The Relationship of Spiritual Intelligence with Environmental Attitudes

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Abstract
Environmental attitudes of people have a great role in preserving and optimizing the ecological environment of humans. Spirituality as an important human factor can explain many of our social behaviors. The purpose of this study was to determine the relationship between spiritual intelligence and environmental attitudes among students of Payame Noor University in Bojnourd. The methodology of this study is descriptive and correlational according to the nature of the subject and the desired goals. The statistical population of this study consists of 315 students selected by random sampling. To measure the variables of the research, King’s Spiritual Intelligence Questionnaire (SISRI) (2008) and Environmental Thought Questionnaire (Thompson & Bertton, 1994) were used. The results of the analysis showed that the components of spiritual intelligence can predict the environmental attitudes of Payame Noor University students (P < .5). The higher the level of spiritual intelligence in students, the more positive environmental attitudes will grow.

Keywords: spiritual intelligence, attitude, environment

Introduction
Environmental attitudes (EA) are a crucial construct in environmental psychology, with more than half of all publications dealing with it (Kaiser, Wolring, & Fuhler, 1999; Milfont, 2007). Environmental Attitudes (EA) are a psychological tendency expressed by evaluative responses to the natural environment with some degree of favor or disfavor (Milfont & Duckitt, 2010). Environmental attitudes are commonly perceived as preconditions for achieving environmental behavior. Hines and colleagues (1987) conducted a meta-analysis of the relationships between pro-environmental attitudes and behavior. They viewed ‘intention to act’ as a determinant of pro-environmental behavior. ‘Intention to act’ itself was described as a composite factor, composed of attitudes among other variables.

The important role of acquisition of environmental behavior is often explained by the assumption that changes in environmental behavior on a personal level can lead to changes in sustainability on a societal level. In other words, if everyone behaves responsibly with environmental sustainability in mind, the society will perform sustainably. Either the object of one’s attitude is the natural environment itself or some aspects of it (e.g. air quality), or the attitude object is ecological behavior (e.g. recycling or political activism).

Environmental attitude towards ecological behavior refers to the Fishbein and Ajzen tradition of attitude research that will be described in more detail later. Only a minority of the studies approximately 20%, according to Hines et al., 1986r87. that relate environmental attitude with ecological behavior refer to the framework of the theory of reasoned action (Ajzen & Fishbein, 1980), and its developed version, the theory of planned behavior (Ajzen, 1985). In contrast, attitude towards the environment commonly refers to environmental concern (Vining & Ebreo, 1992). Environmental concern is used either as a multiple or a single component approach (Fuhrer, 1995) and covers either environment in general or some particular aspects of environment.
Following the attitude research tradition, some researchers have used the three-component attitude model as an approach for specifying the structure of EA (Cottrell, 2003). These researchers have postulated that EA have cognitive, affective, and behavioural components.

It has been generally seen that though environmental attitude is fairly high now, eco-friendly behaviour does not show such high levels. This has been referred to as the attitude-behaviour gap. (Alwitt and Pitts, 1996). Many studies have been conducted to explore this gap and what variables can be used to explain this. Environmental awareness is one of those variables. (Chan, 2001). Life and its quality are influenced by application of human intelligences like IQ, EQ and SQ in different degrees.

Spiritual intelligence is one of the concepts that was discussed and developed in high interest in global psychologists of religion and spirituality (Wolman, 2001). Zohar and Marshall (2000) believe that spiritual intelligence makes the individual find a deep insight against events and the difficulties of life and he does not fear the difficulties of life and deals with patience and thinking with them and find reasonable and humane solutions for them.

Wigglesworth, Cindy (2012) defines spirituality as “the innate human need to be connected to something larger than ourselves, something we consider to be divine or of exceptional nobility. This innate desire for that connection transcends any particular faith or tradition. It does not require a belief in a divinity by any description, nor does it preclude belief in God or Spirit or the divine”. Wigglesworth, Cindy (2012) defines spiritual intelligence as “the ability to behave with wisdom and compassion, while maintaining inner and outer peace, regardless of the situation”.

Sisk (2002) describes spiritual intelligence as a deep self-awareness in which the individual becomes increasingly informed about the dimension of self not only as a body, but rather as a body, mind and soul. He states that when we employ spiritual intelligence, we reach a point in which the mind accelerates required data processes. With due attention to components such as the ability to use spiritual resources for solving problems we can claim that their application in daily life increases an individual’s flexibility.

Nasel (2004) defined spiritual intelligence as the “ability to draw on one’s spiritual abilities and resources to better identify, find meaning in, and resolve existential, spiritual, and practical issues. Such resources and abilities be it prayer, intuition, or transcendence, ought to be relevant to facilitating an individual’s capacity for finding meaning in experiences, for facilitating problem solving, and for enhancing an individual’s capacity for adaptive decision making”. Zahar and Marshall (2004) defined, “Spiritual intelligence is the intelligence with which we access our deepest meaning, purposes, and highest motivations.” They introduced 12 qualities of SQ namely self-awareness, spontaneity, being-though, holism, compassion, celebration of diversity, fielddependence, humility, tendency to ask fundamental “why” questions, ability to reframe, positive use of adversity, and sense of vocation.

Wigglesworth (2006) defined spiritual intelligence as “the ability to act with wisdom and compassion, while maintaining inner and outer peace, regardless of the circumstances.” She arranged four quadrants of spiritual intelligence as higher self/ego self-awareness, universal awareness, higher self/ego self-mastery, and spiritual presence/social mastery.

According to Amram (2007), “SI is defined as the ability to apply and embody spiritual resources and qualities to enhance daily functioning and wellbeing.” King (2008) defined spiritual intelligence as “a set of adaptive mental capacities based on non-material and transcendent aspect of reality, specifically those that contribute to the awareness, integration, and adaptive application of the non-material and transcendent aspects of one’s existence, leading to such outcomes as deep
existential reflection, enhancement of meaning, recognition of a transcendent self, and mastery of spiritual states.

Tiwary (2013) observes that education has four pillars: knowledge, wisdom, spiritual perception, and eloquent speech. It has been said that knowledge is power. Knowledge is the source by which all worldly powers could be grabbed. It is the source of all material resources. According to the research mentioned in this study, we examine the relationship between spiritual intelligence and environmental attitudes.

**Method**

The methodology of this study is descriptive and correlational according to the nature of the subject and the desired goals. The statistical population of this study included all students of Payame Noor University of Bojnourd, which is 1840. The sample size was used to determine the sample size from the Morgan sample. A total of 315 students were selected by random stratified sampling method. Two questionnaires of Spiritual Intelligence King (SISRI) (2008) and Thompson & Burton (1994) Environmental Attitudes Questionnaire were used to collect information.

Thompson & Burton (1994) environmental perceptions questionnaire: This questionnaire consists of three subscales of human, orbit, and general disregard that was used to assess the attitude of the environment. The validity of each of these subscales is as follows: Cronbach's alpha coefficient is 0.70 for the human orbital, 0.75 for the orbit environment and 0.6 for the disregard.

King Spiritual Intelligence Questionnaire (2008): SISRI uses a 4 point scale (A – Not at all true of me; B – Not very true of me; C – Very true of me; D – Completely true of me). Higher the score, higher is an individual’s spiritual intelligence. It measures four dimensions of Spiritual Intelligence, **Critical Existential Thinking**: the capacity to critically think about the meaning and purpose of one’s existence and to contemplate non-existent issues in relation to one’s existence; **Personal Meaning Production**: the ability to derive personal meaning and purpose from all physical & mental experiences, including the capacity to create and master a life purpose; **Transcendental Awareness**: the capacity to identify transcendent dimensions/patterns of the self (i.e., a transpersonal or transcendent self), of others, and of the physical world (e.g., holism, non materialism) during normal states of consciousness, accompanied by the capacity to identify their relationship to one’s self and to the physical world; **Conscious State Expansion**: the ability to enter and exit higher/spiritual states of consciousness (e.g. pure consciousness, cosmic consciousness, unity, oneness) at one’s own discretion (as in deep contemplation or reflection, meditation, prayer, etc.). The scale had Cronbach’s Alpha .95 for all items, .88 for CET, .87 for PMP, .89 for TA, and .96 for CSE. Subsequent to the understanding of the major properties of the scale, it was subject to a rigorous validation process.

**Analysis**

The results of Kolmogorov-Smirnov test to assess the assumption of the normal distribution of their variables showed that Z scores of self-awareness, social support and depression were respectively with a significant level of 0.49, 0.83, and 0.34 respectively. Considering that the significance level of Kalmogorov-Smirnov test in all variables is more than 0.05. Therefore, with 95% confidence, we can say that the distribution of the scores of the variables examined is normal.

In order to predict environmental attitudes, using multi-variable regression method, the spiritual intelligence was used. The results are presented in the following table.
Table 1: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Critical Thinking</td>
<td>0/57</td>
<td>0/32</td>
<td>11.23</td>
<td>0.001</td>
</tr>
<tr>
<td>2-Critical Thinking, Production of Meaning</td>
<td>0/63</td>
<td>0/39</td>
<td>10.37</td>
<td>0.001</td>
</tr>
<tr>
<td>3- Critical Thinking, Production of Meaning, Awareness</td>
<td>0/68</td>
<td>0/46</td>
<td>11.42</td>
<td>0.001</td>
</tr>
<tr>
<td>4-Critical Thinking, Production of Meaning, Awareness, Expansion of Consciousness</td>
<td>0/71</td>
<td>0/50</td>
<td>18.36</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The regression performed in four steps. In the first step, among the predictor variables included in the analysis (dimensions of spiritual intelligence), based on the highest level of significance, only critical thinking remains in analysis, which explains about 32% of the variance in the scores of environmental attitudes (r=0.32). In the fourth step, in addition to critical thinking, self-awareness, production of meaning, and awareness-raising, it has also entered into analysis. In total, these variables account for about 50% of the variance of environmental attitudes scores (r = 0.50).

Considering the amount of F calculated and the significant level (0.001), we conclude that the model is significant, since its significance level is less than 0.05. To determine how much the contribution of each variable is ahead, they calculate the beta and B values, as shown in the table below:

Table 2. Variables coefficients (in multivariate regression)

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>B</th>
<th>SD</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fixed amount</td>
<td>1.32</td>
<td>9.4</td>
<td>-</td>
<td>6.6</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Critical Thinking</td>
<td>0.54</td>
<td>0.13</td>
<td>0.33</td>
<td>4.3</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Fixed amount</td>
<td>34.13</td>
<td>4.08</td>
<td>-</td>
<td>7.5</td>
<td>0.001</td>
</tr>
<tr>
<td>2</td>
<td>Production of Meaning</td>
<td>0.21</td>
<td>0.09</td>
<td>0.18</td>
<td>2.2</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>Fixed amount</td>
<td>32.05</td>
<td>4.11</td>
<td>-</td>
<td>6.64</td>
<td>0.001</td>
</tr>
<tr>
<td>3</td>
<td>Awareness</td>
<td>0.35</td>
<td>0.15</td>
<td>0.25</td>
<td>2.4</td>
<td>0.02</td>
</tr>
<tr>
<td>4</td>
<td>Fixed amount</td>
<td>29.41</td>
<td>4.68</td>
<td>-</td>
<td>7.1</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Expansion of Consciousness</td>
<td>0/30</td>
<td>0/15</td>
<td>0/20</td>
<td>2/3</td>
<td>0/002</td>
</tr>
</tbody>
</table>
Table 2 shows that the standardized beta coefficients are related to knowledge and awareness of (0.20) and critical thinking (0.33) and the production of meaning (0.21). The scores indicate that if one unit increases in the consciousness awareness and awareness variable, we will increase the amount of 20 hundredths of units in the environmental attitude. Also, an increase in the critical thinking and production of meaning scores will increase by 31% and 21% respectively in students’ environmental attitudes.

**Conclusion**

Examining the psychological variables and the environmental behavior of individuals and how the relationships between these variables can help predict how to interact with the environment and protect it. The present study showed that students’ spiritual intelligence can significantly predict their environmental attitudes ($R^2 = 0.50$). Also, Jagger and Mathew (2010) studied research into the values and beliefs associated with environmental responsibility of Swedish people. The results of this paper show that a significant proportion of respondents exhibit a value corresponding to ecological citizenship, such as non-ambivalence and priority of social justice.

As the beginning of this study, the only way to reach a sustainable society in contemporary societies is to pay attention to the environment in any society, the nature of environmental attitudes relies on the values that the citizens of each society must have with it. It leads to ecological behaviors. Spiritual intelligence is one of the factors that facilitates and strengthens ethical values and ethical issues and urban world attitudes.

On the basis of above analysis and discussion it can be inferred that Emotional and spiritual intelligence are powerful predicators of environmental attitudes of students, if we want to save our planet earth than we have to reconstruct our present environmental education curriculum and some activities should be added to utilize and enhance both the intelligence. Human beings are rational creatures who have an innate need to rationalize all their actions and thoughts. Spirituality provides the rationale and make them sensitive towards other beings and nature, make able to realize that man is not the owner but the steward or trustee of God’s creation, and thus by the use of both intelligence we can develop sensitiveness towards nature and morality can be sprouted in student and by that we can save our planet earth.
REFERENCES


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