

Examining Media Literacy Levels and Personality Traits of Physical Education and Sports Students According to Certain Demographic Variables

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ABSTRACT

The present study aims to examine the media literacy and personality traits of physical education and sports students according to certain demographic variables. 197 volunteering students of 80 females and 117 males who studied at Sakarya University Faculty of Sports Sciences and Bartın University Physical Education and Sports College in 2016-2017 academic years participated in the study. In order to define the students' personality traits "Ten-item Personality Scale" (TPS) was used. In order to define media literacy, "Media Literacy Level Identification Scale" was used. Statistical analysis of the data was carried out through Kruskal Wallis H Test, Mann Whitney U Test and Spearman Correlation Test in the SPSS 22.0 program. The analyses showed a significance level of $p < 0,05$. The results of the study showed that media literacy levels of the students was average and media literacy levels did not differ significantly according to their gender and age group variables ($p > 0,05$). When the students' personality traits were examined, personality trait of openness to experiences was average and the other personality traits were above average. When gender variable was taken into consideration, male students had significantly more openness to experience in their personality traits than female students ($p < 0,05$); while according to the age group variable, 20 year-old students had more responsible personality than 19 year-old students ($p < 0,05$). Additionally, there was a positively significant relationship between the students' personality traits and their media literacy ($p < 0,05$). As a result, gender and age variables were not important determiners; whereas age and gender variables influenced the personality traits. The findings revealed that university students' age and gender influenced their personality traits; while they did not influence the students' media literacy. Additionally, there was a statistically significant relationship between the students' personality traits and their media literacy. For future studies, suggestions could include a number of different variables that influence personality traits and media literacy of university students such as various age groups, school types, locations and parent attitudes; comparing electronics they have, digital media tools, etc to demographic variables.

Keywords: Physical Education and Sports, university students, personality traits, media literacy.

INTRODUCTION

Today, the information accessed by people does not only inform them; but also influence their standard of judgement, beliefs and attitudes in different perspectives and even reshape people's thoughts on many areas. In such an atmosphere, notions of media and literacy are integrated (Önal, 2007: 337). Media literacy is defined as the ability to access written and visual messages which have great variety (TV; cinema, video, the Internet, advertisements, etc.) and evaluate, analyze and transfer those messages (Solmaz and Yılmaz, 2012: 55). Another definition reads, media literacy "are the knowledge and skills that are needed in order to analyze, inquire, interpret and evaluate media messages" (Deveci and Cengelci, 2008: 26). Media literacy allows individuals to read media more consciously, express themselves more easily and be more active in social life (Solmaz and Yılmaz; 2012: 55). Additionally, media literacy helps people to create their own media messages (Kartal and Kınca, 2012: 169).

First thing that makes media literacy is the fact that the messages create control over individuals in the target audience. Therefore, the more the children and individuals from every part of community is well-informed on the subject of media literacy the better they can distinguish the line between real media and real world. Furthermore, individuals with high media literacy can protect themselves from harms of the media (Solmaz and Yılmaz; 2012: 55). In fact, one of the factors that caused media literacy to emerge is the aim to protect oneself from the harms of the media (Gündüz-Kalan, 2010: 59). This situation has revealed the necessity to raise knowledgeable and conscious media literates on the effects of media on societies through various tools or ways (Kurt and Kürüm, 2010: 20; Korkmaz and Yeşil, 2011: 110). In accordance with this necessity, media literacy has entered the curriculum today (Solmaz and Yılmaz, 2012: 55).

Humans’ defining and distinguishing patterns of emotion, thought and behaviors which define their individual and social way of interaction is described as “personality” (İnci, 2011: 267). Another definition says personality is “the person’s autogenous, consistent patterns of behavior” (Burger, 2006: 23). As personality is shaped according to hereditary and environmental factors, individuals’ personality traits may change over time. In this context, personality is assessed as a phenomenon which distinguishes people from others, idiosyncratic and different in each individual. People’s personalities do not differ all the time according their environment. An individual who has a calm personality in daily life is also maintains her/his calm personality at school or something they come across (Aytaç, 2001: 1).

It is known that university students spend a lot of their time on mass media tools and results of the studies in the literature also support this view (Karaman, 2010: 60). This situation reveals that university students’ media literacy is a subject which needs attention. On the other hand, studies and publishing done on media literacy in Turkey are quite limited (Ünlü, 2017: 67). People generally use media tools according to their personality traits and what they follow is shaped according to their personality (Kim et al., 2013: 498). Studies in the literature support the view that personality traits and media literacy have a significant relationship (Karabay, 2015: 1173; Austin et al., 2016: 600). However, related studies were scarce in Turkey. At this point, the question of “Is there a relationship between university students’ personality traits and their media literacy?” had to be answered. In this context, this study aimed to examine the sports sciences students’ media literacy levels and their personality traits according to certain demographic variables.

While the relationship between the students’ personality traits and their media literacy were examined, their personality traits and media literacy levels were also examined according to gender and age variables, because studies in the literature claimed that there was a significant relationship between gender and age group and personality traits Chapman et al., 2007: 1594; Costa et al., 2001: 322; Paris, 2004: 71; McCrae et al., 2004: 144; Soto et al., 2011: 330). In addition, they discovered significant relationship between age and gender and media literacy (Skaar, 2009: 39). However, the scarcity of data on university students in the literature led the researcher to study with university students. The study included 197 volunteering (80 female, 117 male) at Sakarya University, Faculty of Sports Sciences and Bartın University Sports College in 2017-2018 academic year.

MATERIALS AND METHOD

Research Model

Survey model from narrative research techniques which is quite frequently used in the field of sports sciences was used in this study. As is known, studies which are carried out with survey model are known as narrative research method used to define the focus group’s features (age, marital status, gender, etc.) (Can, 2014: 8).

Study Group

197 volunteering students of 80 females and 117 males who studied at Sakarya University Faculty of Sports Sciences and Bartın University Physical Education and Sports College in 2016-2017 academic years were involved in this study. Demographic features of the students in the study group are presented in Table 1.

Table 1. Distribution of frequency and percentage regarding the participants’ demographic information

| Variables | Sub-variables | F | % |
|------------|---------------|-----|------|
| Age groups | 18 | 46 | 23,4 |
| | 19 | 76 | 38,6 |
| | 20 | 43 | 21,8 |
| | 20+ | 32 | 16,2 |
| Gender | Female | 80 | 40,6 |
| | Male | 117 | 59,4 |

The table shows that 23,4% of the participants are in the age group of 18; 38,6% of them in the age groups of 19; 21,8% of them in the age group of 20; and 16,2% of them in the age group of 20+.

Data Collection Tools

To define the participants’ personality traits, “Ten-item Personality Scale (TPS)” was used. TPS was developed by Gosling et al. (2003: 504); and adapted into Turkish by Atak (2013: 312). The scale which was developed according to the five-factor personality traits measures the five important personality traits of openness to experience, Conscientiousness, extroversion, Agreeableness and emotional stability. The scale included 7-Likert type items with two items for each personality trait. In the process of adapting the scale into Turkish, the

Cronbach-Alpha index was 0.89 in the sub-dimension of openness to experience; 0.87 in Conscientiousness; and 0.88 in extroversion (Atak, 2013: 312).

In order to determine the participants’ media literacy, “Media Literacy Level Identification Scale” developed by Karaman and Karataş (2009: 802) was used. The development of the scale was applied on the prospective teachers and it was comprised of three sub-dimensions and 17 items. The sub-dimensions of the scale were being informed, ability to analyze and react, ability to judge and recognize organized messages. The scale was a 5-point Likert type and the answers included never (1), rarely (2), sometimes (3), usually (4) and always (5). Cronbach-Alpha indexes were .721 on being informed; .705 on ability to analyze and react; and .680 on ability to judge and recognize organized messages.

Statistical Analyses

SPSS 22.0 program was used to analyze the data that were gathered. Neither of the sub-dimensions of the scales showed normal distribution; therefore non-parametric analysis methods were used. In order to compare and contrast between the scale scores of the participants according to their age group, Kruskal Wallis H Test was run; while Mann Whitney Test was run in order to compare and contrast between them according to their gender. In order to examine the relationship between the scores of both scales, Spearman Correlation analysis was carried out. The analyses showed $p < 0,05$ level of significance.

FINDINGS

Table 2. Defining Statistics regarding the Participants’ Media Literacy and Personality Traits

| Scales | Sub-dimensions | X | Sd |
|----------------|---|------|-------|
| Media Literacy | Being informed | 4,05 | ,742 |
| | Ability to analyze and react | 3,64 | ,744 |
| | Ability to judge and recognize organized messages | 3,79 | ,813 |
| | Media literacy total | 3,85 | ,690 |
| Personality | Extroversion | 4,42 | 1,133 |
| | Emotional Stability | 4,41 | 1,396 |
| | Openness to Experience | 3,89 | 1,299 |
| | Conscientiousness | 4,22 | 1,192 |
| | Agreeableness | 4,58 | 1,235 |

The table shows that the participants’ levels of being informed, ability to analyze and react, and ability to judge and recognize organized messages are average. The participants’ personality trait of openness to experience was average while the other personality traits were above average.

Table 3. Comparison of the participants’ media literacy levels according to their gender

| Sub-dimensions | Gender | n | X | Sd | Mean | Total | U | p |
|---|--------|-----|------|------|--------|---------|--------|------|
| Being informed | Female | 80 | 4,13 | ,626 | 102,56 | 8205,0 | 4395,0 | ,467 |
| | Male | 117 | 4,00 | ,810 | 96,56 | 11298,0 | | |
| Ability to analyze and react | Female | 80 | 3,71 | ,718 | 103,39 | 8271,0 | 4329,0 | ,370 |
| | Male | 117 | 3,59 | ,761 | 96,00 | 11232,0 | | |
| Ability to judge and recognize organized messages | Female | 80 | 3,81 | ,728 | 98,38 | 7870,0 | 4630,0 | ,898 |
| | Male | 117 | 3,78 | ,869 | 99,43 | 11633,0 | | |
| Media literacy total score | Female | 80 | 3,91 | ,602 | 101,22 | 8097,5 | 4502,5 | ,651 |
| | Male | 117 | 3,80 | ,745 | 97,48 | 11405,5 | | |

The table reveals that being informed, ability to analyze and react, ability to judge and recognize organized messages do not display statistically significant difference ($p > 0,05$).

Table 4. Comparison of the participants’ media literacy levels according to their age group

| Sub-dimensions | Age groups | n | X | Sd | Mean | x ² | p |
|----------------|------------|----|------|------|--------|----------------|------|
| Being informed | 18 | 46 | 4,23 | ,591 | 110,37 | 2,586 | ,460 |
| | 19 | 76 | 4,03 | ,714 | 96,33 | | |
| | 20 | 43 | 3,94 | ,853 | 92,50 | | |

| | | | | | | | |
|---|-----|----|------|------|--------|-------|------|
| | 20+ | 32 | 4,00 | ,830 | 97,73 | | |
| | 18 | 46 | 3,67 | ,541 | 98,09 | | |
| Ability to analyze and react | 19 | 76 | 3,68 | ,783 | 100,52 | ,367 | ,947 |
| | 20 | 43 | 3,58 | ,819 | 95,03 | | |
| | 20+ | 32 | 3,59 | ,820 | 102,03 | | |
| Ability to judge and recognize organized messages | 18 | 46 | 3,89 | ,779 | 106,29 | 1,159 | ,763 |
| | 19 | 76 | 3,78 | ,742 | 95,54 | | |
| | 20 | 43 | 3,76 | ,872 | 96,34 | | |
| | 20+ | 32 | 3,75 | ,957 | 100,31 | | |
| Media literacy total score | 18 | 46 | 3,95 | ,536 | 105,33 | ,953 | ,813 |
| | 19 | 76 | 3,84 | ,658 | 96,47 | | |
| | 20 | 43 | 3,77 | ,801 | 95,17 | | |
| | 20+ | 32 | 3,79 | ,806 | 101,06 | | |

The table shows that being informed, ability to analyze and react, ability to judge and recognize organized messages and total media literacy levels do not statistically and significantly differ according to the age groups ($p>0,05$).

Table 5. Comparison of the participants' personality traits according to their gender

| Sub-dimensions | Gender | n | X | Sd | Mean | Total | U | p |
|-------------------------|--------|-----|------|-------|--------|---------|--------|------|
| Extroversion | Female | 80 | 4,40 | 1,080 | 95,83 | 7666,5 | 4426,5 | ,510 |
| | Male | 117 | 4,44 | 1,172 | 101,17 | 11836,5 | | |
| Emotional Stability | Female | 80 | 4,33 | 1,499 | 97,68 | 7814,0 | 4574,0 | ,786 |
| | Male | 117 | 4,46 | 1,325 | 99,91 | 11689,0 | | |
| Openness to experiences | Female | 80 | 3,64 | 1,343 | 88,79 | 7103,0 | 3863,0 | ,036 |
| | Male | 117 | 4,07 | 1,244 | 105,98 | 12400,0 | | |
| Conscientiousness | Female | 80 | 4,09 | 1,147 | 92,57 | 7405,5 | 4165,5 | ,186 |
| | Male | 117 | 4,30 | 1,219 | 103,40 | 12097,5 | | |
| Agreeableness | Female | 80 | 4,64 | 1,086 | 100,54 | 8043,0 | 4557,0 | ,752 |
| | Male | 117 | 4,54 | 1,330 | 97,95 | 11460,0 | | |

The table shows that personality traits of extroversion, emotional stability, Conscientiousness and Agreeableness do not display statistically significant difference according to gender; whereas personality trait of openness to experiences was significantly more present in male participants ($p<0,05$).

Table 6. Comparison of the participants' personality traits according to their age group

| Sub-dimensions | Age groups | n | X | Sd | Mean | x ² | p |
|-------------------------|------------|----|------|-------|--------|----------------|------|
| Extroversion | 18 | 46 | 4,62 | 1,252 | 108,22 | 1,875 | ,599 |
| | 19 | 76 | 4,31 | 1,163 | 95,00 | | |
| | 20 | 43 | 4,45 | ,800 | 99,70 | | |
| | 20+ | 32 | 4,36 | 1,265 | 94,31 | | |
| Emotional stability | 18 | 46 | 4,58 | 1,374 | 105,29 | 3,830 | ,280 |
| | 19 | 76 | 4,18 | 1,348 | 89,13 | | |
| | 20 | 43 | 4,53 | 1,369 | 106,45 | | |
| | 20+ | 32 | 4,53 | 1,560 | 103,39 | | |
| Openness to experiences | 18 | 46 | 3,95 | 1,262 | 101,61 | ,573 | ,903 |
| | 19 | 76 | 3,84 | 1,320 | 97,32 | | |
| | 20 | 43 | 3,84 | 1,266 | 95,50 | | |
| | 20+ | 32 | 4,03 | 1,391 | 103,94 | | |
| Conscientiousness | 18 | 46 | 4,17 | 1,326 | 98,13 | 9,091 | ,028 |
| | 19 | 76 | 3,99 | 1,149 | 87,36 | | |
| | 20 | 43 | 4,62 | 1,169 | 119,79 | | |
| | 20+ | 32 | 4,28 | 1,016 | 99,95 | | |
| Agreeableness | 18 | 46 | 4,59 | 1,335 | 96,43 | ,484 | ,922 |
| | 19 | 76 | 4,61 | 1,091 | 100,95 | | |
| | 20 | 43 | 4,62 | 1,224 | 101,66 | | |
| | 20+ | 32 | 4,47 | 1,459 | 94,48 | | |

According to the table, the participants’ personality traits of extroversion, emotional stability, openness to experience and Agreeableness do not statistically and significantly differ according to their age group ($p>0,05$); while personality trait of Conscientiousness differed significantly ($p<0,05$). The difference in the personality trait of Conscientiousness is between the age groups of 19 and 20.

Table 7. Examining the relationship between the participants’ personality traits and media literacy

| | | Extraversion | Emotional Stability | Openness to Experiences | Conscientiousness | Agreeableness |
|---|---|--------------|---------------------|-------------------------|-------------------|---------------|
| Being informed | r | ,163* | ,072 | -,045 | ,001 | ,370** |
| | p | ,022 | ,317 | ,533 | ,984 | ,000 |
| Ability to analyze and react | r | ,129 | ,073 | ,025 | ,020 | ,318** |
| | p | ,072 | ,310 | ,727 | ,776 | ,000 |
| Ability to judge and recognize organized messages | r | ,223** | ,123 | ,022 | -,008 | ,323** |
| | p | ,002 | ,086 | ,761 | ,907 | ,000 |
| Total media literacy | r | ,190** | ,108 | -,006 | ,017 | ,380** |
| | p | ,007 | ,130 | ,938 | ,814 | ,000 |

According to the table, while there is a positive, low level of significant relationship between the participants’ extroversion and being informed, ability to judge and recognize organized messages and total media literacy ($p<0,05$); there was not a significant relationship between their personality trait of extroversion and ability to analyze and react ($p>0,05$). There is not a significant relationship between emotional stability, openness to experience and media literacy sub-dimensions and total media literacy ($p>0,05$). There is a positively average and significant relationship between Agreeableness and being informed, ability to analyze and react, ability to judge and recognize organized messages and total media literacy levels ($p<0,05$).

DISCUSSION AND CONCLUSION

The present study found that being informed, ability to analyze and react, ability to judge and recognize organized messages and total media literacy of the students was average level. Media literacy levels of university students were also examined by various studies in the literature (Hobbs and Tuzel, 2017). A similar study conducted by Som and Kurt (2012: 104) found that the university students’ media literacy level was average level; while a study by Tuncer (2013: 79) found that education faculty students’ media literacy was above average. Another study by Som and Kurt aimed at examining the media literacy levels of students at different faculties and included 1563 university students. At the end of the study, it was reported that the students were “partly” aware of media literacy and that the majority of the students did not have enough information on the subject of media literacy. A study conducted by Karaman and Karataş (2009: 799) reported that the education faculty students had high levels of media literacy. The results of the studies in the literature were partly parallels with the present study. The reason for this may be because the participants were from different departments and had different levels of interest in media. Also, other studies in the literature (Yılmaz and Özkan, 2013: 178; Som and Kurt, 2012: 112; İnan, 2010: 49) reported that media literacy differed according to the university students’ universities and departments.

Considering the gender variable, there was not a significant difference in the media literacy level according to it. The basis for this may be the fact that frequency and reason for male and female students to use the media are similar. Similar studies in the literature examined university students’ media literacy levels according to gender variable (Aybek, 2016: 261; Chen et al., 2015: 583). Some studies in the literature also support the result that media literacy of the university students did not differ significantly according to the gender variable (Som and Kurt, 2012: 111; Karataş, 2008: 49). This result is parallel with the present study.

Considering the age variable, media literacy of the students in the study did not differ significantly according to the age variable. The basis of this may be due to the fact that although the students were in different age groups, they were in similar development period and the fact that their interests and demand in the media were similar in the age groups. Studies in the literature also examined media literacy of university students at different ages (Kammerl and Pannarale, 2007: 3067; Buckingham, 2007: 43). A similar study carried out by Tuncer (2013: 81) also reported that media literacy of education faculty students was not significantly different according to the age group variable. The result of this study supports the present study.

When the students’ personality traits are taken into account, the students had average level of extroversion and above average levels of other personality traits. According to the data, physical education and sports students had versatile personality traits; meaning that students had all the personality traits. The reason for this result may be

because sports support personality development and the features of sports activities (team and individual sports, competitive sports) in which people participate shapes the personality in different ways. In fact, similar studies support the view that engaging in sports supports social skills and personality development (Küçük and Koç, 2015: 5) and that sports branch (team/individual) shapes the psychological structure differently (Salar et al., 2012: 125). Results of these studies also support the present study.

According to the gender variable, openness to experience was more highly present in male students and other personality traits did not display difference according to the gender variable. The reason for this may be because female and male students have different styles of upbringing. In fact, similar studies (Özdemir et al., 2012: 569; Lodi-Smith and Roberts, 2007: 68) support the view that upbringing is an important determinant on personality development. Additionally, studies show that parents' attitudes in raising children are also important determiners on personality development (İnanç et al 2017: 1731).

There was a significant difference in having responsible personality according to the age groups. The data showed that compared to 19 year-old students, 20 year-old one had a higher level of responsible personality. There was not a significant difference in the students' personality traits according to their age groups. The basis for this result may be the fact that students have become more responsible as they get older. Findings of similar studies in the literature also support this view. A study by Stephan et al. (2015: 142) claimed that age variable is an important determinant on personality development.

Considering the relationship between the students' personality traits and their media literacy, there was a near-average positive and significant relationship between Agreeableness and being informed, ability to analyze and react, ability to judge and recognize organized messages and total media literacy. The data shows that personality traits are important determiners on media literacy. The reason for this may be because of the fact that the students' media literacy differed according to their personality and their ways of thinking are different. Therefore the students with different thinking structures perceive and interpret the media in a different way. Similar studies in the literature also support the view that media literacy is closely related to thinking skills and cognitive structure (Karabay, 2015: 1173). These results support the present study.

As a result, findings of the present study revealed that there was a statistically significant difference among personality traits of physical education and sports students according to age and gender variables. On the other hand, there was not a statistically significant difference among the students' media literacy levels according to age and gender variables. Additionally, there was a statistically significant relationship between the students' personality traits and their media literacy.

The following are suggestions based on these conclusions:

Children and teenagers can be educated in media literacy that will guide them to do more sports and get physical education and sports,

Similar studies can be conducted on team and individual sports players in various age groups to compare and contrast,

Another similar study can be carried out on physical education and sports teachers, trainer and sports administrators to compare and contrast.

Additional studies examining the relationship between university students' personality traits and media literacy levels can be conducted.

As personality traits and media literacy are influenced by a number of socio-demographic variables, more studies where students' personality traits and media literacy are examined according to different variables (location, parent attitude, grade, department and school type) can be conducted.

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