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# Social intelligence and its sub-scales among physical education expertise in Isfahan education organizations: Study of gender differences

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#### **ABSTRACT**

Social intelligence has been studied by social scientists for the past three decades but recently has garnered increasing attention. When predicting and interpreting human behavior, a specific area is created by interpersonal situations and behaving of a person in such situations, in other words, managing and solving problems where an important role is played by the factor of social contacts of people. One of the significant characteristics used when describing and predicting such behavior is social intelligence. Based on these evidences, the purpose of this research was to examine the social intelligence and its sub-scales among physical education expertise in Isfahan education organizations: study of gender differences. For this purpose, a total of 48 physical education expertise in Isfahan education organizations participated in this research. There were 37 men and 11 women, and their ages ranged from 35-46 years-old. To data collection, all subjects filled in the Silvera Social Intelligence Scale (2001) and demographic questionnaire. The results showed that the differences between overall social intelligence scores and its sub-scales with gender (men and women) were significant at the level of P<0.05. Furthermore, men in these variables obtained higher scores than women.

Key words: Social Intelligence, Gender, Physical Education Expertise, Education Organizations, Isfahan.

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## INTRODUCTION

When predicting and interpreting human behavior, a specific area is created by interpersonal situations and behaving of a person in such situations, in other words, managing and solving problems where an important role is played by the factor of social contacts of people [1]. One of the significant characteristics used when describing and predicting such behavior is social intelligence. An increase in professional interest in the broad issue of social intelligence can be observed in the period of the second half of the 20th century. A dramatic increase of reports involving this issue has been recorded in the last 30 years [1,2]. Although social intelligence is a real individual characteristic [3] and the beginning of efforts to measure it date back to Thorne dike [4], when trying to distinguish it more precisely we encounter certain difficulties [3]. One of the reasons for these difficulties is connected with distinguishing social

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intelligence from other similar constructs, such as academic intelligence, emotional intelligence or practical intelligence [5].

It is not simple to define social intelligence, if we consider that this concept is very close to notions such as social skills and competence [6]. Moreover, other concepts like emotional intelligence [7] or interpersonal intelligence [8] are partly overlapping concepts. One of the main difficulties in studying social intelligence, therefore, is the fact that different researchers have defined this construct in different ways over the years. Undoubtedly, social intelligence is a multifaceted construct and, among others, Bjorkqvist, Osterman, and Kaukiainen (2000) argued that social intelligence has three different components: perceptual, cognitive-analytical and behavioral. In this sense, they consider the socially intelligent individual as a person who is "capable of producing adequate behavior for the purpose of achieving desired social goals" [9].

Ford and Tisak (1983) defined social intelligence in terms of behavioral outcomes and were successful in supporting a distinct domain of social intelligence [10]. They defined social intelligence as "one's ability to accomplish relevant objectives in specific social settings". Marlowe (1986) equated social intelligence to social competence. He defined social intelligence as "the ability to understand the feelings, thoughts, and behaviors of persons, including oneself, in interpersonal situations and to act appropriately upon that understanding" [11]. More recently, Goleman's (2006) definition divides social intelligence into two broad categories: social awareness and social facility. He defined social awareness as "what we sense about others" and defined social facility as "what we then do with that awareness" [13].

Many researchers (e.g., Barnes & Sternberg, 1989; Gardner, 1985; Marlowe, 1986; Thorndike, 1920; Kosmitzki & John, 1993; Sternberg Conway, Ketron, & Bernstein, 1981) believe that people can be described as more or less socially intelligent, that social intelligence may have several facets, and that social intelligence is different from, although it may be correlated with, academic intelligence. Thorndike (1920), for example, proposed three separate intelligences (abstract, social and mechanical) and defined social intelligence as ``the ability to understand and manage men and women, boys and girls - to act wisely in human relations" (p. 228) - a definition that includes a cognitive component (``to understand") and a behavioral component (``to manage", ``to act wisely") [16-17]. Similarly, Kosmitzki and John (1993) found that undergraduates believed that social-cognitive (e.g., ``understanding people", ``knowing social rules") and social-behavioral (e.g., ``good in dealing with people") abilities were central aspects of social intelligence but that general, or academic, intelligence (e.g., ``high intelligence", ``sophisticated and educated") was not [18].

Marlowe (1986) suggested that individuals who are socially intelligent appear to experience a rich, meaningful life, as opposed to truncated affective experiences [11]. Furthermore, aspects of social intelligence have been found to be associated with enhanced social problem-solving abilities [19], experienced leadership [20], and positive interpersonal experience [21]. Based on these evidences and documents the main objective of present research was to analyze the social intelligence and its sub-scales among physical education expertise in Isfahan education organizations: study of gender differences.

#### MATERIALS AND METHODS

Participants included 48 physical education expertise's in Isfahan education organizations. There were 37 men and 11 women, and their ages ranged from 35-46 years-old.

#### **Instruments**

To data collection, all subjects filled in the Silvera Social Intelligence Scale (2001) and the Survey of effective influence (SEI). The Silvera Social Intelligence Scale (2001) was used to determined social intelligence in participants. This scale has 21 questions. Silvera (2001) constructed a scale for the assessment of social intelligence. In this Scale, after recoding items that were negatively worded, an Exploratory Factor Analysis (EFA) using principle components analysis and Varimax rotation was conducted on the 103 preliminary. This solution explained a total of 30% of the variance in the original item set. The Silvera Social Intelligence Scale (2001) included the social information processing, social skills and social awareness subscales. Furthermore, we used the overall social intelligence scores in this research. Silvera et al. (2001) introduced three components of social intelligence meaning, social information processing, social skills and social awareness.

Social skill has been determined to be an important asset to an employee. High social awareness has been considered to be important for the workplace. Social information processing and social skills are also important for teachers [22].

Also, the collected data was analyzed by descriptive (mean and standard deviation) and inferential (independent t test) statistical tests at the P<0.05 significant level with SPSS Version 15.

#### RESULTS

Table 1 shows the means (M) and standard deviations (SD) of the overall social intelligence and it's sub-scales among physical education expertise in Isfahan education organizations.

Variables		Means (M)	Standard Deviations (SD)	
Overall Social Intelligence	Men	3.806	0.426	
	Women	3.011	0.478	
Social awareness	Men	3.85	0.530	
	Women	3.26	0.512	
Social Information Processing	Men	3.77	0.506	
	Women	3.13	0.501	
Social Skills	Men	3.80	0.401	
	Women	3.24	0.423	

Table 1. The descriptive results of overall social intelligence and its sub-scales

In addition, we used the independent t test to determine the differences between gender (men and women) and overall social intelligence and its sub-scales scores (see table 2). Based on our results, the differences between gender with these variables were significant (P<0.05). Based on our results, men in these variables obtained higher scores than women (see table 1).

Table 2. The results of independent t-test between overall social intelligence and its sub-scales scores and gender

Variables	N	df	t	P
Overall Social Intelligence	48	47	13.10	0.001*
Social awareness	48	47	11.10	0.001*
Social Information Processing	48	47	10.49	0.001*
Social Skills	48	47	14.84	0.001*

<sup>\*</sup> Significant at the level of P<0.05

### DISCUSSION

Our results showed that the significant and meaningful differences between overall social intelligence score and it's sub-scales and gender (for more details, see table 2). With respect to gender, based on the North American normative sample (Bar-On, 1997b), females appear to have stronger interpersonal skills than males, but the latter have a higher intrapersonal capacity, are better at managing emotions and are more adaptable than the former. More specifically, the Bar-On model reveals that women are more aware of emotions, demonstrate more empathy, relate better interpersonally and are more socially responsible than men. On the other hand, men appear to have better self-regard, are more self-reliant, cope better with stress, are more flexible, solve problems better, and are more optimistic than women. Similar gender patterns have been observed in almost every other population sample that has been examined with the EQ-i. Men's deficiencies in interpersonal skills, when compared with women, could explain why psychopathic is diagnosed much more frequently in men than in women; and significantly lower stress tolerance amongst women may explain why women suffer more from anxiety-related disturbances than men (American Psychiatric Association, 1994).

The results in this study support Albrecht's (2006) research regarding social intelligence to be required for the teachers the important role it plays in classroom behavior management. He pointed out that we need teachers who enjoy high levels of social intelligence and model them for their students [22]. The findings of the present research also agreed with Marzano et al. (2003). They stated that the teachers who are socially intelligent, organize the classroom through establishing supportive and encouraging relationships with their students, developing the lessons

which are based on the students' strong points and abilities, creating and applying behavioral guidelines in the ways which enhance intrinsic motivation, such as discussion, hinting, recognition and involvement.

The findings of the current research support the theoretical foundations by Mayer et al. (1999) who acknowledged that the social and emotional intelligence may share common ground in that they are both concepts related to human behavior, but their contention was that on the one hand, emotional intelligence is broader than social intelligence. Conversely, emotional intelligence is more centered than social intelligence in that its constructs have been described as separate and apart from verbal intelligence [23-25].

Zirkel (2000) believed that social intelligence is closely related to one's own personality and individual behavior. Those with social intelligence are fully aware of themselves and understand their environment. This enables them to control their emotions, make decisions about their goals in life. Her model centered on the term "purposive behavior" which is deliberate action taken after evaluating one's environment, opportunities and risks and the goals set. In fact this model of social intelligence assists in creating a sense of identity for the individual, emphasizes interpersonal skills and focuses on thinking and resultant behavior within social contexts [26].

According to the integrative framework of social competences (Süß, Weis, & Seidel, 2005), social intelligence is a relevant component for socially competent behavior. Social competence is defined as the potential of a person and is therefore a required ability for appropriate social performance [27]. The model proposes social intelligence to lead to socially intelligent or competent behavior [27-28].

Orosová, et al. (2004) believed that the developing social intelligent behavior of an individual predicts improvement of self-reflection, reflection of social processes, reflection of the subjective sense and interpretation of behavior, social competence training [29]. When defining social intelligence, various components are emphasized. Some definitions accentuate rather perception, cognitive-analytical dimension, or an ability to understand other people [15]. Other definitions concentrate more on behavior, or an ability to successfully affect other people [10], and emphasize rather behavioral aspect. Social intelligence is characterized also from the point of view of the classic three-component model with differentiation of perception, cognitive, and behavioral components [9].

Silvera, et al. (2001) stated that the psychometric approach conceptualizes and operationalizes social intelligence as an ability or a number of abilities, where people can be compared on a low versus high dimension, and in this case the only difference from the academic intelligence study is in focus on the social sphere [3]. On the other hand, personal approach representatives speculate about social intelligence on the basis of behavior in various interpersonal situations, social interactions, and social structures [30], which are not evaluated strictly on the efficiency dimension. A considerable attention is paid on the aspect of subjective view on social intelligence. In these connections, social intelligence is perceived as a personality feature, and one of the possible approaches to its examination and determination is the behavioral situational concept [31-32].

Goleman (2006) in His model emphasizes an affective interactive state where both social awareness and social facility domains range from basic capabilities to more complex high-end articulation. Social awareness is comprised of four dimensions: primal empathy, attunement, empathic accuracy, and social cognition. Primal empathy is being able to sense others' nonverbal emotional signals. Attunement refers to active listening and giving someone our full attention. Empathic accuracy is a cognitive ability and builds on primal empathy, i.e., the individual is able to not only feel, but understand, what the other person is experiencing. Social cognition describes knowledge about how the social world works, e.g., the rules of etiquette, finding solutions to social dilemmas, or decoding social signals [13]. Social facility expands on this awareness to allow smooth, effective interactions, and its four dimensions include: synchrony, self-presentation, influence, and concern [13].

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