

ERPA 2014

A comparative study on empathy skills of kid swimmers and non-swimmers

Korkmaz Yigiter^{a*}, Mihrac Kuru^b

^aDuzce University, School of Physical Education and Sport, Duzce 81620, Turkey

^bPrivate Sahin Schools, Sakarya 54100, Turkey

Abstract

The purpose of this study is to investigate the differences between swimmers and non-swimmers in terms of empathy skills. In this context, 100 kids, swimmers ($M_{age}=11,98\pm,82$) and non-swimmers ($M_{age}=12,54\pm,81$), participated in the study voluntarily. Empathy index for children and adolescents developed by Bryant (1982) used in the study. This scale was performed on the swimmers and non-swimmers in a swimming tournament. The data was analyzed using SPSS 16.0 Package Program, and level of significance was determined to be 0.05. There was not a statistically significant difference between swimmers' \bar{X} empathy skills score $14,76\pm 4,04$ and \bar{X} non-swimmers' empathy skills score $14,46\pm 3,69$ ($p>0.05$). The results collected in the present study were discussed in this context.

© 2014 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

Peer-review under responsibility of the Organizing Committee of the ERPA Congress 2014.

Keywords: swimmers; non-swimmers; empathy skill; psychological health; children.

1. Introduction

Empathy is regarded as being crucial to the development of the therapeutic relationship (Dixon, et al., 1999; Mitchell & Cormack, 1998; Mercer & Reynolds, 2002). Empathy is also a quality and this quality enables a person to understand and feel concern for others situations or feelings. Empathy means to identify with the problems or situations of people and understand their thoughts and conditions. According to Freud empathy is being able to be

* Corresponding author. Tel.: +0-380-542-12-15; fax: +0-380-542-13-65.

E-mail address: korkmazyigiter@gmail.com

same as the person in front of us and imitate him later. This mechanism helps the person to understand different ideas and worlds (Kolayış & Yigiter, 2010; Yigiter & Ustaoglu, 2013).

With respect to the relationship between psychological and physiological aspects of empathy, Stephen Porges pointed out that in contemporary cognitive neuroscience, empathy is regarded as being the function of higher brain structures, such as the cerebralneocortex, which represents the most recent stage in the evolution of brain development. “However, at least some of the underlying physiological [structures and mechanisms] necessary for the expression of empathy are shared with more general aspects of emotionality, as well as sociability and reproduction, which are dependent on lower brain structures and the autonomic nervous system,” and also on functional neuroendocrine processes (Carter, Harris, & Porges, 2009; Devay, 2010; Yigiter, 2013). Within this explanation regarding the relationship between psychology and physiology, an important aspect of this ability is cognitive empathy, cognitive empathy typically encompasses or equates to cognitive perspective-taking skills and is generally described as the ability to imagine, with intention, the feelings and motivations of others (Eisenberg, 1991; Smith, 2006; Yigiter & Ustaoglu, 2013).

Social functioning requires the rapid processing of emotionally valenced stimuli, in ascertaining the intentions, motivations, and emotional reactions of others. Essential emotional signalling information is conveyed by facial expression, vocal prosody, and expression in the eyes (Thonks et al., 2008). Empathy is an important ability for future of people because if people understand each other in the social life, social communication networks can be better for people. With this social communication networks, people can understand each other easily and understanding each other is an useful factor to create a new key for healthy relationships among people in the society (Yigiter & Ustaoglu, 2013). From this viewpoint, improving the empathy skills of kids provides good social networks to society. In this way, people can understand each other better.

Within this framework, it can be proposed that the empathy skill levels of all kids can be improved by taking a empathy course. It was hypothesized that the swimmers' empathy skill levels in the study group will be higher score than non-swimmers.

2. Method

2.1. Subjects

The sample of study was composed of swimmers aged 11-13 ($M_{age}=11,98\pm,82$) and non-swimmers aged 11-14 ($M_{age}=12,54\pm,81$) in Sakarya city in the Marmara region of the Turkey. All kids were chosen randomly for the study, and they were voluntarily included in the present study.

2.2. Measures

Empathy index for children and adolescents has twenty two items with a 5-point likert-type scale. Bryant (1982) reported Cronbach alpha and test-retest reliability coefficients of .54 (.74), .68 (.81), and .79 (.83) for first, fourth, and seventh grade samples respectively (Barrio et al., 2004). Empathy index for children and adolescents was adapted to Turkish by Biryani (2006). Cronbach alpha is found to be .70 on fourth-grade students in Turkey.

2.3 Procedure

Empathy index for children and adolescents was distributed among the swimmers in a swimming tournament in Sakarya city in the Marmara region of Turkey. Informed consent was signed by all kids, and also all scale used in this study were anonymous.

2.4 Data Analysis

All data collected in the present study were analyzed using SPSS 16.0 Package Program. Descriptive statistics, independent sample t test were used to analyze the data. Level of significance was determined to be 0.05.

3. Results

According to data collected in this study, between swimmers' \bar{X} empathy skills score $14,76 \pm 4,04$ and \bar{X} non-swimmers' empathy skills score $14,46 \pm 3,69$ ($p > 0.05$).

Table 1. Differences between empathy skills of kidswimmers and non-swimmers

	Stress levels			P
	N	Mean	SD	
Swimmers	50	14,76	4,04	,699 p>0.05
Non-swimmers	50	14,46	3,69	

4. Discussion

The present study was conducted to investigate the differences between swimmers and non-swimmers in terms of empathy skills. For that purpose, it was hypothesized that the swimmers' empathy skill levels in the study group will be higher score than non-swimmers. The results of the present study did not indicate any significant difference between empathy skill levels of the swimmers and non-swimmers.

In reviewing the results of this study, the results of this study did not support the hypothesis that the swimmers' empathy skill levels in the study group will be higher score than non-swimmers. Empathy skill levels of the swimmers and non-swimmers showed that there was not a statistically significant difference between swimmers and non-swimmers ($p > 0.05$). There are very few studies on investigation relationships between sport and empathy skill. Despite of inadequacy of studies in the literature about empathy skill, it is able to find a few study. For instance, Yiğiter and Ustaoglu (2013) investigated the effects of the sport training on empathy ability of the vocational school students in Turkey, and the results of their study showed that the sport training has an important effect on empathy ability of the students. Also, Yiğiter (2013a) tried to improve the empathy ability of university students by participating in recreational activities as group, and the results of that study showed that participants in the experimental group improved in empathy ability than those in the control group. These studies did not supported the results of the present study. In general, it can be said that this study was performed on the relationships between empathy ability and swimmers and non-swimmers for the first time. Therefore, this study can be classified as a pilot study. As for limitations of the study, any research on the relationship between swimmers and non-swimmers have not been found in the current literature to compare with the present study. Within this framework, although this study used a small sample, it revealed primarily evidence for future studies in terms of empathy skill levels of swimmers and nonswimmers.

In conclusion, it can be concluded that empathy skill levels will not differ between swimmers and non-swimmers. In daily life, there are various problems in the world, and everybody can encounter those problems (Yiğiter, 2013b). When encountered problems, people have some psychological talents, and if they use them efficiently, a various problems like social, cognitive, individual and many others could be solved easily (Yiğiter, 2013c). To this end, empathy skill levels of all kids can be elevated by giving them in a variety courses in order to facilitate communication in society.

References

- Barrio, V., Aluja, A., & Garcia, L. F. (2004). Biryant's empathy index for children and adolescents: Psychometric properties in the Spanish language. *Psychological Reports, 95*, 257-267.
- Biryant, S. (2006). *Çocuklar ve ergenler için empati ölçeğinin türkçe formunun geçerlik ve güvenirlik çalışması*. İstanbul: Marmara Üniversitesi Eğitim Bilimleri Enstitüsü Sınıf Öğretmenliği Doktora Programı. Yayınlanmamış Ders Ödevi.
- Dixon, D. M., Sweeney, K. G., & Gray, D. J. P. P. (1999). The physician healer: ancient magic or modern science? *British Journal of General Practice, 49*, 309-312.
- Kolayış, H., & Yiğiter, K. (2010). The Examination of Emphatic Skills on the Elementary and Middle School Physical Education Teachers in City of Kocaeli. *International Online Journal of Educational Sciences, 2(2)*, 562-578.
- Mitchell, A., & Cormack, M. (1998). *The therapeutic relationship in complementary health care*. London: Churchill Livingstone, 1998.
- Mercer, S. W., & Reynolds, W. J. (2002). Empathy and quality of care. *British Journal of General Practice, 52*, 9-13.

- Thonks, C., Slater, A., Frampton, I., Wall, S. E., Yates, P., & Williams, W. H. (2008). The development of emotion and empathy skills after childhood brain injury. *Developmental Medicine & Child Neurology*, 51, 8-16.
- Yigiter, K., & Ustaoglu, P. (2013). Effect of the sport training on empathy ability of the vocational school students in Turkey, *Journal of Education and Practice*, 4(11), 210-213.
- Yigiter, K. (2013a). Improving the empathy ability of university students by participating in recreational activities as group, *American Journal of Scientific Research*, 92, 45-50.
- Yigiter, K. (2013b). The examining problem solving skills and preferences of university students in relation to sport and social activity, *Educational Research International*, 1(3), 34-40.
- Yigiter, K. (2013c). Investigation of the problem solving-skill, self-esteem and preferences of the university students regarding sport and social activity in Turkey. *International Journal of Academic Research Part B*, 5(4), 220-226.