



[www.aassjournal.com](http://www.aassjournal.com)

e-ISSN: 2322-4479

p-ISSN: 2476-4981

**Short Communication**

Received: 01/08/2015

Accepted: 07/10/2015

# **Examination of Thinking Styles of Trainers from Different Branches**

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## **BSTRACT**

Thinking styles are a matter of choice in individuals' use of their abilities. In other words, they are processes that determine individuals' attitude towards the problems they encounter and their way of self-expression in the face of these problems. It is considered each athlete and trainer has unique ways in achieving their goals and succeeding. Starting from this, in our study we aim to examine "Thinking Styles of Trainers of Different Branches". 50 trainers, 20 females and 30 males, who coach in different branches in Elazığ city center, participated in our study. In the study, it was used a personal information form to gather participants' demographical information "their gender, being trainer of individual or team sports, year of coaching and educational level" and the REI (Rational Experiential Inventory) developed by Epstein et al. to determine their thinking styles. Consequently, it has been observed the rational and intuitive thinking styles of the trainers from different branches are sufficient in our study. In the light of the findings, it has been concluded that trainers of team sports have high levels of analytical-rational thinking, "participating-not participating in cognitive activities and enjoying-not enjoying cognitive activities", while trainers of individual sports have high levels of intuitive thinking "data processing and trusting-not trusting their feelings and first impressions in their daily life". Our study has importance since it is believed it provides enlightening information for trainers and athletes in their choice of appropriate methods and techniques while performing and coaching and also it forms literature for future studies.

**Key Words:** Thinking Styles, Trainers, Rational and Intuitive Thinking Styles.

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## INTRODUCTION

We deal with thousands of thoughts while speaking, reading, travelling, and eating in our daily life. Where these thoughts stem from, what they evoke and what we obtain from them differ for each person (1).

Thinking style is defined as the way or method individuals prefer in using their abilities by Sternberg (1995). Thinking style is a choice, not ability. Hence, it cannot be characterized as good or bad. However, we can mention its differences. Therefore, thinking style of individuals may alter depending upon the current situation, problem they handle and also in time (16).

Likewise, two individuals who have similar abilities may differ in their thinking styles. Even though thinking styles are determined by dominance of ability and personality, both notions are related (12,13,14). Thinking style varies by the requirements of the situation. Thinking styles are closely related with social surroundings and may differ based upon culture, time and situation (12).

Thinking styles are a matter of choice in individuals' using their abilities. In other words, they are processes which designate individuals' attitude towards problems and situations they encounter and the way of their self-expression before these problems (5, 13).

Psychologists who adopt different approaches have asserted two thinking styles that are different basically but are in interacted with each other (7).

These styles are named with different notions. These are intuitive, experiential, ideational, conceptual-rational and analytical thinking styles (17, 2). Each individual develops specific methods and approaches towards his/her relationship with the world, perceiving it, achieving their goals and solving their problems. In that process, individual focuses on various aspects of the truth, gathers all kinds of data, organizes

data in different ways and makes different judgmental deduction, reaches different decisions and performs these decisions in different ways (18,7,3).

It is believed each athlete and trainer has unique ways in achieving their goals and succeeding. Based upon this, in our study which is believed to form literature for other studies, it is aimed to examine the thinking styles of the trainers from different branches.

## MATERIALS AND METHODS

**Participants.** Fifteen trainers, 20 females and 30 males, who coach in different branches in Elazığ city center, participated in our study. 24 of the trainers coach in team sports and 26 of them coach in individual sports.

**Tools.** In the study, it was used a personal information form to gather participants' demographical information and the REI (Rational Experiential Inventory) developed by Epstein et. al (1996) to determine their thinking styles. Analytical-Rational and Experiential Thinking Styles comprise 31 items and 2 subscales. The first scale contains rational thinking. It comprises abridged 19-item form taken from the Need for Cognition Scale (45-item) developed by Cacioppa and Petty (1982). The scales assess individuals' level of participating-not participating in cognitive activities and enjoying-not enjoying cognitive activities. The second scale is the Faith in Intuition subscale and includes 12 items. The scale measures individuals' level of trusting-not trusting their feelings and first impressions in their daily life behaviors (4,5).

The scale is a 5 point likert scale. Graduation level increases 1 to 5 and responses are given through levels of "Strongly Disagree" to "Strongly Agree". 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 9th, 10th, 11th, 13th, 15th, 16th, 18th and 19th items of the Need for Cognition subscale are measured reversely and the score interval of

the scale varies between 19-95. Scoring of the Faith in Intuition subscale is not implemented reversely since the items are stated as positive statements and the score interval varies through 12-60 (5).

**Statistical Analysis.** Frequency distribution, arithmetic mean, percentages, independent sample t-test and One-Way ANOVA with Tukey posthoc test was used to analyze data. Data was analyzed using SPSS

software. A level of 0.05 was considered significant.

## RESULTS

When the value of distribution function of trainers who attended the study was examined in respect to "branch of coaching" variable; it was seen that there were 24 trainers by %48 participation in team sports and 26 trainers by %52 participation in individual sports (table 1).

**Table 1. Distribution of Trainers As To The "Branch of Coaching Variable"**

Branch of Coaching	N	%
Volleyball	6	10.2
Handball	5	10.0
Futsal	4	0.8
Football	6	10.2
Basketball	5	10.0
Box	5	10.8
Tae Kwon Do	6	10.2
Archery	2	0.4
Kickbox	4	0.8
Wrestling	2	0.4
Judo	3	0.6
Athletics	2	0.4
Total	50	100,0

In Table 2 and 3, when the analysis results in respect to the points of Rational-Experiential Thinking Styles as to gender and year of coaching history variables of trainers on different branches, respectively, were examined, it was found out that there was not significant differentiation in terms of gender and year of coaching history variables, respectively, from the sub-scales of Rational Thinking and Intuitive Thinking factors ( $p < 0.05$ ).

In Table 4, when the analysis results in respect to the points of team and individual sport trainers' Rational-Experiential Thinking Styles on different branches were examined, it was found out that there was significant differentiation in terms of sub-scales of Rational Thinking ( $p > 0.001$ ) and Intuitive Thinking ( $p > 0,005$ ) factors.

**Table 2. Rational-Experiential Thinking Styles Scale as to Gender**

REI	GENDER	N	$\bar{X}$	Ss	t	p
<b>Analytical-Rational Thinking</b>	Male	30	39.50	8.12	-0.41	0.68
	Female	20	40.60	10.76		
<b>Intuitive Thinking</b>	Male	30	56.00	9.25	-0.15	0.87
	Female	20	56.45	11.27		

**Table 3. Rational-Experiential Thinking Styles Scale as to Year of Coaching History**

REI	Year of Coaching	N	$\bar{X}$	Ss	F	p
<b>Analytical-Rational Thinking</b>	1-2 years	13	40.69	11.16	0.56	0.57
	3-5 years	22	38.40	9.17		
	6 years and over	15	41.53	7.41		
	Total	50	39.94	9.18		
<b>Intuitive Thinking</b>	1-2 years	13	55.69	11.67	0.06	0.93
	3-5 years	22	56.77	10.97		
	6 years and over	15	55.73	7.20		
	Total	50	56.18	10.00		

**Table 4. Rational-Experiential Thinking Styles Scale as to Team and Individual Sports**

REI	Branch	N	$\bar{X}$	Ss	t	p
<b>Analytical-Rational Thinking</b>	Team Sport	24	44.12	8.73	3.41	0.001*
	Individual Sport	26	36.07	7.91		
<b>Intuitive Thinking</b>	Team Sport	24	52.16	9.12	-2.92	0.005*
	Individual Sport	26	59.88	9.48		

## DISCUSSION AND CONCLUSION

Within the scope of the research, the point average and standard deviation values of thinking styles in respect to the gender, being trainer of team or individual sports, coaching year and educational level were examined by a questionnaire which 30 male and 20 female, total 50, trainers coaching on different branches in the city centre of Elazığ answered.

Thinking style is a data processing approach which the individual puts to use on problem solving, perceiving the life and achieving his/her goals consciously or unconsciously. In this sense, "rational thinking" is described as a data processing manner which functions on conscious level separately from emotional effects which are preferential analytical and verbal and "intuitive-experiential thinking style" can be described as a data processing manner which the individual puts to use on data processing and is self-acting, associative, holistic and is not originally verbal and functions by being affected of momentary emotions [3].

The individual's productivity, adaptation and efficiency can rise by means of knowing which thinking style is being used densely, changing inefficient thinking styles to more functional ones in time and becoming skillful at being flexible on thinking styles as to the situations. [9]

It was tried to ascertain whether there was any differences between the level of thinking styles of male and female trainers concerning gender and thinking styles. However, it was found any differentiation at neither rational thinking nor intuitive thinking styles in terms of gender according to the analysis results. When the studies supporting our research were examined, it could not any statistically differences between gender and thinking styles on the studies conducted by Buluş (2000), Zhang (1999), Walter and his friends (1990), Duru (2002). These findings support our research.

When the analysis results in respect to the points of team and individual sport trainers' Rational-Experiential Thinking Styles on different branches were examined, it was found out that there was significant

differentiation in terms of sub-scales of Rational Thinking and Intuitive Thinking factors. On the sub-scales of Rational Thinking; it was found out the point average of trainers on team sports was 44,12 and individual sports was 36,07. Significance level was observed as  $p > 0,001$ . On the sub-scales of Intuitive Thinking; the point average of the trainers on team sports was 52,16 and individual sports was 59,88. Significance level was observed as  $p > 0,005$ . According to the research findings, it was figured out that the level of rational thinking "attending cognitive activities or not and enjoying cognitive activities or not" was higher on the trainers who coached at team sports. By contrast with, it was stated that the level of intuitive thinking "data processing and relying on his/her feelings and first impressions on daily life or not" was higher on the trainers who coached at individual sports. This study shows parallelism with Özmütlu and his friends' and Bernardo and his friends' studies (7, 2).

Within the context of the research, when the analysis results in respect to the points of Rational-Experiential Thinking Styles as to coaching year of trainers on different branches variable were examined, it was found out that there was not significant

differentiation in terms of coaching year variable from the sub-scales of Rational Thinking and Intuitive Thinking factors. It can be figured out that there were not any differences on research findings because the group consisted of trainers, they attended many races before and got experienced and had low-anxiety. The studies conducted by Tümkaya, İflazoğlu, (2000), Tanrıkulu, (2002); Pulur and his friends (2012) support our research.

It was observed that the trainers' rational and intuitive thinking styles on different branches were at sufficient level. Cognitive processes such as thinking styles from the point of trainers and athletes have importance because it was thought that it would provide enlightening information on their choosing appropriate methods and techniques at sport environment.

#### APPLICABLE REMARKS

- It increases psychological performance coaches and athletes at the desired level.
- Studying this kind of different researches will be contributed to sports science.

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تازه‌های علوم کاربردی ورزش

دوره سوم، شماره چهارم

صص ۰۸-۰۱، زمستان ۱۳۹۴

مقاله کوتاه

تاریخ دریافت: ۱۳۹۴/۰۵/۱۰

تاریخ پذیرش: ۱۳۹۴/۰۷/۱۵

## بررسی سبک‌های تفکر مربیان شاخه‌های مختلف

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### چکیده

سبک‌های تفکر، موضوع انتخاب در استفاده افراد از توانایی‌های خود است. به عبارت دیگر، شامل فرآیندهایی است که تعیین‌کننده نگرش افراد نسبت به روبرو شدن با مشکلات خود و روش خودگفتاری آن‌ها در رویارویی با این مشکلات می‌باشد. هر ورزشکار و مربی راه منحصر به فرد در دستیابی به اهداف خود و موفقیت دارد. از این رو، هدف از این تحقیق بررسی سبک‌های تفکر مربیان از شاخه‌های مختلف است. تعداد ۵۰ مربی (۲۰ زن و ۳۰ مرد) که در زمینه‌های مختلفی در شهر ایلازیگ فعالیت می‌کردند در تحقیق شرکت کردند. در این مطالعه، از یک فرم اطلاعات شخصی برای جمع‌آوری اطلاعات جمعیت شناختی شرکت‌کنندگان استفاده شد که شامل جنسیت، سابقه و سطح مربیگری، مربی بودن برای ورزش فردی یا تیمی، و سطح آموزشی بود. همچنین از (REI) پرسشنامه تجربی گویا توسعه یافته توسط اپستاین و همکاران برای تعیین سبک تفکر استفاده شد. تجزیه و تحلیل داده بوسیله نرم افزار SPSS انجام گردید. تجزیه و تحلیل داده‌های آماری در سطح  $p < 0.05$  انجام گردید. در نتیجه، مشاهده شد سبک تفکر منطقی و شهودی مربیان شاخه‌های مختلف در مطالعه ما کافی است. از طرفی دیگر، نتیجه گیری شده است که مربیان تیم‌های ورزشی دارای سطوح بالایی از تفکر عقلانی تحلیلی، شرکت-عدم شرکت در فعالیت‌های شناختی و بهره‌گیری یا عدم بهره‌گیری از فعالیت‌های شناختی هستند، در حالی که مربیان ورزش‌های انفرادی دارای سطوح بالا تفکر شهودی، پردازش داده‌ها و اعتماد یا عدم اعتماد احساسات خود و برداشت اولیه در زندگی روزانه خود را دارا هستند. مطالعه ما دارای اهمیت است از آن جهت که اطلاعات روشنگری را برای مربیان و ورزشکاران فراهم می‌کند تا در انتخاب خود از روش‌ها و تکنیک‌های مناسب برای مربیگری استفاده کنند و همچنین آن را به شکل ادبیات پیشنهادی برای مطالعات آینده ایجاد می‌کند.

واژگان کلیدی: سبک‌های تفکر، مربیان، سبک‌های تفکر شهودی و منطقی.

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