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A STUDY OF HIGH SCHOOL STUDENTS' POSITIVE AND NEGATIVE AFFECT IN TERMS OF GENDER DIFFERENCES

Research Article

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Abstract

The objective of this research was to analyse high school students' positive and negative affect schedules and to compare them according to gender, level of class and type of schools such as General High Schools, Anatolian High Schools and Science High Schools. 171 voluntary students in the 11th and 12th grades took part in this study. Data were collected through the Positive And Negative Affect Schedule (PANAS). The research indicated that the positive affect schedule was considerably high in both female and male participants, while the negative affect schedule of both genders was slightly low. However, the positive affect scores of male students were higher than of females but the negative affect scores of male students were lower than of females. Also, the means of negative affect in females were higher than of males among the 11th grades in all school types, and in both the 11th and the 12th grades in General High Schools.

Keywords: affect, gender, high school students, negative, positive

1. Introduction

Affect is a condition as anger, joy, sadness and fear motivating or inhibiting behaviours and affecting the interaction and communication with the environment. It is emphasized in the literature that philosophical and psychological examinations of affect are neglected (Yazici, 2006). The foundation of this accommodates the fact that there are still different views on whether the affect is a cognition, product, feeling, behaviour or motivation (Er et al., 2008). Yet, studying the definitions in literature, affect is defined, for instance, by American psychologist Dr. Daniel Goleman as an agitation or dynamics of mind, feeling and passion; any intense or stimulated mental condition (Ozgen, 2006). Another definition refers to affect as not only a feeling, but also a condition of the mind. Considering all the views, affect is the judgement evaluating the world (Yazici, 2006).

The definitions of affect have been attributed to various hypotheses such as the theories of James-Lange and Cannon Bard and cognitive theory (e.g. Oatley and Johnson-laird, 2014; Weisfeld and Goetz 2013). While the theory by James and Lange indicates that physiological reactions, meaning, physical and facial changes cause the change in affect, cognitive theory is the reflection of one's affect observing the environment and comparing himself/herself with others. Nonetheless, the research conducted suggests that the structure of feeling is formed from two fundamental dimensions independent of each other. These dimensions are positive and negative affect. The positive affect is defined as the active pleasure and joy one gets out of

life, while the negative affect is described as the activation of one's unpleasant emotions such as stress, fear and anger (Dogan & Ozdevecioglu, 2009; Ozdemir 2013). Watson et al., (1988) defined the positive affectivity as "looking at the world with enthusiasm and getting pleasure out of living". In other words, positive affectivity is considering life intensively positive. Within this framework, the level of positive affectivity is determined with one's energy felt towards life and the level of this energy. On the other hand, negative affectivity approaches the world with a negative perspective. Negative affect can arise not only from an individual, but also from organizational and physical conditions (Ozdemir, 2013).

Positive and negative affect occupies an important place in every person's life. The research conducted shows that positive and negative affect is associated with job satisfaction, working performance and life satisfaction (e.g. Dogan & Ozdevecioglu, 2009; Erol-Korkmaz, 2014; Gaudreau et al. 2006; Ozdemir, 2015). The research also indicates that young people have more negative affect than adults, and girls than boys (e.g. Fujita et al., 1991; Mroczek & Kolarz, 1998; Windsor & Anster 2010.). Positive and negative affect schedules of young people need to be known based on the role of affect on thoughts and behaviours, and young people's act of giving different reactions depending on their existing affect, because young people in adolescence period feel different in various situations and their way of expressing feelings can differ positively or negatively. In adolescence many changes occur. A young person changes physically due to his/ her hormones, As an adult, he/she experiences emotional ups and downs. Individuals become occasionally happy and sad during this period and usually cannot explain the reason for that. However, the individuals in this era are expected to grow emotionally mature in the same way they do cognitively and socially while solving all such problems they face (Gul & Gunes, 2009). Therefore, examining the affect of adolescents is of great importance. There are a range of studies in literature analysing the affect in adolescents/young people (e.g. Buz, Pérez-Arechaederra et al., 2015; Ebesutani et al., 2011; Telef, 2013). Meanwhile, a research studying high school students' positive and negative affect has not yet been done. Therefore, it is hoped that the findings in this study specifying the state of students' positive and negative affect will be a good reference for all the education and guidance services in high schools in TRNC (Turkish Republic of North Cyprus).

This study is important in two aspects. Firstly, it is the only research done to specify the most frequently experienced changes in affect in adolescence (Haşimoğlu & Aslandoğan, 2018; Tel, 2014), and the indications of emotional experiences (Larsen et al., 2017). Secondly, it is emphasized in literature that the state of affect among young people is connected with general life satisfaction (e.g. Lyubomirsky et al., 2005), academic satisfaction, attending or missing classes, success variables (e.g. Nickerson et al., 2011), gender, class level and age (e.g. Ozgule & Sumer, 2017; Sarı, 2007). Considering all these aspects, it is crucial that in order to run education and educational activities as required and assure students of their targets, their state of affect is well defined.

The aim of this research was to analyze high school student's positive and negative affect in terms of gender, level of class and type of school. Within the scope of this objective, answers were sought to the questions below:

1. What is the positive and negative affect of female and male high school students?
2. Do positive and negative affect of high school students vary according to gender?
3. Do positive and negative affect of female and male high school students vary according to level of class?
4. Do positive and negative affect of female and male high school students vary according to type of school?

2. Method

2.1. Model

Screening was used as a model in this study. General screening models are the screening regulations performed within a population consisting of numerous elements on the whole population or a group, example or sample taken out of it in order to have a general judgement on population (Bilgic, 2011).

2.2. The sample

The population of this research included the students studying in high schools of the Ministry of National Education, TRNC. Due to the limitations in conducting this study with the entire population, the sampling method was used and three high schools in Nicosia were randomly selected. In order to collect data, questionnaires were distributed to approximately 300 people in the relevant schools, but 200 questionnaires were returned. 171 of the questionnaires were evaluated (149 11th grade, 21 12th grade, 79 female, 92 male, 67 studying in a general high school, 30 in a Science high school and 74 in an Anatolian high school). The age ranges of the students varied between 16 and 19 (Mean=1.01; Sd:0.07). (Table 1).

Table 1. *Demographic characteristic of high school students*

| | Variable | N | % |
|---------------------|-----------------------|----------|----------|
| Gender | Female | 79 | 46.2 |
| | Male | 92 | 53.8 |
| Type of High School | General High School | 67 | 39.2 |
| | Science High School | 30 | 17.5 |
| | Anatolian High School | 74 | 43.3 |
| Level of Class | 11th grade | 149 | 87.1 |
| | 12th grade | 21 | 12.3 |
| | No information | 1 | 0.6 |

2.3. The instrument

In order to determine the demographic characteristics of high school students and to evaluate their positive and negative affect status, questionnaires including “Positive and Negative Affect Schedule” and questions revealing personal details (gender, age, and class) were used in this study.

The Positive and Negative Affect Schedule was developed by Watson et al. (1988) and was adapted to Turkish by Gençöz (2000). The scale included 20 expressions - 10 positive and 10 negative - determining the positive and negative affectivity. 5 Likert type scale was used for evaluation (1=very little; 5=very much). The reliability values of the positive and negative dimensions of the scale were calculated as 0.88 and 0.85 respectively by Gençöz (2000). The reliability values in this research were calculated as 0.88 and 0.81 respectively.

2.4. Analysis

The data obtained from the scales within the scope of this research were analyzed through the SPSS 23 Program. Frequency, percentage, and the independent sample t-test was used in the analysis of the data. Before the independent sample t-test, the distributions of the data were checked for normality and it was observed that Skewness and Kurtosis values of scale and subscales ranged from -1 to +1 according to gender and class level.

3. Results

3.1. Positive and negative affect of high school students

Values regarding the positive and negative affect of high school students are as in Table 2 below.

Table 2. *Positive and negative affect schedules of female and male high school students*

| Positive | Female | | Male | | Negative | Female | | Male | |
|--------------|--------|------|------|------|------------|--------|------|------|------|
| | Mean | Sd. | Mean | Sd. | | Mean | Sd. | Mean | Sd. |
| Interested | 3.05 | 1.02 | 3.11 | 1.16 | Distressed | 3.54 | 1.26 | 2.77 | 1.21 |
| Excited | 3.04 | 1.24 | 3.22 | 1.37 | Upset | 2.84 | 1.23 | 2.13 | 1.22 |
| Strong | 3.37 | 1.19 | 3.94 | 1.13 | Guilty | 1.76 | 1.08 | 1.42 | .90 |
| Enthusiastic | 3.31 | 1.32 | 3.68 | 1.30 | Scared | 1.79 | 1.10 | 1.60 | 1.13 |
| Proud | 3.32 | 1.38 | 3.86 | 1.22 | Hostile | 1.70 | .99 | 1.84 | 1.29 |
| Irritable | 3.11 | 1.30 | 3.33 | 1.26 | Alert | 3.53 | 1.33 | 2.77 | 1.53 |
| Inspired | 2.96 | 1.32 | 3.31 | 1.35 | Ashamed | 2.42 | 1.37 | 2.15 | 1.34 |
| Determined | 3.59 | 1.22 | 3.71 | 1.25 | Nervous | 3.38 | 1.32 | 2.89 | 1.54 |
| Attentive | 3.21 | 1.21 | 3.64 | 1.19 | Jittery | 2.91 | 1.30 | 2.38 | 1.31 |
| Active | 3.37 | 1.18 | 3.73 | 1.21 | Afraid | 2.19 | 1.34 | 1.49 | 1.01 |

While the mean values regarding the positive affect schedules of female high school students vary between 3.59 ± 1.22 and 2.96 ± 1.32 , male students' positive affect schedules vary between 3.94 ± 1.13 and 3.11 ± 1.16 . While the mean values regarding the negative affect schedules of female high school students vary between 3.54 ± 1.26 and 1.70 ± 0.99 , male students' negative affect schedules vary between 2.89 ± 1.54 and 1.42 ± 0.90 . According to Table 2, the scores of positive affect of male high school students are higher than of female high school students and the scores of negative affect of female high school students are higher than male high school students.

3. 2. Comparison of the positive and negative affect of high school students according to gender

A t-test was conducted to analyse any varieties in the status of students' positive and negative affect in terms of gender. The results are as shown in Table 3.

Table 3. *T-Test Results of PAS and NAS According to Gender*

| Dependent Variable | Gender | N | Mean | Sd. | t | df. | P |
|--------------------|--------|----|------|------|------|-----|-------|
| PAS | Female | 79 | 3.23 | 0.90 | 2.48 | 167 | 0.01* |
| | Male | 92 | 3.56 | 0.80 | | | |
| NAS | Female | 79 | 2.60 | 0.80 | 3.85 | 167 | 0.00* |
| | Male | 92 | 2.14 | 0.74 | | | |

* $p < 0.05$

As it can be observed in Table 3, the positive and negative affect of the female and male students vary. While this result is in favour of the male students in positive affect, it is in favour of the female students in negative affect.

3.3. Comparison of the positive and negative affect of the 11th and 12th-grade students according to gender

The t-test analysis was used in order to determine any varieties in the means of positive and negative affect of the 11th and 12th-grade students according to gender. The results of the analysis are as in Table 4 below.

Table 4. *T-test result for PAS and NAS according to gender in terms of the class*

| | Class | Gender | N | Mean | Sd. | t | df. | P |
|-----|------------------|--------|----|------|-----|-------|-------|-----|
| PAS | 11 th | Female | 60 | 3.27 | .87 | -1.89 | 145.0 | .06 |
| | | Male | 87 | 3.54 | .80 | | | |
| NAS | | Female | 60 | 2.53 | .74 | 3.08 | 145.0 | .00 |
| | | Male | 87 | 2.14 | .75 | | | |
| PAS | 12 th | Female | 18 | 3.18 | .95 | -1.56 | 19.0 | .14 |
| | | Male | 3 | 4.07 | .55 | | | |
| NAS | | Female | 18 | 2.87 | .97 | 1.25 | 19.0 | .23 |
| | | Male | 3 | 2.13 | .65 | | | |

* p < 0.05

As it can be observed in Table 4 above, the mean of the positive affect of the 11th and the 12th-grade male students is higher than of female students. Also the mean of the negative affect of the 11th and 12th-grade female students are higher than of the male students. This finding indicates a meaningful significance in the negative affect schedules of female and male students in the 11th grade.

3.4. Comparison of the positive and negative affect schedules of high school students according to gender in terms of high school types

The t-test analysis was conducted to determine any varieties in the positive and negative affect of the students according to gender in terms of school type. The results of the analysis are as in Table 5.

Table 5. *T-test results for PAS and NAS according to gender in terms of school type*

| | School Type | Gender | N | Mean | Sd. | t | df. | P |
|-----|-------------|--------|----|------|------|-------|------|-----|
| PAS | General | Female | 12 | 3.21 | 1.03 | -1.72 | 64.0 | .09 |
| | | Male | 54 | 3.65 | .75 | | | |
| NAS | | Female | 12 | 2.82 | .61 | 3.52 | 64.0 | .00 |
| | | Male | 54 | 2.08 | .66 | | | |
| PAS | Science | Female | 16 | 2.89 | .87 | -.75 | 27.0 | .46 |
| | | Male | 13 | 3.16 | 1.03 | | | |
| NAS | | Female | 16 | 2.37 | .89 | .63 | 27.0 | .53 |
| | | Male | 13 | 2.16 | .87 | | | |
| PAS | Anatolian | Female | 51 | 3.35 | .86 | -1.04 | 72.0 | .30 |
| | | Male | 23 | 3.56 | .71 | | | |
| NAS | | Female | 51 | 2.62 | .81 | 1.66 | 72.0 | .10 |
| | | Male | 23 | 2.28 | .86 | | | |

* p < 0.05

As it is revealed in Table 5, there is only a significant difference in the negative affect schedules between female and male students at general high school.

4. Discussion

In this research, positive and negative affect schedules of the students studying in high schools in Nicosia were investigated. According to the results, while the positive affect schedules of male high school students are higher than of female students, the negative affect schedules of male students are lower than of female students. In literature it is has been found that the positive and negative affect varies according to gender (e.g. Deniz et al. 2012; Aporicio et al. 2009; Melvin and Molloy 2000; Fujite et al. 1991; Wood et al. 1989). These results can be associated with the differences in both female and male students' biological, psychological, and social developments and changes.

Another result obtained from the study is about the effect of the level of class and school type on the positive and negative affect according to gender. Merely, the means of negative affect of female and male high school students vary in terms of class and school type. According to the results, the mean of negative affect in females was higher than of males among the 11th-grade students in all school types, and in both the 11th and 12th grade students in General High School. When class levels and affect averages are considered, a high negative affect is observed among the 11th-grade female students and this is associated with gender and age. The connection between affect and age was brought up by Barrick et al., (1989) and Fernandez-Agilar et al., (2018). This finding overlaps with the argument “negative affect decreased with age” by Charles et al., (2001). When school culture and students’ affect averages were compared, a high negative affect average was observed among female students in General High School and this was associated with school culture and school climate. This finding matches well with the argument “culture shapes affect in several ways” by Ozgule & Sumer (2017).

In conclusion, gender, class level, and type of school play a great role in high school students' affect schedules. This study was limited with students attending to three types of high schools in Lefkoşa and the Positive and Negative Affect Scale. In future studies, the sampling can be expanded and the Positive and Negative Affect schedules and life satisfaction of the young people in Cyprus can be examined. Studies dealing with “happiness” indicated that happy individuals exhibit positive affect and have a high inclination to reach targets with their positive state of mind (e.g. Lyubomirsky et al., 2005). In future studies, the connection among the variables such as positive and negative affect of high school students, their attendance to school, leaving school, lesson load, etc. can be dealt with. Researches done argue that positive and negative affect is the indication of emotional experience (e.g. Larsen et al., 2017). It is suggested that studies are done in the future to examine the connection between emotional experiences and risky behaviors among the young people in Cyprus.

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