Relationship between Mental Health and Creativity of Female Volleyball Coaches of City of Tehran

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Abstract

The aim of this research is studying the relationship between mental health and creativity of female volleyball coaches of city of Tehran. The current research population includes all female volleyball coaches of city of Tehran and the number was 925 individuals and 271 individuals were chosen as the sample. Goldberg’s GHQ and Torrance test of creative thinking (TTCT) were used for data collection. Pearson correlation coefficient test was used for data analysis. Findings showed that there was a positive and significant relationship between mental health, creativity and its dimensions including fluency, flexibility, and originality.

Keywords: Creativity, Performance, Mental Skills.

Introduction

One of the effective features in many behavioral structures of coaches is mental health (Farajollahpour, 2011). World Health Organization considers mental health as the capability of harmonious relationship with others, reforming the personal and social environment and logical, fair and appropriate method of resolving conflicts and personal interests. Some psychologists believe that the ability to adapt to the environment, flexibility, fair and logical judgement while confronting deprivations and stress are some of the criteria of mental health and the aim of curing mental diseases is enabling them to have a family, social life and to have environmental compatibility (Farajollahpour, 2011). Mental health is one of the mental variables that have a significant role in athletes’ success. Coaches who have high mental health also have positive effects on mental health and mental skills of the athletes (Poursoltani et al., 2008). Lack of being healthy results in preventing from progress, and the ability to perform tasks. Experts consider mental health as the prerequisite of maintaining and sustaining the individual, social, job, academic performances and social successes. In fact, the main aim of all mental health improvement programs is helping individuals reach a more complete, happier, more coordinated life and preventing from mood, emotional and behavioral disorders in them (Milanifard, 2007). Mental health as a theoretical construct which acts as a whole, is a set of aspects of body, habits, tendencies, states, thoughts and behaviors in an individual that are described as relatively stable features and characteristics (Milanifard, 2007). Mental health has an important role in guaranteeing the dynamism and efficiency of each society. Rossini (1999) considers mental health as a mental state with emotional health which is relatively free of symptoms of anxiety, disability in having constructive relationships, and coping with stressful demands and stimuli of life. Mental health is an adaptive and relatively good condition, well-being, and flourishing of individual’s talents. Creativity is one of the signs of mental health but Davis believes that creativity and ingenuity is a sign of insanity and creative individuals always have signs of abnormal states and actions. Davis is one of the people who have surveyed the abnormal cognitive actions and believes that creative individuals have abnormal cognitive actions and they show undesirable mental health in different situations. Davis believes that creativity is the example and sample of insanity. Unlike Davis’s theory which considers creativity as a
sign of mental disorder, Lazarus’s theory believes that creativity is the sign of mental health. Coaches who do not have the ability positively interact with others (athletes) and do not have sufficient proficiency on sports environment, suffer from stress and anxiety and encounter problems in social interactions. Lack of self-confidence and self-determination affects the coaches’ performance and results in failure. Inflexibility of coaches’ mind prevent them from reaching their personal growth and development and being initiative; as a result providing mental health for the athletes is disrupted. The aim of conducting this research is surveying the relationship between mental health and creativity of female volleyball coaches of city of Tehran.

Materials and Methods

The research method was descriptive-correlative. The statistical population includes all female volleyball coaches of city of Tehran and the number was 925 individuals. Based on Morgan table 271 individuals were chosen as the research sample. The predictor variable was mental health (physical symptoms, anxiety, social impairment, depression) and the criterion variable was creativity (fluency, flexibility and originality). At the research implementation stage after providing the introductory explanations regarding the research measuring tools and aim of conducting the research the method of answering was fully explained to the participants. Regarding the ethical considerations, after gaining their testimonial and providing the necessary awareness they were assured that the received information would be only used in this research and they would be protected from any sort of abuse. The following questionnaires were used for measuring research variables:

**General health Questionnaire (GHQ):** This questionnaire was provided by Goldberg and Hillier in 1978. It includes 28 questions measuring 4 sub-scales of physical symptoms, anxiety, social impairment, and depression. Rating is based on a 5-degree (1-5) Likert scale. In all items the lower degrees indicate health and higher degrees indicate lack of health of individual. Lower scores indicate higher mental health.

**Torrance Test of Creative Thinking (TTCT):** This questionnaire has been designed by Torrance (1974) for measuring creativity. It includes 45 questions measuring subscales of fluency, flexibility and originality. For reaching the test result for each answer to (A) 0 points, each answer to (B) 1 point, each answer to (C) two points must be given. Validity of the questionnaires was confirmed by professors and experts. Conducted surveys in Iran show that the validity and reliability of GHQ is between 0.84 and 0.93. Researchers’ survey with the research sample indicated Cronbach’s alpha coefficient of 0.80 for this questionnaire (Pirkhaefi, 2012). In the current research the reliability of GHQ with Cronbach’s alpha coefficient of 0.92 was confirmed. Also the reliability of components of mental health with Cronbach’s alpha coefficient was: physical symptoms 0.88, anxiety 0.71, social impairment 0.79 and depression 0.86. Surveying the reliability of creativity questionnaire in a preliminary study with 120-individual sample the Cronbach’ alpha coefficient was reported to be 0.83 (Sharifzadeh, 2005). In this research, the reliability of creativity questionnaire with Cronbach’s alpha coefficient of 0.72 was confirmed.

Reliability of components of creativity was: fluency 0.69, flexibility 0.69, and originality 0.79. For achieving the stability, questionnaires were distributed among 20 individuals from the population and after a 10-day time interval the questionnaires were redistributed among them. Correlation coefficient between the pre-test and post-test scores was used for surveying the stability; for GHQ it was 0.90 and for creativity questionnaire it was 0.73. Pearson correlation was used for data analysis. All analyses were conducted at significance level p<0.05.

Results

Table 1 shows mean and standard deviation of research variables. According to table 1, scattering distribution of importance of mental health was around 3.77±0.512 and regarding the median amount (2.5) it is above the average level. Descriptive statistics of each factor related to mental health based on the range mean achieved show an average level for each of the evaluated items. The highest mean was related to the dimension of physical symptoms (3.74±0.676) and the lowest mean was related to the dimension of anxiety (2.84±0.467). Scattering distribution of amount of creativity of coaches was around 97±13.88 and regarding being in the range of 85-100 it belongs to high creativity level. Descriptive statistics of each of the factors related to creativity was achieved based on range mean, and it shows an average level for each of the evaluated items. The highest score was related to the coaches’ flexibility dimension (33.69±5.063) and the lowest score was related to the coaches’ originality dimension (21.37±6.091).
Table 1: Descriptive statistics of research variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>No. of Respondents</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>271</td>
<td>3.770</td>
<td>0.512</td>
</tr>
<tr>
<td>Physical symptoms</td>
<td>271</td>
<td>3.74</td>
<td>0.676</td>
</tr>
<tr>
<td>Anxiety</td>
<td>271</td>
<td>2.84</td>
<td>0.467</td>
</tr>
<tr>
<td>Social actions</td>
<td>271</td>
<td>3.534</td>
<td>0.353</td>
</tr>
<tr>
<td>Depression</td>
<td>271</td>
<td>3.148</td>
<td>0.582</td>
</tr>
<tr>
<td>Creativity</td>
<td>271</td>
<td>97.15</td>
<td>13.88</td>
</tr>
<tr>
<td>Fluency</td>
<td>271</td>
<td>32.127</td>
<td>4.707</td>
</tr>
<tr>
<td>Flexibility</td>
<td>271</td>
<td>33.69</td>
<td>5.063</td>
</tr>
<tr>
<td>Originality</td>
<td>271</td>
<td>21.37</td>
<td>6.091</td>
</tr>
</tbody>
</table>

Kolmogorov-Smirnoff test results showed normal data distribution (p>0.05). Pearson correlation was used for surveying the relationship between mental health, creativity and its components. According to table 2, the results showed that the correlation coefficient between mental health and creativity of female volleyball coaches of city of Tehran was positive and significant (P<0.01); which means that by increasing the variable of mental health the variable of coaches’ creativity increases. In other words, there is a positive and significant relationship between mental health and creativity of female volleyball coaches of city of Tehran. According to the table the correlation coefficient between mental health and fluency of female volleyball coaches of city of Tehran shows that (r=0.321) there is a significant correlation (P<0.01) between these two variables, and also the positive coefficient shows changes toward increasing one variable with the increase of another variable. Thus by increasing the variable of mental health, the variable of fluency of coaches increases. In other words, there is a positive and significant relationship between mental health and fluency of female volleyball coaches of city of Tehran. The correlation coefficient between mental health and flexibility of female volleyball coaches of city of Tehran shows that (r=0.357) there is a significant correlation (P<0.01) between these two variables and also the positive coefficient shows changes toward increasing one variable with the increase of another variable. Thus by increasing the variable of mental health, the variable of flexibility increases. In other words, there is a positive and significant relationship between mental health and flexibility of female volleyball coaches of city of Tehran. Based on the table, the correlation coefficient between mental health and originality of female volleyball coaches of city of Tehran shows that (r=0.401) there is a significant correlation (P<0.01) between these two variables and also the positive coefficient shows changes toward increasing one variable with the increase of another variable. Thus by increasing the variable of mental health the variable of originality increases. In other words, there is a positive and significant relationship between mental health and originality of female volleyball coaches of city of Tehran.

Table 2: Results of correlation analysis between mental health and creativity

<table>
<thead>
<tr>
<th></th>
<th>Creativity</th>
<th>Fluency</th>
<th>Flexibility</th>
<th>Originality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>r=0.415*</td>
<td>0.321*</td>
<td>0.357*</td>
<td>0.401*</td>
</tr>
<tr>
<td>p</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*At level P<0.05 difference is significant

Discussion and Conclusion

The aim of conducting this research was surveying the relationship between mental health and creativity of female volleyball coaches of city of Tehran. Results showed that there is a positive and significant relationship between mental health and creativity of female volleyball coaches of city of Tehran. Consistent with the current research result, in a research Pirkhaefi et al (2012) concluded that teachers who have more mental health will have more creative students. Also in another research they concluded that in the field of mental health, creativity is an effective variable; thus by stimulating and improving it is possible to help improve mental health. One of the important features of individuals having mental health is their creativity (Vollrath, 2006). This type of creativity is a kind of intergrowth which results in moving them toward perfection and self-actualization. In fact birth and internal movement results in giving these individuals the power of leading and higher balance in mind and personality and they could reach a better balance with a better objective and subjective world. Increasing the individuals’ creativity could result in decreasing anxiety and depression, increasing better adaptability, increasing self-efficacy, increasing
personal growth, increasing flexibility and optimism, developing positive emotions, effectiveness of adaptive skills and in general increasing mental health (Vollrath, 2006; Malouf, 2007; Myhalyi & Wolf, 2002). Other results showed that there is a positive and significant relationship between mental health and fluency of female volleyball coaches of city of Tehran. The current research result is consistent with research result of Pirkhaefi (2012). Pirkhaefi concluded that increasing the mental health results in increasing creativity. Torrance believes that this fluency means the talent of producing many thoughts. According to Torrance, the creative individual must be able to explain many certain problems that could cope with. A creative individual has high independence in thoughts and works; these individuals do not think that their beliefs and ideas are depended on others’ ideas and thoughts; they usually act independently in making fundamental changes in their works, and methods of life and they less feel that they need others (Dehghan, 2008). This is the sense of autonomy which indicates the sense of independence, self-sufficiency and freedom of norms (Ryff, 1989).

Autonomy is one of the signs of mental health; thus by increasing the mental health the fluency increases. There is a positive and significant relationship between mental health and flexibility of female volleyball coaches of city of Tehran. The current research is consistent with research result of Pirkhaefi (2012). Pirkhaefi concluded that increasing the mental health results in increasing creativity. Torrance believed that flexibility means the talent of producing thoughts and/or different methods and also being able to detect different aspects of problematic situation. Creativity in the form of flexibility is expressed through intensity of interest and through different methods. It is true that creativity includes an element of brain teaser but its main features are openness and flexibility rather than teasing (Mousavi, 2008). The creative individual has a very flexible mind and personality. If the creative person encounters a barrier while solving a problem he/she could easily change his/her way of thinking and survey the problem from other dimensions and angles. This type of changing the way of thinking enables the creative individual to use different ideas, thoughts and solutions and the creative person always saves a place for change and evolution (Dehghan, 2008). Openness of insight toward new experiences and having continuous personal growth is the personal growth which is one of the signs of mental health. Thus by increasing mental health the flexibility increases. There is a positive and significant relationship between mental health and originality of female volleyball coaches of city of Tehran.

The current research is consistent with research result of Pirkhaefi (2012). Pirkhaefi concluded that increasing mental health results in increasing creativity. Torrance believed that originality means the talent of producing original, unusual and new thoughts. At this stage, several different ideas are provided in which the association of meanings plays an important role and thus one thought results in production of another thought. At this stage it is necessary to pay attention to the quantity and this result in improvement of quality. Originality means moving away from clichés, common and repetitive patterns and habits; and the creative individual does not have interest in clichés and generally thinking based on habit and tries to create innovative, rare and unique thoughts and ideas. The idea of a creative individual is usually very different from the ideas of others (Dehghan, 2008). An individual who has originality has reaches the self-acceptance level which is one of the signs of mental health; thus increasing mental health results in increasing originality. Fluency and originality result in providing new and creative methods of training and educating by the coaches and they have a positive effect on improving the performance of athletes. Thus regarding the positive and significant relationship between mental health, fluency and originality it is suggested to provide the guidelines for increasing mental health and as a result increasing fluency and originality.

Conflict of interest

The authors declare no conflict of interest

References


