

Full Length Research Paper

An evaluation of the empathy levels of pre-service social studies teachers

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This study was conducted to determine the factors that affect the empathy levels of pre-service teachers studying in the Department of Social Studies Teaching. The research questions developed in this context aimed to determine the roles of gender, age and being a member of a school club in the empathy levels of pre-service teachers. The study group consisted of pre-service social studies teachers (n=149), including 87 females and 62 males, studying in a faculty of education in the Black Sea region. The independent sample t-test was used to determine whether the empathy levels of pre-service teachers varied by age, gender and being a member of a school club. The analyses found that the pre-service teachers' scores on the emotional reactivity sub-dimension of empathy levels varied by age and gender variables.

Keywords: Empathy level, social studies, education.

INTRODUCTION

Systematic, disciplined and planned education in schools serves two purposes: teaching students the academic knowledge they can use in their daily lives and in a choice of profession, and more importantly, socializing them.

Paragraph 1 of Article 26 of Universal Declaration of Human Rights (1948) states: "Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit." Paragraph 2 continues: "Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding,

tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace" (<http://www.un.org/en/documents/udhr/>). Article 26 was prepared in the aftermath of the destruction of World War II based on the common understanding that human beings need to be protected from one another.

Certainly, the Article's proposal of compulsory education is not related to the ability of future generations to acquire academic knowledge in schools, but to the necessity of their socialization. World War II had shown that there was no limit to how badly people can treat each other, that they have very different ways of killing each other and that they can easily justify their actions by differences in races, political views, religions and sects,

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geographical locations and the need for raw materials.

The world's population is now 7.324 billion people (<http://populationpyramid.net/world/2015/>), each with their own different personalities. It is normal to expect mutual liking among individuals; however, they also have the right not to like each other. Individuals may not like each other, but living together in a community, country or the world brings with it obligations of mutual respect, tolerance and forgiveness. Also, the need to produce and share collectively in order to live well and prosper requires that people be honest, sharing, helpful and productive. The need to possess all these traits at the same time means that people have to know each other and work together. In brief, the second aim of education requires people to socialize and be socialized, the primary purpose of which is to give people the opportunity to acquire the capacity for empathy.

People with empathy would not so easily cause the type of destruction of humankind seen in World War II. For this reason, compulsory elementary education became part of the Declaration. School is the only place to socialize humankind in a systematic, disciplined and planned manner, to get them to know each other, to allow them to acquire empathy and to get them to produce collectively in society. Belonging to a community brings awareness of solidarity and mutual attachment among people. This awareness occurs by making the contributions and resources available for the needs of individuals and groups, developing care and empathy, and learning to be interested in diverse communities with ethnic, cultural and social differences (Gay and Hanley, 1999).

Empathy, no doubt, is an important skill. It helps people to be aware of others' feelings and thoughts. It allows us to understand their intentions, predict their actions and experience emotions triggered by their emotional experiences. Empathic skills facilitate effective communication in the social world. It is like a "glue" in the community helping us to help others and deterring us from hurting others (Baron-Cohen and Wheelwright, 2004).

Empathy

The English word, empathy, derives from the Greek word, *empathia*. The prefix, *em*, means within or inside, and *pathia* means feeling (Gülseren, 2001). In the twenty-first century, empathy is frequently discussed in psychiatry and psychology and a topic of research in the fields of clinic, social and communication psychology. Although many researchers have contributed to the comprehension of empathy, the first name that comes to mind today is Carl Rogers. Today, Empathy's irreplaceable importance in psychotherapy and interpersonal relations is the result of his persistent

studies (Dinçyürek, 2004). The most commonly accepted definition of empathy sees it as the process of understanding and feeling accurately what another individual is experiencing by placing oneself in another's position and letting the other individual know about this (Rogers, 1975).

Emphasizing that the scope of the concept of empathy should be limited, Freud defined empathy as a practice that plays a role in understanding something strange to the self of an individual (Ünal, 1972). According to Badea and Pana (2010), empathy is a way of understanding the feelings of others, not experiencing them. An individual should be sensitive to the feelings of other individuals and should recognize, understand and interpret these feelings to show empathy. Being able to understand other individuals' feelings before they express them is the core of empathy. Being empathetic means reading other individuals in an emotional way (Moller, 2000).

Zinn (1993) described empathy as: "the intellectual identification with, or experiencing emotions, thoughts, or attitudes of another; the imaginative ascribing to an object, as a natural object or work of art, feelings, or attitudes present in oneself" (as cited in Marshall and Marshall, 2011).

Liew et al. (2003) defined empathy as an effective reaction caused by fear, anxiety or the expectation about what another individual feels or will feel.

Rota and Reiterer (2009) defined empathy as: "the individual's struggle to identify themselves in imaginative or real life conditions" (cited in Dewaele and Wei, 2012).

Feshbach (1987), Miller and Eisenberg (1988) claim that empathy underlines pro-social behavior, and in the absence of empathy, individuals display aggressive and acquisitive behaviors while ignoring the rights or suffering of others (cited in Marshall and Marshall, 2011). Empathy includes the notion of understanding multiple perspectives on people's actions, historical events and the ability to take an empathic stance (Grant, 2001). According to Foster (1990), without important aspects of empathy, contrary to common sense, empathy is neither synonymous with sympathy or imagination, nor is it a skill for understanding the world through someone else's eyes (cited in Grant, 2001).

Hoffman (1991) stated that the motivation needed for moral actions depends on empathy. Putting oneself in the other's place, understanding his feelings and his experiences in every condition is the highest level of empathy (cited in Kirsli, 2003).

There are many elements to be considered for a definition of empathy. For example, how do empathy and sympathy differ, if they actually do differ? Is empathy a cognitive or an affective response to the suffering of others? Recent research has conceptualized empathy as having both cognitive and affective aspects

(Marshall and Marshall, 2011).

Dimensions of empathy

There are many explanations of the multidimensional nature of empathy. Social psychologists define empathy using two main approaches. The first, cognitive empathy, is understanding others' states of mind with the help of the imagination, and the second, emotional empathy, is defined as one's emotional reaction to another's emotional reaction. In the literature, affective empathy is used to refer emotional empathy (Lawrence, Shaw, Baker, Baron-Cohen and David, 2004).

Lamm and Majdandzic (2015) stated that since the explanation of the concept of sharing another individual's feelings (Empathy: Em – inside/internal / patheos: emotion, feeling) through neurological networks (MR imaging) began approximately 10 years ago, empathy is handled in the field of social neuroscience (neuroscience in behavior and learning, neurology in medicine and neurobiology). Emphasizing that the bases of empathy which is a very important and complex social skill should be revealed empirically as a neurological substructure, Lamm and Majdandzic (2015) pointed out how important and determinant shared neural activity—especially the relationship between empathy and mirror neurons—is for empathy.

Empathy is a conscious, intrinsic capacity that can be caused in two ways. Firstly, empathy can be caused by observing one's emotional state and briefly experiencing affective resonance (affective empathy). Secondly, it can be caused by intentionally adopting someone else's psychological perspective (cognitive empathy) (Decety and Moriguchi, 2007; cited in Segal, Cimino, Gerdes, Harmon and Wagaman, 2013).

Contrary to commonsense, emotional empathy is not related to sensitivity against injustice to others. Rather, due to individual differences, cognitive empathy and empathic concern involve a predictable sensitivity to justice for others, in addition to adherence to a moral code (Decety and Yoder, 2015).

In this study, the emotional reactivity sub-factor of the survey was conceptualized as a component of emotional regulation. Many researchers think that structure of emotional regulation potentially indicates that it has a unifying effect on maladaptive behaviors. For example, Linehan et al. (1993) asserted that the primary etiological cause of borderline personality disorder is emotional dysregulation (Becerra and Campitelli, 2013).

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Interestingly, cognitive and social neuroscience research is increasingly supporting emotional reactivity as the primary explanation for individual disposition towards sensitivity to justice. In two different studies, Yoder and Maya (2014) showed that sensitivity to justice was an important element in rating predictable approved and disapproved behaviors and moral actions (cited in Decety and Yoder, 2015).

Emotional regulation includes intrinsic and extrinsic processes aimed at monitoring, evaluating and modifying emotional reactions. Emotional reactions, especially their temporal and intensive features, help individuals to achieve their goals. In addition, these reactions include both voluntary and self-inflicted regulation processes (Becerra and Campitelli, 2013). Moreover, these processes are specifically responsible for changing these reactions to be able to reach certain goals (Thompson, 1994; cited in Onat and Otrar, 2010).

It is obvious that individuals' emotional reactions differ from context to context and, in every context of conscious life, play a key role in the personal experience of emotions (Nock et al., 2008).

Several surprising studies examined the effects of depression on emotional processes across cultures. Many other studies of emotional reactions and depression were conducted with European Americans. Clinical reports have shown that patients with manic depressive disorder suffer from extremely negative emotional expressions, experiences and sadness. However, scientific findings contradicted the reports showing that both depressed and non-depressed individuals give the same or only slightly different responses to the same negative emotions and stimulants (Dutton et al., 2007).

Relationship between curriculum and empathy

According to the NCSS (National Council for Social Studies) (1994), parents who care about raising their children into healthy individuals help create citizens who respect other people and their rights, struggle to improve public policies by participating in public protests and enjoy learning, which is also the aim of social studies experts. Activities that contribute to this goal include modules that teach empathy, assertiveness, anger management and problem-solving skills, as well as those that build self-esteem (cited in Berson and Berson, 1999).

Teachers have to assist students to explore beyond their personal and national experiences, to learn their rights and develop empathy for others, to understand issues with an open mind and to like their colleagues

Table 1. Curricula in Turkey involving direct instruction about empathy.

Course	Grade
Education of Religion and Ethics	4-8
Education of Religion and Ethics	9-12
Chess Teaching (Elective)	1-8
Social Studies	4-7
Critical Thinking (Elective)	6-8
Art Activities (Elective)	1-8
Education for Human Rights, Citizenship and Democracy	4
Geography	9-12
Education for Human Rights and Democracy (Elective)	10-12
Drama Education (Elective)	5-6
Drama Education (Elective)	10-12
Thinking Abilities (Elective)	1-8
Emotional and Social Development (Elective)	1-8
Aesthetics (Elective)	10-12
Visual Arts (Elective)	10-12
Music Education (Elective)	10-12
Health Information	9
Analysis of Art Work (Fine Arts High School)	12
Sports Accident Prevention and First Aid (Fine Arts and Physical Education High School)	9
Sports Massage (Fine Arts and Physical Education High School)	10
Social Activities	10-12
Social Studies/Sociology (Social Studies High School)	9-10
Sociology of Sports (Fine Arts and Physical Education High School)	12
Fundamentals of Religion(İmam Hatip Secondary School)	5-8
Fundamentals of Religion (Islam-I-II) (İmam Hatip High School)	9
International Relations (Elective)	10-12

Taken from Kaya and Çolakoğlu (2015).Adaptation of Empathy Quotient Scale (EQS).İnönü University Journal of the faculty of education, 16(1), 17-30. DOI: 10.17679/iuefd.16127895

(Gaudelli and Fernekes, 2004).

Since 2005, many additional elective courses have been added into the curriculum. In 2015, there were total of 188 courses (curriculum) at the primary, secondary and high school levels, and in 27 of them empathy was classified as “direct instruction”. These curricula are listed in Table 1.

Developing empathy helps students establish a positive relationship with teachers so that they can understand problems and find solutions together. When students realize that their teachers are trying to put themselves in their position and understand what they feel, in other words, they notice their teachers’ empathetic skill, it is likely that they will feel intimate with them, trust them and be impressed by them (Kuzgun, 2000).

According to Checkley (2008), empathy, the ability to walk in someone else’s shoes, has been a necessary focus in the Turkish Republic’s curricula since 2005. Table 1 indicates that the social studies curriculum is

one where empathy is directly instructed. This study sought answers to these questions below from pre-service teachers who will teach social studies in the future.

1. Does gender significantly affect the empathy levels of pre-service social studies teachers?
2. Does age significantly affect the empathy levels of pre-service social studies teachers?
3. Does playing an active role in the community significantly affect the empathy levels of pre-service social studies teachers?

MATERIALS AND METHOD

This is a descriptive study using the survey method. The sample consisted of 149 pre-service social studies teachers. The participants completed the Empathy Quotient Scale developed by Kaya and Çolakoğlu (2015). A Likert scale with 13 items and 3 sub-factors was used: social skills, cognitive empathy and

Table 2. Descriptive analysis results for the empathy quotient scale and its sub-factors.

Independent variables	N	Mean	SD
Social Skills	149	3.07	0.63
Emotional Reactivity	149	3.26	0.55
Cognitive Empathy	149	3.21	0.53
Empathy Quotient Scale	149	3.19	0.42

Table 3. The *t*-test scores for gender effects on the empathy quotient scale and its sub-factors.

Independent variables	Gender	N	Mean	SD	t	p
Social Skills	Female	87	3.09	.60	.375	0.71
	Male	62	3.05	.66		
Emotional Reactivity	Female	87	3.42	.50	4.281	0.00*
	Male	62	3.04	.56		
Cognitive Empathy	Female	87	3.19	.56	-.589	0.58
	Male	62	3.24	.50		
Empathy Quotient Scale	Female	87	3.23	.41	1.366	0.17
	Male	62	3.14	.42		

* $p < 0.05$.

emotional reactivity. Its reliability coefficient (Cronbach's alpha) was found to be 0.776 by Kaya and Çolakoğlu (2015). Its reliability coefficient for this study's 149 participants was 0.794. IBM SPSS 13.0 software was used to analyze the data. The independent samples *t*-test was used to compare participants' empathy levels with their demographics.

FINDINGS

The sample consisted of 87 females and 62 males ($n=149$). Of them, 63.8% were age between 17 and 21 years of age, 41.6% were over 22, and 62% played an active role in the community.

The participants' mean scores on "empathy level" and sub-factors as shown in Table 2 indicate that their empathy level scores were above the average. In addition, the lowest sub-factor score was social skills, and the highest was cognitive empathy.

Gender effects on students' empathy level and sub-factor scores

The first research question investigated whether there was a difference between the scores of males and

females on the empathy level scale and its sub-factors. The results of the comparisons are shown in Table 3, revealing that there was no significant difference between scores of males and females on the empathy level and its sub-factors, except for the emotional reactivity sub-factor scores ($t=4.281$, $p < 0.05$). The females' emotional reactivity scores ($M=3.42$) were significantly higher than males ($M=3.04$), indicating that the females' emotional reactions were more intense.

Age effects on students' empathy level and sub-factor scores

The second research question investigated whether the participants' age affected their empathy level and sub-factor scores. The results of the comparisons are shown in Table 4:

Table 4 shows that there was no significant difference between the 17-21 age group and the over-22 age group, except in the emotional reactivity sub-factor scores ($t=2.463$, $p < 0.05$). The mean score of emotional reactivity for the 17-21 age group was 3.34, and for the over-22 age group it was 3.12. Based on the results, younger pre-service teachers were more sensitive than

Table 4. The *t*-test scores for age effects on the empathy quotient scale and its sub-factors.

Independent variables	Age	N	Mean	SD	t	p
Social Skills	17-21	95	3.09	.61	.400	0.69
	Over 22	54	3.05	.66		
Emotional Reactivity	17-21	95	3.34	.51	2.463	0.02*
	Over 22	54	3.12	.60		
Cognitive Empathy	17-21	95	3.25	.55	1.020	0.31
	Over 22	54	3.16	.50		
Empathy Quotient Scale	17-21	95	3.23	.41	1.435	0.15
	Over 22	54	3.13	.43		

* $p < 0.05$.**Table 5.** The *t*-test scores for playing an active role in the community effects on the Empathy Quotient Scale and its sub-factors.

Independent Variables	Playing an Active Role in Community	N	Mean	SD	t	p
Social Skills	Yes	92	3.10	.63	.839	0.40
	No	57	3.02	.62		
Emotional Reactivity	Yes	92	3.29	.57	.809	0.42
	No	57	3.22	.53		
Cognitive Empathy	Yes	92	3.27	.52	1.476	0.14
	No	57	3.13	.54		
Empathy Quotient Scale	Yes	92	3.23	.41	1.544	0.13
	No	57	3.12	.42		

older teachers.

The effects of playing an active role in the community on pre-service teachers' empathy level and sub-factor scores

The third research question investigated whether playing an active role in the community affected the pre-service teachers' empathy level and sub-factor scores. The results are shown in Table 5.

There was no significant difference between the groups' empathy level and sub-factor scores, indicating that an active role in the community had no effect on pre-service teachers' empathy levels.

DISCUSSION AND CONCLUSION

This study concluded that the emotional reactivity sub-

factor of the pre-service social studies teachers' empathy levels showed a significant difference by gender. The difference was in favor of females. This may be due to the fact that, according to Turkish family structure, manners, customs and traditions, girls begin to prepare for the responsibility of motherhood at early ages, to be a mother and housewife by means of their playing and toys (baby dolls, kitchen toy sets, etc.), and that Turkish society teaches them to behave more compassionately and emotionally towards their children and husbands in the future. The results of other studies conducted in Turkey mentioned below support these results.

A research investigating empathy or empathic tendency found similar results. Ekinci and Aybek's (2010) research on pre-service teachers found that gender significantly affected pre-service teachers' empathic tendencies in favor of females. Ikiz (2009) found that female psychological counselors working at primary schools had higher scores for empathic ability

than males. Akbulut and Sağlam's (2010) research on primary school teachers' empathic ability found that female teachers' mean scores for empathic tendency were higher than those of males. Duru (2002) researched the effects of some psychosocial variables on pre-service teachers' empathic tendency and found that females had significantly different empathic tendency scores. Kapıkıran's (2009) study of the empathic tendency and self-monitoring of pre-service teachers, found that female teachers scored higher than males and that male pre-service teachers were more egocentric.

Fitness and Curtis' (2005) research on the effects of emotional quotient, empathy, attributional complexity and self-control in interpersonal conflicts concluded that females had higher mean scores for empathy than males. Dereli and Aypay (2012) studied the empathic tendency of pre-service teachers in evening education programs and found that females had an advantage over males. Akyol and Salı (2013) investigated the effect of working and non-working adolescents' perfectionist traits on empathic tendency and found that females had significantly higher scores. Myyry and Helkama's (2001) research on university students' value priorities and emotional empathy showed that gender, in favor of females, accounted for a significant difference in empathy.

Self-reports give the most reliable and valid results for gender differences. According to these reports, females are much more empathic than males (Davis, 1983; Eisenberg and Lennon, 1983; Mehrabian et al., 1988; Rueckert and Naybar, 2008; cited in Rueckert et al., 2011). In several Master's theses investigating empathic tendency, females had higher empathic tendencies than males.

Many studies of emotional expressiveness and emotional reactivity have found females to be more emotional than males, or at least more emotionally expressive (Kring and Gordon, 1998). In this research, the emotional reactivity of the female pre-service social studies teachers was significantly different to that of the males. When Demirtaş and Dönmez (2006) researched jealousy in intimate relations they found that females had more emotional reactions than males. Rueckert et al. (2011) conducted a self-report study to investigate whether gender differences in empathic tendency are caused by differences in emotional reactivity. The results showed that women had higher levels of empathy. Sharma (2014) investigated the effect of gender on the daily life stress and major depressive disorders of 60 participants between the ages of 18 and 40 years, and the results showed that stress-coping skills differed with respect to gender. Males were much more practical in problem-solving and less affected by their emotions than females. Males had significantly greater depth of feelings, were less affected by their

own feelings and had a greater control over their feelings. Parkins (2012) investigated the emotional expressivity of males and females in social networking realms, such as Facebook and Twitter and concluded that females were much more emotionally expressive in face-to-face communication than males. Like much of the literature's findings on empathy, the pre-service social studies teachers' empathy levels, and emotional reactivity as a sub-factor, differed by gender.

This study also found that pre-service social studies teachers' emotional reactivity was significantly affected by age. Younger pre-service teachers had higher emotional reactivity than older pre-service teachers. In this study, the emotional reactivity of pre-service social studies teachers in the age group of 17-21 and in the age group of 22 and older was investigated. The results showed that the 17-21 age group had higher scores of emotional reactivity sub-factor than those of the age group of 22 and older, indicating that the younger pre-service teachers are more sensitive. No research investigating the relation between pre-service teachers' empathy levels, age and emotional reactivity was found in the literature.

Kunzmann and Grünh (2005) investigated the emotional reactions of young adults and older adults in the presence of emotion-arousing stimulus, but found that age did not affect emotional reactivity. Silvers et al. (2012) conducted a study with children and young adults (10-23-years-old). By showing them negative and neutral photos, they attempted to establish the effect of age on emotional reactivity, regulation sensitivity and rejection sensitivity. The results indicated that age had no effect. Gojmerac (2009) investigated the relation between emotional regulation and age in a doctoral study and found no difference between younger and older adults. Ekinçi and Aybek's (2010) research into pre-service teachers' empathic tendencies and critical thinking skills found that senior students had higher emotional tendencies than freshmen, but in this research did not investigate emotional reactivity. Kliegel et al. (2007) investigated emotional development in adulthood by carrying out a procedure which caused negative moods and found that emotional reactivity is more intense for older adults than younger people. Smith, Hillman and Duley's (2005) research with 18-23 year-old participants and 60-71 year-old participants examined emotional reactivity by showing participants touching pictures. They found that the group of older participants had much more intense emotional reactions.

This study found no significant relation between playing an active role in the community and the empathy levels of pre-service social studies teachers. However, this may be due to the limitation of having only pre-service social studies teachers participating in the research.

It is recommended that further research should be

conducted using the Empathy Quotient Scale developed by Kaya and Çolakoğlu (2015), with pre-service teachers from different departments in faculties of education to compare the results. Due to results of this study, the effects of variables other than age and gender on emotional reactivity as a sub-factor of the Empathy Quotient Scale should also be investigated.

Conflict of Interests

The author has not declared any conflicts of interest.

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