagged.	2.11	.049	1.01
Read my teachers' personal info (for example, interests, activities, favorites, etc.).	2.39	.055	1.14
Read my teachers' basic info (for example, political views, religious view, relationship status, etc	2.30	.056	1.15
View my teachers' profiles.	2.16	.053	1.09
Comment on videos my teachers post.	1.91	.046	.949
Read through the posts on my teachers' Walls.	2.29	.052	1.08
Comment on photos in which my teachers have been tagged.	1.76	.045	.920
Read my teachers' contact information (for example, e-mail, phone number, etc.).	1.96	.054	1.11

sometimes commented on photos (*x*=2.79), posted on their walls (*x*=2.53), read the groups they joined (*x*=2.77) while they rarely viewed their friend lists (*x*=2.26). On the other hand, they stated that they sometimes sent friend invitations (*x*=3.19), and commented on their teachers' status updates (*x*=3.00). Moreover, they stated that the teachers sometimes viewed their photos (*x*=2.92), chatted with them (*x*=3.28), joined the groups the students joined (*x*=3.02), sent them messages (*x*=3.22), read through their work and educational information (*x*=3.23), watched videos the students post (*x*=3.21), and viewed the photos in which they were tagged (*x*=3.04). Last, they think that teachers sometimes read the students' personal (*x*=3.13), basic and contact info (*x*=3.06), and commented on and read the videos and photos that students post (*x*=3.08)

Effects of Age, Gender, Year and Departments of Study on Physical Education and Sport Students' Interactions

According to the values in Table 3, gender was a differentiating variable for reading teachers' status updates, viewing their profiles and joining the groups their teachers joined. That is,

though Physical Education and Sport students rarely posted on their teachers' wall, the males seemed more interested in posting on their teachers' wall than the females (*p=.003*). Also, more males found that teachers were more interested in sending pokes (*p=.035*) and starting a chat with students (*p=.037*) when compared to female participants' perceptions.

Table 4 shows that the year of study was also a considerable factor that affected Physical Education and Sport students' behaviors in terms of sending their teachers messages and reading their teachers' contact information. In other words, second- and fourth-year students were more comfortable than first- and third-year students with posting on their teachers' wall (*p=.006*), commenting on photos their teachers' post (*p=.038*), viewing their teachers' friend lists (*p=.000*) and photos in which their teachers have been tagged (*p=.025*), and commenting on videos their teachers' post (*p=.050*). First- and fourth-year students feel more comfortable in terms of sending their teachers messages when compared to second- and third-year students (*p=.033*).

According to Table 5, the age influenced the rate at which Physical Education and Sport stu-

Table 2: Physical Education and Sport students' perceptions of their teachers' usage of Facebook

Statements (N=416)	Mean	Std. error	Std. deviation
On Facebook, my teachers can			
Send me a "poke".	2.10	.067	1.38
Comment on photos I post.	2.79	.066	1.35
Post on my wall.	2.53	.066	1.35
Read through the groups I have joined.	2.77	.067	1.38
View my friends list.	2.26	.065	1.34
Send me a friend invitation	3.19	.072	1.48
Comment on my status updates.	3.00	.068	1.40
View photos I posts.	2.92	.070	1.43
Start a chat with me.	3.28	.068	1.40
Join the groups I have joined.	3.02	.069	1.42
Read my status updates.	3.21	.067	1.37
Send me a message.	3.22	.069	1.41
Read through my work info.	3.16	.071	1.45
Read through my education info.	3.23	.071	1.45
Watch videos I post.	3.21	.068	1.39
View photos in which I have been tagged.	3.04	.070	1.42
Read my personal info (for example, interests, activities, favorites, etc)	3.13	.069	1.42
Read my basic info (for example, political views, religious view, relationship status, etc.).	3.06	.068	1.38
View my profile.	2.95	.070	1.43
Comment on videos I post.	3.08	.068	1.40
Read through the posts on my wall.	3.16	.068	1.39
Comment on photos in which I have been tagged.	3.07	.069	1.42
Read my contact information (for example, e-mail, phone number, etc.).	3.02	.072	1.47

Table 3: Gender effects on Physical Education and Sport student interactions with their teachers (t-test).

Statements (N=416)	Gender	N	Mean	Std. deviation	F	Sig.
On Facebook, I post on my teachers' wall.	Female	139	1.36	.723	9.17	.003
	Male	277	1.52	.823		
On Facebook, my teachers can send me a "poke".	Female	139	1.89	1.29	4.49	.035
	Male	277	2.20	1.41		
On Facebook, my teachers can start a chat with me.	Female	139	3.37	1.30	4.37	.037
	Male	277	3.23	1.45		

dents posted on their teachers' walls ($p=0.11$), viewed their teachers' friend lists ($p=0.01$) and photos their teachers post ($p=0.06$), photos in which their teachers have been tagged ($p=0.11$), and read their teachers' contact information ($p=0.17$). This finding seems to indicate that older Physical Education and Sport students were more interested in viewing their teachers' profiles than younger ones ($p=0.39$).

According to the findings presented in Appendix 1, Physical Education and Sport students were more comfortable and interested in interacting with their teachers on Facebook than the Coaching and Sport Management students. Speaking more specifically, Physical Education and Sport students feel more comfortable when they send pokes to their teachers ($p=0.06$), post on their teachers' walls ($p=0.20$), viewing the photos their teachers post ($p=0.04$), chat with their teachers ($p=0.04$), join the groups their teachers have joined ($p=0.10$), and read their teachers' status updates ($p=0.03$). Similarly, Physical Education and Sport students feel more comfortable when they send teachers messages ($p=0.00$), read their work ($p=0.00$), view personal ($p=0.00$) contact and educational information ($p=0.09$), watch the videos they post ($p=0.00$), see the photos they post ($p=0.00$), see their profiles ($p=0.00$), send them pokes ($p=0.44$), comment on their photos ($p=0.50$), send friend invi-

Table 4: Year-of-study effects on Physical Education and Sport student interactions with their teachers (ANOVA)

Statements (N=416)	Gender	N	Mean	Std. deviation	F	Sig.
On Facebook, I Comment on photos my teachers post.	First year	153	1.78	.880	2.82	.038
	Second year	86	1.87	.955		
	Third year	80	1.77	.841		
	Fourth year	97	2.09	.867		
	Total	416	1.87	.892		
On Facebook, I View my teachers' friend lists.	First year	153	1.42	.824	7.07	.000
	Second year	86	1.47	.890		
	Third year	80	1.41	.806		
	Fourth year	97	1.89	.962		
	Total	416	1.54	.887		
On Facebook, I Comment on my teachers' status updates.	First year	153	1.81	.854	3.09	.027
	Second year	86	1.88	1.03		
	Third year	80	1.68	.789		
	Fourth year	97	2.08	.920		
	Total	416	1.86	.904		
On Facebook, I View photos my teachers post.	First year	153	1.92	1.08	3.76	.011
	Second year	86	2.10	1.15		
	Third year	80	1.95	1.06		
	Fourth year	97	2.38	1.11		
	Total	416	2.07	1.11		
On Facebook, I Send my teachers messages.	First year	153	2.24	1.05	2.93	.033
	Second year	86	2.02	.969		
	Third year	80	2.01	.849		
	Fourth year	97	2.37	.982		
	Total	416	2.18	.989		
On Facebook, I View photos in which my teachers have been tagged.	First year	153	1.96	1.02	3.15	.025
	Second year	86	2.15	1.13		
	Third year	80	2.08	.888		
	Fourth year	97	2.36	.970		
	Total	416	2.11	1.01		
On Facebook, I Comment on videos my teachers post	First year	153	1.84	.980	2.63	.050
	Second year	86	1.93	.967		
	Third year	80	1.77	.810		
	Fourth year	97	2.13	.964		
	Total	416	1.91	.949		
On Facebook, my teachers can Post on my wall.	First year	153	2.52	1.42	2.65	.048
	Second year	86	2.63	1.379		
	Third year	80	2.18	1.22		
	Fourth year	97	2.73	1.27		
	Total	416	2.53	1.35		
On Facebook, my teachers can View my friends list	First year	153	2.20	1.37	6.74	.000
	Second year	86	2.11	1.26		
	Third year	80	1.93	1.162		
	Fourth year	97	2.76	1.36		
	Total	416	2.26	1.34		

tations ($p=0.02$), comment on their status updates ($p=0.22$), view their photos ($p=0.04$), start chat with the teachers ($p=0.00$), and read through the groups they joined and comment on their status updates ($p=0.00$). When compared to the students in other departments, Physical Education and Sport students feel more comfortable when they send their teachers direct messages ($p=0.00$) and comment on photos ($p=0.50$) that were tagged ($p=0.00$).

DISCUSSION

There are six main findings obtained from the study. First, Physical Education and Sport students believe that they have mainly passive behaviors, indirect expressions of feelings, needs and wants, such as posting on teachers' walls, poking and chatting with them when they interact with their teachers on Facebook. However, they feel comfortable when their teachers inter-

Table 5: Age effects on physical education and sport student interactions with their teachers (ANOVA)

Statements (N=416)	Gender	N	Mean	Std. Deviation	F	Sig.
On Facebook, I Post on my teachers' wall.	18-20	178	1.33	.696	4.59	.011
	21-23	206	1.56	.822		
	24 - +	32	1.62	1.008		
	Total	416	1.47	.794		
On Facebook, I View my teachers' friend lists.	18-20	178	1.38	.752	7.73	.001
	21-23	206	1.60	.908		
	24 - +	32	2.00	1.21		
	Total	416	1.54	.887		
On Facebook, I View photos my teachers post.	18-20	178	1.88	1.03	5.11	.006
	21-23	206	2.24	1.16		
	24 - +	32	2.06	1.04		
	Total	416	2.07	1.11		
On Facebook, I View photos in which my teachers have been tagged.	18-20	178	1.95	1.03	4.60	.011
	21-23	206	2.26	1.00		
	24 - +	32	2.06	.913		
	Total	416	2.11	1.01		
On Facebook, I Read my teachers' contact information (for example, e-mail, phone number, etc.).	18-20	178	1.80	1.03	4.12	.017
	21-23	206	2.12	1.18		
	24 - +	32	1.84	.987		
	Total	416	1.96	1.11		
On Facebook, my teachers can Post on my wall.	18-20	178	2.33	1.31	3.27	.039
	21-23	206	2.68	1.38		
	24 - +	32	2.62	1.28		
	Total	416	2.53	1.35		

act with them on Facebook. Second, gender constitutes a significant factor in terms of interactions with the teachers. That is, the results of the study show that male students seem more interested in interactions with their teachers as compared to females. Third, fourth-year students have higher interaction levels with their teachers when compared to first-, second-, and third-year students. In other words, the higher the grade is, the more they interact with their teachers. Fourth, it can be concluded that older students seem more comfortable with their teachers when they interact in social media. Sixth and last, it was concluded that Physical Education and Sport students show more interest in interacting with their teachers compared with the students from other departments of Sport Management and Coaching. In brief, it can be concluded that Physical Education and Sport students perceive that they have mainly passive behaviors, and that their study year, gender, age and department constitute significant factors. Results found in this study support that passive behaviors are more appropriate than active behaviors, as found by Teclehaimanot and Hickman's (2011). They also support the results found by Mazer et al. (2007) that suggest negative associations between teacher use of Facebook and teacher cred-

ibility, while the results in the current study contradict the findings of other studies that underline that male students find student-teacher interactions on Facebook more appropriate than females (Hewitt and Forte 2006; Mazman and Usluel 2011; Teclehaimanot and Hickman 2011).

CONCLUSION

The statistical findings presented in the tables and appendices may relate to cultural factors. First, the students' very active behaviors, such as chatting, poking and posting, can be considered disrespectful by their teachers in Turkish culture. Thus, it can be stated that cultural factors such as the learners' age, gender, ethnicity, religion, educational, social, and economic status, educational and occupational levels of learners' parents, social norms, and their socialization processes could constitute a considerable area for additional research on the learners' interactions with their teachers. In addition, the reason Turkish students avoid "poking" also relates to Turkish culture, as the word "poking" has negative connotations in the Turkish culture and so is seen as disrespectful. It should also be underlined that the mentioned word is a taboo that relates to a sexual offense.

As a limitation, it must be strongly emphasized that culture as a factor was not measured in the study.

RECOMMENDATIONS

This study may have several contributions to target groups such as teachers, students and curriculum developers. First of all, as interaction is a vital dimension in sport activities, the students' perceptions of Facebook as an interactional environment, should be known by teachers. That may increase awareness regarding interactional problems between students and teachers. Moreover, it is obvious that Facebook offers students experiencing face-to-face interactional problems to use it as an interactional environment. By this way, it will be possible to reduce passive behaviors among sport students. Second, an intelligible understanding of passive behaviors among students can be reflected in their academic achievement, as interaction is a key point that contributes to their academic life in terms of both sport activities and achievement in their classes. In other words, active interaction between students and teachers can facilitate the students' content and sport knowledge. In this sense, Facebook as an interactive environment will help learners ask questions, develop critical thinking, lead discussions, engage in learning activities vigorously, and facilitate collaborative learning in a lowered affective filter. Hence, conclusions reached in this study can facilitate not only interactions but also their achievement in sport and educational activities.

LIMITATIONS

One of the limitations of this study is that participants were limited to 416 students enrolled in the school of Physical Education and Sport at Balikesir University. The scope of the study is the descriptive data obtained from the background questionnaire and the scale. Moreover, results of this study are limited to the students' perspectives rather than teachers' perspectives. Further research should focus on student-teacher interactions regarding their cultural and individual differences in qualitative and experimental studies. Consequently, this descriptive study aimed to investigate the level of Physical Education and Sport students' interactions with their teachers on Facebook, and concludes that Phys-

ical Education and Sport students have mainly passive behaviors when they interact with their teachers on Facebook. As a final note, age, gender, grade and department are the factors that affect the students' interactions with their teachers on Facebook.

REFERENCES

Aydin S 2012. A review of research on Facebook as an educational environment. *Educational Technology Research and Development,* 60(6): 1093-1106.

Aydin S 2014. Foreign language learners' interactions with their teachers on Facebook. *System*, 42: 155-163.

Boon S, Sinclair C 2009. A world I don't inhabit: Disquiet and identity in second life and Facebook. *Educational Media International,* 46(2): 99–110.

Butler K 2010. Tweeting your own horn. *District Administration,* 46(2): 41–44.

Çetin E 2009. Sosyal Iletisim Aglari ve Gençlik: Facebook Örnegi. Uluslararasi Davraz Kongresi Bildiri Kitabi, pp. 1094-1105. From <http://idc.sdu.edu.tr/tammetinler/bilim/bilim15.pdf> (Retrieved on 15 May 2015).

Charlton T, Devlin M, Drummond S 2009. Using ''Facebook'' to improve communication in undergraduate software development teams. *Computer Science Education,* 19(4): 273–292.

Çoklar AN 2010. Bilgi ve iletisim teknolojileri isiginda dönüsümler. In: H Ferhan Odabasi (Eds.): *Ailede Dönüsümler.* Ankara: Nobel Yayin, pp. 185-208.

Couros A 2008. Safety and social networking: How can we maximize the learning power of participatory web sites while ensuring students are protected and behave responsibly? *Technology and Learning,* 28(7): 20.

Derakhshan A, Hasanabbasi S 2015. Social networks for language learning. *Theory and Practice in Language Studies,* 5(5): 1090-1095.

Dba JP, Karl K 2008. Social networking profiles: An examination of student attitudes regarding use and appropriateness of content. *Cyber Psychology and Behavior*, 11(1): 95-97.

DeAndrea DC, Ellison NB, LaRose R, Steinfield C, Fiore A 2012. Serious social media: On the use of social media for improving students' adjustment to college, *Internet and Higher Education,* 15(1): 5-23.

Ellison NB, Steinfield C, Lampe C 2007. The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication,* 12(4): 1.

Ergenc A 2010. *Web 2.0 and Cyber Socialization: The Facebook Sample.* MA Thesis, Unpublished. Istanbul, Turkey: Maltepe University.

Heiberger G, Harper R 2008. Have you Facebooked Astin lately? Using technology to increase student involvement. *New Directions for Student Services,* 124: 19-35.

Hergüner G 2011. Opinions of students in physical education and sports teaching on the use of social network sites. *The Turkish Online Journal of Educational Technology,* 10(2): 174-183.

Hew KF 2011. Students' and teachers' use of Facebook. *Computers in Human Behavior*, 27: 662-676.

Hewitt A, Forte A 2006 . Crossing Boundaries: Identity Management and Student/Faculty Relationships on the Facebook. *Poster presented at the ACM Special Interest Group on Computer-Supported Cooperative Work*, Banff, Canada.

Huang JJS, Yang SJH, Huang YM, Hsiao IYT 2010. Social learning networks: Build mobile learning networks based on collaborative services. *Educational Technology and Society,* 13(3): 78–92.

Junco R, Cole-Avent GA 2008. An introduction to technologies commonly used college students. *New Directions for Student Services,* 124: 3-17.

Kabilan MK, Ahmad N, Abidin MJZ 2010. Facebook: An online environment for learning of English in institutions of higher education? *Internet and Higher Education,* 13(4): 179-187.

Kalpidou M, Dan Costin MA, Jessica Morris BA 2011. The relationship between Facebook and the well-being of undergraduate college students. *Cyberpsychology, Behavior and Social Networking,* 14(4): 183-189.

Karlin S 2007. Examining how youths interact online. *School Board News*, 73(4): 6-9.

Keenan A, Shiri A 2009. Sociability and social interaction on social networking websites. *Library Review*, 58(6): 438-450.

Lewis K, Kaufman J, Gonzalez M, Wimmer A, Christakis N 2008. Tastes, ties and time: A new social network dataset using Facebook.com. *Social Networks*, 30(4): 330–342.

Lewis J, West A 2009. Friending: London-based Undergraduates' Experience of Facebook. *New Media Society*, September, P. 185.

Madge C, Meek J, Wellens J, Hooley T 2009. "Facebook", social integration and informal learning at university: It is more for socialising and talking to friends about work than for actually doing work. *Learning, Media and Technology,* 34(2): 141–155.

Maguth B, Yamaguchi M, Elliott J 2010. Researching, producing, presenting: Use of technology for global advocacy in the social studies. *Social Education,* 74(2): 105–106.

Mazer JP, Murphy RE, Simonds CJ 2007. "I'll see you on Facebook": The effects of computer teacher self-disclosure on student motivation, affective learning, and classroom climate. *Communication Education,* 56(1): 1–17.

Mazman SG, Usluel YK 2010. Modeling educational usage of Facebook. *Computers and Education,* 55(2): 444–453.

Ong EYL, Ang RP, Ho JCM, Lim JCY, Goh DH, Lee CS, Chua AYK 2011. Narcissism, extraversion and adolescents' self-presentation on Facebook. *Personality and Individual Differences*, 50: 180-185.

Pempek TA, Yermolayeva YA, Calvert SL 2009. College students' social networking experiences. *Journal of Applied Developmental Psychology*, 30(3): 227–238.

Roblyer MD, McDaniel M, Webb M, Herman J, Witty JV 2010. Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *Internet and Higher Education*, 13: 134-140.

Ross C, Orr ES, Sisic M, Arseneault JM, Simmering MG, Robert Orr R 2009. Personality and motivations associated with Facebook use. *Computers in Human Behavior,* 25: 578-586.

Sanchez-Franco MJ, Villarejo-Ramos AF, Martin-Velicia FA 2011. Social integration and post-adoption usage of social network sites: An analysis of effects on learning performance. *Procedia Social and Behavioral Sciences*, 15: 256-262.

Siegle D 2011. Facing Facebook: A guide for non-teens. *Gifted Child Today*, 34(2): 14-19.

Skerrett A 2010. Lolita, Facebook and the third space of literacy teacher education. *Educational Studies: Journal of the American Educational Studies Association,* 46(1): 67-84.

Sturgeon CM, Walker C 2009. Faculty on Facebook: Confirm or Deny? *Paper presented at the Annual Instructional Technology Conference,* Murfreesboro, TN, 1-19, March 29th-31st 2009.

Subrahmanyam K, Reich SM, Waechter N, Espinoza G 2008. Online and offline social networks: Useful social networking sites emerging adults. *Journal of Applied Developmental Psychology,* 29(6): 420-433.

Teclehaimanot B, Hickman T 2011. Student-teacher interaction on Facebook: What students find appropriate. *TechTrends: Linking Research and Practice to Improve Learning,* 55(3): 19-30.

Vasalou A, Joinson AN, Courvoisier D 2010. Cultural differences, experience with social networks and the nature of "true commitment" in Facebook. *International Journal of Human-Computer Studies,* 68(10): 719-728.

Villano M 2007. Social revolution. *Campus Technology,* 20(5): 40–45.

Violino B 2009. The buzz on campus: Social networking takes hold. *Community College Journal,* 79(6): 28–30.

Wallace L, Yang C, Miloch K 2010. Sporting Facebook: A Case Study of Dallas' Professional Sports on Facebook. 8th Annual Conference of the Sport Marketing Association, October 26-29, New Orleans, Louisiana. From <http://www. sportmarketingassociation. com/2010conference/2010conferencepresentations/ S-30.pdf> (Retrieved on 02 May 2011).

Wang SS, Moon S, Kwon KH, Evans CA Stefanone MA 2010. Face off: Implications of visual cues on initiating friendship on Facebook. *Computers in Human Behaviour*, 26(2): 226-234.

Wu CH, Chen SC 2015. Understanding the relationships of critical factors to Facebook educational usage intention. *Internet Research*, 25(2): 262-278.

Appendix 1: Department effects on physical education and sport student interactions with their teachers (ANOVA)

Statements (N=416)	Departments	N	Mean	Std. deviation	F	Sig.
On Facebook, I Send my teachers a "poke".	Sport management	163	1.10	.439	5.26	.006
	Coaching	150	1.22	.684		
	Physical education and sport	103	1.34	.696		
	Total	416	1.20	.609		
On Facebook, I Post on my teachers' wall.	Sport management	163	1.37	.712	3.93	.020
	Coaching	150	1.45	.799		
	Physical education and sport	103	1.65	.882		
	Total	416	1.47	.794		
On Facebook, I View photos my teachers post.	Sport management	163	2.01	1.11	3.17	.043
	Coaching	150	1.97	1.10		
	Physical education and sport	103	2.31	1.10		
	Total	416	2.07	1.11		
On Facebook, I Start chat with my teachers.	Sport management	163	2.55	1.19	3.35	.036
	Coaching	150	2.50	1.13		
	Physical education and sport	103	2.86	1.07		
	Total	416	2.61	1.15		
On Facebook, I Join the groups my teachers have joined.	Sport management	163	2.03	1.02	4.62	.010
	Coaching	150	2.04	1.04		
	Physical education and sport	103	2.37	.875		
	Total	416	2.12	1.00		
On Facebook, I Read my teachers' status updates.	Sport management	163	2.58	1.16	5.86	.003
	Coaching	150	2.40	1.16		
	Physical education and sport	103	2.90	1.08		
	Total	416	2.59	1.16		
On Facebook, I Send my teachers messages.	Sport management	163	2.14	.999	8.81	.000
	Coaching	150	2.00	1.04		
	Physical education and sport	103	2.51	.802		
	Total	416	2.18	.989		
On Facebook, I Read through my teachers' work info.	Sport management	163	2.25	1.10	11.35	.000
	Coaching	150	2.10	1.18		
	Physical education and sport	103	2.75	.954		
	Total	416	2.32	1.12		
On Facebook, I Read through my teacher's education info.	Sport management	163	2.55	1.23	4.75	.009
	Coaching	150	2.58	1.29		
	Physical education and sport	103	2.99	.975		
	Total	416	2.67	1.20		
On Facebook, I Watch videos my teachers post.	Sport management	163	2.49	1.18	9.01	.000
	Coaching	150	2.42	1.10		
	Physical education and sport	103	2.99	1.01		
	Total	416	2.58	1.13		
On Facebook, I View photos in which my teachers have been tagged	Sport management	163	2.09	1.03	9.09	.000
	Coaching	150	1.91	.933		
	Physical education and sport	103	2.45	1.03		
	Total	416	2.11	1.01		
On Facebook, I Read my teachers' personal info (for example, interests, activities, favorites, etc.).	Sport management	163	2.30	1.17	8.28	.000
	Coaching	150	2.22	1.06		
	Physical education and sport	103	2.77	1.11		
	Total	416	2.39	1.14		
On Facebook, I View my teachers' profiles.	Sport management	163	2.14	1.11	9.96	.000
	Coaching	150	1.93	1.02		
	Physical education and sport	103	2.54	1.07		
	Total	416	2.16	1.09		
On Facebook, I Read my teachers' contact information (for example, e-mail, phone number, etc.).	Sport management	163	1.90	1.10	7.40	.001
	Coaching	150	1.79	1.04		
	Physical education and sport	103	2.32	1.17		
	Total	416	1.96	1.11		
On Facebook, my teachers can Send me a "poke".	Sport management	163	2.00	1.32	3.13	.044
	Coaching	150	2.00	1.35		
	Physical education and sport	103	2.39	1.47		
	Total	416	2.10	1.38		

Appendix Contd...

Statements (N=416)	Departments	N	Mean	Std. deviation	F	Sig.
On Facebook, my *teachers can* Comment on photos I post.	Sport management Coaching Physical education and sport Total	163 150 103 416	2.64 2.78 3.05 2.79	1.31 1.39 1.31 1.35	3.00	.050
On Facebook, my teachers can Send me a friend invitation.	Sport management Coaching Physical education and sport Total	163 150 103 416	2.95 3.17 3.60 3.19	1.53 1.51 1.27 1.48	6.25	.002
On Facebook, my *teachers can* Comment on my status updates.	Sport management Coaching Physical education and sport Total	163 150 103 416	2.88 2.91 3.33 3.00	1.43 1.45 1.21 1.40	3.86	.022
On Facebook, my *teachers can* View photos I post	Sport management Coaching Physical education and sport Total	163 150 103 416	2.84 2.73 3.32 2.92	1.42 1.44 1.38 1.43	5.64	.004
On Facebook, my *teachers can* Start a chat with me	Sport management Coaching Physical education and sport Total	163 150 103 416	3.12 3.08 3.81 3.28	1.42 1.44 1.17 1.40	10.26	.000
On Facebook, my *teachers can* Read through the groups have joined	Sport management Coaching Physical education and sport Total	163 150 103 416	2.74 2.95 3.56 3.02	1.40 1.44 1.27 1.42	11.13	.000
On Facebook, my *teachers can* Comment on my status updates.	Sport management Coaching Physical education and sport Total	163 150 103 416	2.96 3.12 3.71 3.21	1.35 1.41 1.23 1.37	10.24	.000
On Facebook, my *teachers can* Send me a message.	Sport management Coaching Physical education and sport Total	163 150 103 416	3.01 3.07 3.75 3.22	1.37 1.49 1.23 1.41	10.32	.000
On Facebook, my *teachers can* Read through my work info.	Sport management Coaching Physical education and sport Total	163 150 103 416	2.95 3.06 3.65 3.16	1.44 1.49 1.28 1.45	8.15	.000
On Facebook, my *teachers can* Read through my education info.	Sport management Coaching Physical education and sport Total	163 150 103 416	2.95 3.14 3.79 3.23	1.45 1.49 1.21 1.45	11.51	.000
On Facebook, my *teachers can* Watch videos I post	Sport management Coaching Physical education and sport Total	163 150 103 416	3.02 3.08 3.69 3.21	1.37 1.44 1.23 1.39	8.78	.000
On Facebook, my *teachers can* Comment on photos in which I have been tagged.	Sport management Coaching Physical education and sport Total	163 150 103 416	2.87 2.84 3.59 3.04	1.38 1.50 1.24 1.42	10.69	.000
On Facebook, my *teachers can* Read my personal info (for example, interests, activities, favorites,	Sport management Coaching Physical education and sport Total	163 150 103 416	2.93 3.00 3.64 3.13	1.38 1.51 1.24 1.42	9.11	.000
On Facebook, my *teachers can* Read my basic info (for example,political views, religious view, relationship status, etc.).	Sport management Coaching Physical education and sport Total	163 150 103 416	2.90 2.97 3.44 3.06	1.36 1.52 1.13 1.38	5.46	.005
On Facebook, my *teachers can* View my profile.	Sport management Coaching Physical education and sport Total	163 150 103 416	2.86 2.75 3.37 2.95	1.39 1.51 1.30 1.43	6.42	.002

Appendix Contd...

Statements (N=416)	Departments	N	Mean	Std. deviation	F	Sig.
On Facebook, my	Sport management	163	2.79	1.41	14.56	.000
teachers can	Coaching	150	2.98	1.42		
Comment on videos	Physical education and sport	103	3.69	1.17		
I post.	Total	416	3.08	1.40		
On Facebook, my	Sport management	163	2.88	1.36	10.68	.000
teachers can Read	Coaching	150	3.11	1.44		
through the posts	Physical education and sport	103	3.66	1.22		
on my wall.	Total	416	3.16	1.39		
On Facebook, my	Sport management	163	2.84	1.39	8.20	.000
teachers can	Coaching	150	3.02	1.50		
Comment on photos	Physical education and sport	103	3.54	1.23		
in which I have been	Total	416	3.07	1.42		
tagged.						
On Facebook, my	Sport management	163	2.80	1.45	5.61	.004
teachers can Read	Coaching	150	3.00	1.51		
my contact informa-	Physical education and sport	103	3.41	1.37		
tion (for example,	Total	416	3.02	1.47		
e-mail, phone						
number, etc.).						