DETERMINING THE RELATIONSHIP BETWEEN EMPATIC TENDENCY AND CRITICAL THINKING INCLINATION OF FOOTBALL COACHES

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Abstract. The main target of this research is to determine the relation between Empatic Tendency and Critical Thinking Inclination of football coaches. For that purpose, California Critical Thinking Inclination (CCTDI), improved by Facione & Giancarlo, adopted in turkish by Kökdemir (2003), and Empathic Tendency Scale (ETS), improved by Dökmen (Dökmen, 1988), were used in this research. The research group consisted of 174 football coaches worked in three cities of Turkey, Aydın, Uşak, Denizli, during the 2015-2016 football season. Spss 16.0 statistical program was used for data analysis to make use of its percentage and frequencies. Kolomogrov-Smirnof test was used to determine whether the data from two dependent variables to show a normal distribution or not. To interpret the data, t-test, Pearson correlation analysis for examining relation between 2 dependent groups, non-parametrik test for lack of normal distribution of sub-dimensions, and test of one way anova for more than two goups, were used. According to findings of the research, there are statistically significant difference between CCTDI scores (t=-9,641) and education level of coaches (p<0.05). It has been observed that football coaches with graduate and post graduate education has higher CCTDI result more than coaches with college education. There are statistically significant difference between the result of ETS scores (t=-17,451) and education level of coaches (p<0.05). It has been confirmed that football coaches with graduate and post graduate education has higher CCTDI result more than coaches with high-school according to the aspect of the difference. In conclusion it is understood that there are significantly different in the ETS scores of football trainers when educational level of them and their parents, monthly income are, however, it has been concluded that there is no difference regarding between their professional seniority, age ranges and ETS scores. By the way, it has been concluded that the educational level of football trainers, educational level of parents, monthly income are determinant on tendency of critical thinking, but professional seniority and age ranges are not determinant on the tendency of critical thinking.

Key words: Football coaches, Critical Thinking Inclination, Empatic Tendency, Monthly Income, Age Ranges, Professional Seniority, Educational Level.

Introduction

Ideal individual is respected and valued back when contacting with its environment, keeping in touch with its neighborhood and showing respect whoever in its living-space. Our football culture is going to rise up when sportsmen is taught how to establish bond with their country, culture, habitat by their well-educated football coaches. Before anything else, coaches need to understand football players very-well according to Kılıç [2005] the way for good communication firstly the person is supposed to understand the others, meet their expectations, and empathize with them. In addition to this, unless understanding the people’s feeling, thought, love cannot emerge among people and does not develop, when we start understanding others we start loving instinctively, said Dökmen [2005] [10].

Empathy is the ability of seeing the events through other people’s viewpoint, and of setting oneself in another’s situation while understanding feelings of other person [27,28]. Empathic thoughts and behaviors get coaches taken as humanist, frank person, giving importance to learner [6]. Coach always must adopt, see developments what sportsman within through sportsman’ condition. Recognizing the positive changes because of attitudes of coach, player approaches its coach as relying on him, player’s respect increase it will eventually develop environment of confidence in the team [31]. At this stage, that is very normal as success from team reflects in school education. Kuzgun [2006] mentioned same dialog becomes between teachers and students at

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school as it is among player and coach in a team [20]. Via empathy inclinations, emotions, thought as well as the causes of behaviors are being tried to be understood, and may be after recognizing these positive descriptions Pala [2008] said that teachers must have high empathy inclination as coaches need to [1,17,24]. Because the attitude of person who give youth education set a example and easy to be a model for sportsman, so so it has a great effect on the young individuals on the way of education either at school or in a team [21].

In addition to being one of the components of the empathic emotional intelligence center, It is also thought to be a skill that sharpens critical thinking and mental imagery [2]. People often appreciate their current thinking skills. For this reason they do not consider developing it. In the age of millennium and in line with the understanding of current education critical thinking ability, like empathy thinking ability, is one of the most basic skills that must be earned by the new generation sportsmen with help of football coaches. Providing our young generation [football players in this case] with this critical thinking ability from every section of society, that to be made possible by specialist-coaches in the field, as well as educators with intellectual wealth [19]. According to Ennis [1989], critical thinking that is logical to think reasonably and deeply [reflective] while making decisions about what people do and believe [14]. Critical thinkers constantly check their thoughts, begin to work with self-criticism, before anything else they question their belief system [25,29]. Critical thinking is sometimes used as a logic of argument or as a form of informal logic, It transforms into a model of thinking that goes through the mental stages such as reasoning, analysis and evaluation [23,31]. Individuals with critical thinking ability and empathy inclinations are more competent in their subjects and on the field than those who lack of it [4].

**Research objective**

The objective of this research whether educational level of football trainers, educational level of parents, monthly income, professional seniority and age ranges have positive impact on Critical Thinking Inclination, and Empatic Tendency of football trainers or not.

**Hypothesis**

1. Football trainers have mid-level of emphatic of Critical Thinking Inclination, Empatic Tendency.
2. Educational level of football trainers, educational level of parents, monthly income, professional seniority and age ranges have positive impact on Critical Thinking Inclination, Empatic Tendency of football trainers.
3. Critical Thinking Inclination, Empatic Tendency of football coaches improve as educational level of football coaches goes up.

**Material and Method**

The study was carried out on 174 football coaches who reside and work in the province of Aydın, Denizli, Uşak ities in Turkey. The research also measured coaches' critical thinking inclinations, empathic thinking tendency by applying the California Critical Thinking Tendency Scale (CCTDI), and the Empathic Thinking Tendency Scale (ETS).

**Study Group**

The sampling and populations of the work is constituted by 174 male football coaches registered in TÜFAD (Turkish Football Coaches Association) who live in Aydın, Uşak and Denizli provinces of Turkey. The research group examined relationship of critical thinking inclination of football coaches (CTI), and empathic tendency of football coaches (ET) with Their education levels, mother and father educational level, ages, professional seniority (how long they have been football coaches to a club and trained a football team), monthly income.

Trainers’ educational back ground divided in two segments. 1. Group; Coaches with high school certificate and lower education certificate or back groud than high school and 2. Group; Coaches with bachelor certificate and postgraduate certificate (Master and PhD education) higher than bachelor education.
Data Collection Tools and Data Analysis

In this research, Empathic Tendency Scale (ETS or ET), prepared, tested and improved by Dökmen (1988), with 20 questions every question is scored 1 to 5. Personal Information Form prepared by researchers, and California Critical Thinking Inclination (CCTDI), improved by Facione & Giancarlo (1992), adopted in Turkish by Kökdemir (2003) are used in the research. Spss 16.0 statistical program was used for data analysis to make use of its percentage and frequencies. Kolomogrov-Smirnof test was used to determine whether the data from two dependent variables to show a normal distribution or not. To interpret the data, t-test, correlation analysis for examining relation between 2 dependent groups, non-parametric test for lack of normal distribution of sub-dimensions, and test of one way anova for more than two groups were used and p<.05 was taken as significant.

Findings

In this study, data from both empathic thinking tendencies scale and critical thinking inclination scale were analyzed and findings were shared. It is investigated if education level of coaches, educational level of coaches’ parents, coaches’ monthly income, professional seniority, age ranges have significant effects on two dependent variables.

| Table 1. Result of Pearson correlation to investigate the relation between ET and CTI |
|-----------------|-----------------|-----------------|
| Variables       | X               | SS              | R               |
| Critical Thinking Inclination | 229,16          | 10,71           | .841*           |
| Empathic Tendency | 80,77           | 19,82           |                 |

It was found that there is high level significant difference (relation) between ET and CTDI (p<0.05).

Findings relating to critical thinking inclination (CTI)

| Table 2. T-test Results on average scores of CTI according to education level. |
|-----------------|-----------------|-----------------|-----------------|
| Variable        | Categories       | N               | x               | SS              | T               | P               |
| Education levels of football coaches | 1 grup (high school and lower) | 53              | 211,47          | 6,04            | -.964           | .00             |
|                 | 2 grup (graduate and postgraduate) | 121             | 236,90          | 18,75           |                 |                 |

There is significant difference between average scores of CTI and education level of football coaches (p<0.05).

| Table 3. Results of variance analysis regarding average scores of CTI according to educational level of parents. |
|-----------------|-----------------|-----------------|-----------------|
| Variables       | Categories       | Sum of squares  | df              | Mean square     | F               | P               |
| Mother educational level | Between-Groups | 7987.82         | 3               | 2662.6          | 7.54            | .00             |
|                  | Within-Groups   | 59987.67        | 171             | 352.86          |                 |                 |
|                  | Total           | 67975.49        | 174             |                 |                 |                 |
| Father educational level | Between-Groups | 15654.03        | 3               | 5218.01         | 16.95           | .00             |
|                  | Within-Groups   | 52321.45        | 170             | 307.77          |                 |                 |
|                  | Total           | 67975.49        | 173             |                 |                 |                 |

As a result of variance analysis significant difference was found between CTI of football coaches and educational level their parents (p<0.05).
It can be seen that there is not any significant difference regarding to scores of CTI according to monthly income, ages, professional seniority of football coaches (p<0.05). But there is a significant difference was understood between average scores of CTI and monthly income of football coaches (p<0.05).

Findings relating to Empathic Tendency (ET)

There is significant difference between average scores of ET and education level of football coaches (p<0.05).

As a result of variance analysis significant difference was found between average scores of ET of football coaches and educational level of parents of football coaches (p<0.05).

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<th>Mean square</th>
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<td>Monthly income</td>
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There is significant difference between average scores of ET and education level of football coaches (p<0.05).

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As a result of variance analysis significant difference was found between average scores of ET of football coaches and educational level of parents of football coaches (p<0.05).
It can be seen that there is not significant difference regarding to average scores of ET according to ages, professional seniority of football coaches (p<0.05). But a significant difference was found between average scores of ET and monthly income of football coaches (p<0.05).

**Conclusion and Discussion**

We found some results from this research, which level of empathic thinking tendencies, critical thinking inclination football coaches have, in the millennium age. If football coaches have these thinking abilities have positive effect on giving training youth footballers with contemporary thoughts in contrast to routinized education and mentality.

Table 1, it was found that there is highly level significant difference (relation) between Empathic Tendency and California Critical Thinking Inclination (p<0.05). Ekinci and Aybek (2010) found low level but meaningful significant difference (11). It can be argued that is derived from educator personality of football coaches.

Table 2, a significant difference was found between average scores of CTI and education level of football coaches (p<0.05). Coaches with university education or postgraduate education have been found to have a higher critical thinking inclination than coaches have lower education of bachelor degree. There is a positive relationship between level of education and critical thinking inclination. It is important that prospective football coaches who will have this profession need to have higher level education.

Table 3, As a result of variance analysis, significant difference was found between CTI of football coaches and educational level of parents (p<0.05). Gulveren (2007), Ersan, Ginuey (2012), Arifoğlu, Razı (2011), and Erdoğan (2012) did not find a significant difference, in their work, between education level of parents and critical thinking skills of the participants (3,12,13,15). The significant difference between the critical thinking inclination of coaches and mother education level of coaches was found in the research of Tümkaya and Aybek (2008). Higher educated parent has a questioning and democratic behavior when raising a child (30). In our study, the difference between critical thinking inclination of coaches and parents education level of participants was statistically significant. It is seen that the reason for this difference based on parents with higher education level of participant coaches. It explicitly shows higher level of parental education positively affects the child's critical thinking inclination and empathic thinking tendency.

Table 4, It can be seen that there is not any significant difference regarding to scores of CTI according to ages, professional seniority of football coaches (p<0.05). But there is a significant difference was understood between average scores of CTI and monthly income of football coaches (p<0.05).

The results of the critical thinking inclination was not affected significantly by coaches’ professional seniority in our study, it was understood. Unlike our research Aybek and Narin (2009) found a significant difference between results of critical thinking inclination and professional seniority of subjects, and also indicated participants who worked over than 21 years have higher critical thinking inclination than who worked 0-5 years and 6-10 years. in the light of such information, we determined that majority of participants with below 10 years professional seniority, in our research. Aybek Birsel and Narin Nuray (2010) said while professional seniority of individual goes high, his/her critical thinking inclination increases (5).

The results of the critical thinking inclination was not affected significantly by coaches’ ages shown in our study. Lack of a significant relationship between critical thinking skills and age of participants is appropriate to the literature (16). In this case, there is no relation between age and critical thinking ability that would be appropriate to the literature.
Çekin, in his research (2013), found a significant difference between participants’ monthly incomes and their critical thinking inclination. Within this context, those with higher monthly incomes have higher critical thinking inclination than others with lower incomes (8). The reason for difference in our research, it shown that those with higher monthly incomes tend to have more critical thinking inclinations.

Table 5, There is significant difference between average scores of ETS and education level of football coaches (p<0.05). According to the difference, coaches with university and higher education have more empathic thinking skills than coaches who have lower education level was determined in our research. While akgün and özdemir (2015) did found significant difference, but dizer and iyigün (2009), canbulat and colleagues (2015), in their research, did not observe a significant difference between education level and empathic thinking tendencies of participants (7,9,26). It has been understood that empathic thinking skills are evolving with education. As the level of education of the individual increases, empathic thinking skills are expected to increase.

It is thought participants in Group 1 were expected to have higher emphatic thinking tendency were younger than others in different groups, and younger age group 1 negatively affected results of spss T-test in Dizer and Iyigun’s research (2009). Majority of participants had bachelor’s degree, and during bachelor education university student were given studies, were paid more attention on emphatic thinking skills, showed the sensitive relation between empathy skills and higher education level (26).

Table 6, As a result of variance analysis significant difference was found between average scores of ETS of football coaches and educational level of parents (p<0.05). Ekinci and Aybek (2010) found a significant difference between parent education level and the participants’ empathic thinking skills, and also observed subjects had low empathic thinking skills whose parents with non-education level or low education level. It is mentioned that one's empathy skill would evolve in social life and empathy skill can develop with education (11). We thought that parents with higher educational levels to be positive role-models for their children with a more sensitive and inquisitive approach as raising the children.

Table 7, It can be seen that there is not a significant difference regarding to average scores of ETS according to ages, professional seniority of football coaches (p<0.05). But a significant difference was found between average scores of ETS and monthly income of football coaches (p<0.05). Dizer and Iyigün (2009) did not find any significant difference between subjects’ empathic skills and years of work (professional seniority). Dizer and Iyigün (2009) observed a decrease in the empathic thinking tendencies of participants who worked over 10 years (9). In our work, it was seen a decrease in the results of coaches working over 10 years.

There was no significant difference in the relationship between the age and empathic tendencies of the participants. It was recognized that Dizer and Iyigün (2009) did not find any significant difference in their work (9). But, we saw younger individual have more empathic tendencies during our research, and also in our study younger coaches have better results of empathic tendencies scale according to elder coaches.

It was determined that empathic skills were highly correlated with the monthly incomes of the coaches. Coaches with above 3.000 TL. made more significant difference than coaches with below 3.000 TL. monthly incomes. It shows higher economic level affects empathic thinking tendency of coaches positive. Our study shows that prejudices towards individual in the society largely are broken out by wealth if person have it, and even in the community that wealth provides person with respect.

Although the relationship between gender and dependent variables has not been examined in our study, It was observed that gender was not significantly related to empathy ability and critical thinking ability in person (22,29). Unlike this findings, Kılıç (2005) distinguished significant difference between empathic skill and gender of subjects (18).

There was high level and positive relation (Pearson Correlation .841*) between empathic skills and critical thinking skills of coaches in our research (p<0.05). It was detected that critical
thinking skills and empathic thinking tendencies of coaches were not affected by their ages, and professional seniorities. It is thought that the reason for the absence of significant relationship among two dependent variables with age and professional seniorities due to the high association between the empathic skills and critical thinking ability of football coaches it is very well featured in Table 1.

Suggestions for future studies

As age progresses, empathic thinking ability and critical thinking skills decrease. For this reason, coaches should be included in-service training activities and these training activities should be developed at regular intervals.

It was seen there were decreases when professional seniorities compared with empathic skills and critical thinking skills of football coaches. Football coaches should be encouraged and excited to follow new educational innovations, attend scientific congresses or events, and they should be allowed to continue their individual development.

References