## Effectiveness of Multi-Faceted Training Focused on Spiritual Parenting to Mothers on **Promoting Spirituality of Overweight Children**

Shahnaz Nouhi<sup>1\*</sup>, Masoud Janbozorgi <sup>2</sup>, Mojgan Agah Heris<sup>3</sup>, Avisa Najimi<sup>4</sup>, Hossein Khastar<sup>5</sup> Dept. of Psychology, Shahrood Branch, Islamic Azad University, Shahrood, Iran.

- Dept. of Psychology, Research Institute of Hawzah and University, Qum, Iran.
- Dept. of Psychology, Payame Noor University, Garmsar, Iran.
- Dept. of Psychology, Isfahan Branch, Islamic Azad University, Isfahan, Iran.
- <sup>5</sup> School of Medicine, Shahroud University of Medical Sciences, Shahroud, Iran.

Received: 11 January 2017 Accepted: 30 May 2017

## **Abstract**

Background: Growing evidences show that the successful treatment of pediatric obesity requires consideration not only of medical issues but also of psychological and social environmental and familial factors. Special emphasis is given to the psychological and spiritual aspects of pediatric obesity in the context of a holistic perspective. In this regard this study was conducted to determine the effectiveness of multi-faceted training focused on spiritual parenting to mothers on promoting spirituality of overweight children.

Methods: In this study, 48 volunteer (24 boy students and 24 their mothers) eligible to exclude-include criteria were selected and randomly assigned into two experimental and control groups. An orientation session was held to explain the research goals and intervention. The experimental group trained, 90 minutes sessions weekly for 3 months (10 sessions), but control group did not receive any intervention. Prior to and after Training, all participant completed demographic information questionnaire and then children completed religiosity and spirituality scale for youth (rassy) scale and their BMI were measured. Data analysis with SPSS version 22 was done.

Results: Data analysis with applying one-way and multivariate analysis of covariance ( ancova and mancova) revealed that Multifaceted training focused on spiritual parenting could significantly promote the total score and faith-based coping and religious social support/activities but BMI were decreased significantly (P<0.05).

Conclusions: The results showed that the multi-faceted training focused on spiritual parenting to mothers leads to promotion of spirituality scores of children with overweight. Also, it seems that the body mass index (BMI) will be reduced. This study demonstrated that spiritual parenting benefits are similar to the dietary restriction and physical activity. And it can cause weight loss and enhance spirituality in children

Keywords: Body mass index, Multi-faceted training, Overweight, Spiritual parenting.

Corresponding to: SH Nouhi, Email: psynut.sh@gmail.com Please cite this paper as: Nouhi SH, Janbozorgi M, Agah Heris M, Najimi A, Khastar H. Effectiveness of multi-faceted training focused on spiritual parenting to mothers on promoting spirituality of overweight children. Int J Health Stud 2017;3(1):40-46.

# ntroduction

Childhood obesity is growing all over the world<sup>1</sup> and it has too many unpleasant effects on peoples' health in both adulthood and childhood. Not only in adulthood it results to high blood pressure, cardiovascular diseases, diabetes, liver diseases and ultimately fatality,<sup>2</sup> but also in childhood it has effects such as asthma, sleep apnea, high blood pressure, high cholesterol and etc.3

The most concerned issue is that expanding childhood obesity is taking place while there has a been a significant growth in awareness of its threatening effects on adults' health, but at the same time overweight children are more probable to turn to diabetic overweight adults suffering from heart diseases and being afflicted with different types of cancer.<sup>2</sup>

It is considerably important to identify the factors causing obesity in order to plan pertinent interference to prevent and control childhood obesity complications.<sup>5</sup> Children obesity similar to adults' obesity is a multi-factorial issue<sup>6</sup> which we are able to mention some of these factors and behaviors such as; high-calorie diets, <sup>7</sup> physical activities reduction, <sup>8</sup> metabolic disorders, <sup>9</sup> parental roles, <sup>10</sup> parenting styles, <sup>11</sup> and spirituality. <sup>12</sup> Besides, parenting role is a significantly important issue since parents directly determine children's social and physical environment and indirectly have effects on children's behaviors, habits and attitudes by socialization and modeling process<sup>13</sup> and understanding this issue can make a contribution to prevent and treatment obesity.<sup>14</sup> Home atmosphere can have consistent effects on their weight loss and gain process since children's good and healthy habits are formed at home. Therefore, parents are able to directly affect their children's accessibility to healthy and unhealthy food and encourage or prevent children's doing physical activities at home. <sup>16</sup> Parenting styles are standard strategies that parents use in their children rearing which are identified by parents' determined responses to children's behaviors<sup>17</sup> and can affect on the formation of daily activities, nutrition, emotional performances and children's gaining weight risk. <sup>15</sup> Permissive parents' children have lighter diets and are less stringent to eat unhealthy food. 16 However, children probably consume less healthy food when their parents use autocratic parenting style.  $^{15}$  On the other hand, parents who are logically friendly are more probable to be efficient and effective models for their children and it results to children's self-care. 18 In contrast, democratic parenting style results to making healthier food choices and doing physical activities.<sup>1</sup>

Not only parenting style affects children's obesity,  $^{20}$  but also it can have effects on self-efficacy,  $^{21}$  mental health,  $^{22}$  quality of life,  $^{23}$  and spirituality.  $^{24}$  In the other words family is the most basic ground of forming religious and spiritual beliefs and they emphasize on this point that most of these beliefs are formed in childhood and in families.<sup>25</sup> Some findings also show that parenting style has a relation with children's religious development. Hunsberger and Brown have reported that

students know their parents as the most important factor of their religious development.<sup>27</sup> In addition, Dudley and Wisbey<sup>2</sup> consider supportive and caring parents as the most important cause of children's religious development. In other words, when parents have positive and supportive attitude toward their children, children show higher adherence to spiritual values.<sup>29</sup> As a result, democratic parenting style has a positive and meaningful relationship with children's spiritual health.<sup>30</sup> contrast, parents who set limitations and have high expectations and focus on unquestionable obedience and respect and behave strictly with their children, bring up children with low selfesteem, lack of creativity and independency and also postponed moral development.<sup>31</sup> Thus, autocratic parenting style has a negative meaningful relationship with youths' spiritual health.<sup>30</sup> This research is done focusing on body mass index (BMI) reduction and overweight children's spirituality by multifaceted training focused on spiritual parenting and making mothers relaxed. Researchers are seeking for an appropriate answer for this question that whether training multi-faceted parenting focusing on mothers' spirituality results to promotion of overweight children's spirituality and body mass index (BMI) reduction or not.

#### **Materials and Methods**

This research is done through convenience sampling and has quasi-experimental design using pre-test, post-test and control group. The research population includes all elementary school boy pupils (2 and 5 regions of Tehran city) who are obese or overweight considering body mass index (BMI) with their mothers.

Inclusion criteria of participants included; (residency of 2 and 5 regions of Tehran city, signing inform consent, age range of 30-50 for mothers, holding at least diploma degree for mothers, age range of 9-12 for children, maleness, living with both parents for children) and exclusion criteria included; (suffering from another psychological disorder simultaneously, holding lower than diploma degree and suffering from any other psychological illness such as; bipolarity, obsession and personality disorders for mothers, suffering from any other psychological disorder related to developmental period based on DSM-5 criteria and divorced, separated or dead parents for children) that all participants were volunteers to take part in the program after researchers' explanations. According to the rules of group therapy, the sample size in adults and children is 8 – 20 people.<sup>32</sup> In general, 50 mothers with their children were selected and finally 48 participants were remained because of two participants who cancelled their participation. All participants were randomly allocated to the intervention (N=24) and control (N=24) groups. The experimental group

trained, 90 minutes sessions weekly for 3 months (10 sessions), But control group were convened in school with no intervention. They just discuss about their children's obesity and spirituality with each other. After finishing the research they participated in a new intervention.

All participated students (control and experimental group) in research answered to all items of Religiosity and Spirituality Scale for Youth (RaSSY) (2011) before and after multi-faceted parenting training. Regarding gathering data in this research personal information forms (demographic questionnaires) were used which for mothers included information such as; age and educational degree and for children it included; age, educational grade, weight and BMI. Two groups (control and experimental groups) were similar in terms of demographic characteristics. They were measured by a demographic questionnaire.

Religiosity and spirituality scales for youth (RaSSY) which were designed by Hernandez<sup>33</sup> included 37 items that the items consisted of two subscales such as (faith-based coping and religious social support activities) in a multiple choice form (always= 4, often= 2, sometimes= 1, never= 0). In research done by Nouhi.<sup>34</sup> Cronbach'a alpha coefficiency for the whole scale was 0.773. For data analysis, one-way ANOVA, ANCOVA and MANOVA were done by SPSS version 22 at a significant level of 0.05.

The present pedagogical program (table 1) has initially been examined on five mothers who have overweight elementary school children according to valid psychology, nutrition and theology books (Especially Qur'an and Hadith) and researches. Besides it has been evaluated by 3 child psychology specialists, 1 nutritionist and 3 religion experts and ultimately the reliability and validity of this program have been confirmed.

## Results

In this research 48 participants (mothers and their overweight children) were allocated into two controls and experimental groups (each group consisted of 24 mothers with their children) with mean and standard deviation of 37/63±4/88 for mothers and 10/83±1/02 for participated children. 40% of mothers hold diploma degree (20 people), 8% hold associate's degree (4 people), and 44% hold BS/BA degree (22 people) and 4% MS/MA and higher degrees (2 people). Descriptive characteristics of participants' scores in two pre-test and posttest groups regarding religiosity and spirituality scales for children and youths (including tolerance based on faith and activities/ religious social support and total score of spirituality) are presented in table 2.

Table 1. Pedagogical program of multi-faceted parenting focusing on spirituality

Session	Title	Highlighted materials of the session					
	Evaluation and introduction of	- distributing demographic questionnaires, BMI and religiosity and spirituality scales for youth (pre-test),					
0	the whole research and	- defining parenting and explaining aspects of multi-faceted parenting focusing on spirituality,					
	familiarization with mothers	- signing of moral consent to participate in research,					
1	Who is an overweight child? How is the healthy food pyramid of schoolchildren?	<ul> <li>- defining overweigh and BMI and explaining BMI in boys aged 9-12,</li> <li>- how to calculate the appropriate height and weight of children aged 9-12,</li> <li>- teaching mothers the healthy food pyramid of schoolchildren,</li> <li>- teaching God orders about eating food and adjusting verses 5,11 and 67 of Surah An-Nahl, verse 61 of Surah Baqarah, verse 99 of Surah Al An'am with the healthy food pyramid of healthy child,</li> <li>- children assignment: making a food pyramid using the ingredients at home,</li> </ul>					

		- checking the previous session assignment,
		- success factors in parenting,
	Harris and offered affective	- aspects of positive and effective upbringing,
2	How is successful and effective parenting?	- five key points in effective upbringing, - how to meet child's needs correctly,
2	What is lordship?	- parents' four basic expectations of children,
	write is lorusing:	defining God lordship.
		- distributing worksheets of mothers' responsive and controlling behaviour,
		- distributing worksheets about the similarities and differences between parents' lordships and God lordships,
		- checking the previous session assignment,
		- discussing about humans and God lordships (similarities and differences),
3	What are parents' roles on	- the effect of parenting style on children's overweight,
	children's overweight?	- the factors causing children's overweight (factors relevant to the child, family, society, school, media,),
		- distributing worksheets of weekly tables of child's food,
-		<ul> <li>distributing worksheets of recognizing the similarities of God and parents adjectives behaving with children,</li> <li>checking the previous session assignment,</li> </ul>
		- How much, where, when and how is God present in our lives and our children's lives?
	Perception of God presence in	- discussing about God presence in our lives (On/Off),
4	our lives	- perception of God presence while eating food,
		- teaching how to eat mindfully and perception of God presence while eating food,
		- assignment: exercising mindfulness with the child,
		- checking the previous session assignment,
		- teaching how to change the family eating habits,
	Changing family and child eating	- teaching healthy food habits and eating food correctly and adjusting it with verse 172 of Surah Bagarah,
5	habits	- 1 <sup>st</sup> session: (planning male meals and snacks, planning eating hours, accompanying the child while eating food, eating food slowly, knowing about food calories and energy food labels,
	(1 <sup>st</sup> session)	- assignment 1: planning having lunch and dinner for 20 minutes,
		- assignment 2: studying energy labels of five ready food and taking notes of the amount of energy and ingredients,
		- assignment 3: filling out the weekly table of child's food,
		- continuing teaching healthy food habits and having food correctly and adjusting it with the verse 172 of Surah Baqarah,
		- 2 <sup>nd</sup> session: (recognizing unhealthy food, reducing the volume of food and the size of plates, allowing the child to participate in
		shopping, cooking and making food ready, having at least one meal with the family every day, being relaxed while having a meal,),
	Changing family and child eating	- teaching detention with conceptualizing beliefs and worships: the concept of Allahu Akbar (God is the greatest) and La ilahailla
6	habits (2 <sup>nd</sup> session)	Allah (there is no deity but God),
	(2 Session)	- teaching detention with conceptualizing beliefs and worships: the concept of Allahu Akbar (God is the greatest) and La ilahailla Allah (there is no deity but God) to children by mothers,
		- assignment 1: performing detention by child and keeping a record of child excitement and behaviour before and after detention,
		- assignment 2: filling out the weekly table of child's food
		- checking the previous session assignment,
		- what is impulse? How is impulsive behaviour?
	Impulse control and self-control	- self-control and its component,
7	(1 <sup>st</sup> session)	- teaching practical exercises to self-control (to postpone eating, talking about the need to eat, mental technique of eating),
	,	- assignment: one of the practical techniques of self-control should be done in case the child is inclined to overeat or over-drink
		(voracity), - assignment: performing detention by child and keeping a record of child excitement and behaviour before and after detention,
-		- decking the previous session assignment,
		- continuing self-control discussion and teaching limitations of eating,
		- teaching practical exercises for self-control; 2 <sup>nd</sup> session: mental distraction technique, self-relaxation dialogue technique, keeping
0	Impulse control and self-control	away tempting food and rejecting the others while serving and insisting on having food)
8	(2 <sup>nd</sup> session)	- explaining the concepts of piety and zakiya (self-regulation) adjusting with verse 1 of Surah Al- Mu'minun, verse 6 of Surah At-
		Tahrim and verse 9 of Surah Ash-Shams,
		- one of the practical techniques of self-control should be done in case the child is inclined to overeat or over-drink (voracity),
		- distributing the worksheet of child detention,
		- checking the previous session assignment,
		<ul> <li>teaching how to give meaning to problems and life events,</li> <li>where is God while having problems (especially in situations with negative excitements such as; fury, grief and worry)</li> </ul>
_	Giving meaning to problems	- where is dod while having problems (especially in situations with negative excitements such as, fury, grief and worry) - explaining the square shape; problem, me, God and the world (the others),
9	Giving meaning to problems	- child assignment (safe place): assign a place to your child at home (a corner of a room, a prayer carpet and) and then encourage
		him/her to converse with God and spend time to relax and ask God to help him/her to solve overweight problem (specially while
		overeating and struggling with overweight),
		- performing the child detention,
		- checking the previous session assignment,
		- consider a start & stop for your behaviours and actions (here about eating),
		- How much of your behaviour do you ever check with origin and resurrection?
10	The purpose of creating the	- What is God purpose of creating me and my child?
10	world and eating, practice start	- What is the purpose of eating? - teaching starting and finishing food mindfully?
	and stop	- teaching starting and finishing food mindfully? - exercising mindfully eating by child
		- exercising mindruly eating by child - distributing self-control worksheet
		- distributing child detention worksheet
		- checking the previous session assignment,
00	Farewell session	- review and summarizing all previous sessions,
00		- asking for feedback of all sessions,
		- doing the post-test

Table 2. descriptive characteristics of subscale changes in children's spirituality dividing into two Pre-test and Post-test groups

Group	Variable	Pre 1	Post Test		
<b>0</b> .0up	Tanable	Mean	SD	Mean	SD
	Faith-based coping	68/88	9/66	72/04	8/88
Experimental	Religious social support/ activities	34/71	4/65	36/83	4/99
	Total score of spirituality	103/58	12/76	108/87	12/03
	Faith-based coping	68/58	9/6	67/42	9/36
Control	Religious social support/ activities	34/5	9/71	33/79	9/42
	Total score of spirituality	103/08	17/39	101/21	16/87

Table 2 Coverience	analusis tast for a	accuiuafuluces of NA	ean score difference

Group		М	SD	F	Df1	Df2	Р	η2
Eve erim entel	Pre Test	25/52	2/23	16/95	1	45	0.005	0.27
Experimental	Post Test	23/9	2/91	-	-	-	-	-
Control	Pre Test	25/61	1/96	-	-	-	-	-
Control	Post Test	25/5	2/47	-	-	-	-	-

Table 4. Covariance analysis test for meaningfulness of spirituality Mean difference (total score)

rable 4. Covariance analysis test for incaming amiess of spiritaanty incam affectine (total score)										
Group		М	SD	F	Df1	Df2	Р	η2		
Experimental	Pretest	103/58	12/76	29/68	1	45	0.005	0.398		
Experimental	Posttest	108/87	12/03	-	-	-	-	-		
Control	Pretest	103/08	17/39	-	-	-	-	-		
Control	Posttest	101/21	16/87	-	-	-	-	-		

In order to study validity of hypothesis (such as; normal distribution of scores, equality of variances, homogeneity of covariance, matrixes) ANOVA and MANOVA were used, however, Kolmogorov Smirnov test results showed the normal distribution of tolerance based on faith and activities/ religious social support and spirituality scores (total score) and body mass index (BMI) (P>0.05). Leven's test results also showed the equality of variance (P>0.05). In other words, for total score, spirituality is (F(1 and 46)=3/47 and P>0.05) and for body mass index (BMI) (F(1 and 46)=0.227 and P>0.05). In addition, Box test results also showed the equality of covariance matrixes (P> 0.05). Therefore, the condition of analysis of covariance is suitable considering Kolmogorov Smirnov, Leven and Box tests' results. In this regard, covariance analysis test results presented in table 3 for meaningfulness test of mean of scores difference between pretest scores and post test scores of control and intervention group participants at body mass index scale illustrated that BMI mean score of intervention group had a meaningful reduction compared to control group [F(1:45)=16/95 and P<0.05)]. Therefore, multi-faceted training focused on mothers' spirituality resulted to meaningful reduction of children' BMI of intervention group compared to control group children (about 1/62 score) in a way that the effective training score was %27 ( $\eta 2= 0.27$ ) that represented an acceptable effect size. The difference is illustrated in figure 1.

The results of covariance analysis test represented in table 4 for meaningfulness test of mean of scores difference between pretest and posttest of participants' scores illustrated that after elimination of pretest effect, the mean score of intervention group children's spirituality scores had a meaningful increase [F(1.45)=29/68 and P<0.05)]. Compared to control group (approximately 5/3 score). Besides, the effect size of multifaceted parenting training focusing on spirituality was %39 ( $\eta$ 2= 0.398) that showed an acceptable effect.

The results of multivariate covariance analysis of F ratio for interactive effect on multi-faceted training focused on mothers' spirituality to subscales of children's religiosity and spirituality in Pillai statistic test in table 5 illustrates that training in alteration of compounding variables (tolerance based on faith and activities/ religious social support) had a meaningful effect [F (45·2) =14/101 and P<0.05)] with effect size of 38% that was an acceptable effect.

In addition to this, the results of covariance analysis showed that scores of both subscales of intervention group had a meaningful increase compared to control group (after elimination of pretest effect) (P < 0/05)in order to study the meaningfulness of each subscale difference in both groups (table 6). This difference is illustrated in figure 2.

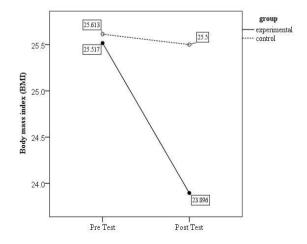


Figure 1. Alteration of BMI mean score difference in two pretest and posttest groups

Table 5. Multivariate covariance analysis of F ratio for interactive effect of multi-faceted parenting training to subscales of children's religiosity and spirituality

Source	Effect	P.V	F	df1	df2	Sig	η2
•	Pillai's Trace	0/358	14/101	2	45	0/0001	0/358
Croup	Wilks's lambda	0/615	14/101	2	45	0/0001	0/358
Group	Hotelling's Trace	0/627	14/101	2	45	0/0001	0/358
	Roy's Largest root	0/627	14/101	2	45	0/0001	0/358

Table 6. Covariance analysis test in subscales of children's religiosity and spirituality in both groups

Variable	Leve	en test							
variable	F	P.V	SS	MS	F	Df1	Df2	Р	η2
Faith-based coping DIF	4/01	0/051	225/333	225/333	18/688	1	46	0/0001	0/289
Religious social support/ Activities DIF	0/713	0/403	96/333	96/333	21/144	1	46	0/0001	0/315

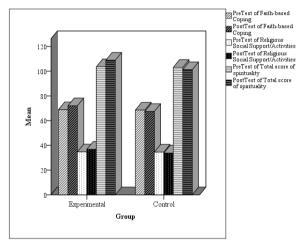


Figure 2. The alteration of the difference between mean score of children's religiosity and spirituality and subscales in both groups pretest and posttest

## Discussion

This research has been done to study the effectiveness of multi-faceted training focused on spiritual parenting to mothers on promoting overweight children's spirituality. Descriptive results represented in table 2 and figure 2 showed that multifaceted parenting training has resulted to a meaningful difference in both faith-based coping scores and activities and religious social support of children in both control and intervention groups in a way that mean scores of these facets and total score of children's religiosity and spirituality in intervention group had a meaningful increase after training, compared to control group (table 6). It also seems that intervention group children's body mass index (BMI) had a meaningful reduction compared to control group children after training by training parenting skills to mothers and promoting children's spirituality (table 3 and figure 1). Considering the study of conducted researches in Iran and abroad, there has been no research found investigating the effectiveness of parenting training focused on spirituality and children's spirituality index. Therefore, this finding is taken into account as one of the most novel achievements in spirituality field. This research results are compared to the other comparative researches or those with the same variables. Regarding this issue, researchers know family as the most basic ground for

formation of religious and spiritual beliefs and strongly believe that most of these beliefs are formed in childhood and in the family. The other researches results also show that objectives and parenting styles are relevant to children's religious developments and parents have a significant role on the kind of children's religious and spiritual upbringing. For instance, Hunsburger and Brown once doing a research reported that students know their parents as the most important factor of religious upbringing and beliefs promotion.<sup>27</sup> Based on this Dickie and et al<sup>35</sup> have directly and indirectly emphasized on the parents' importance in formation of child's god concept. Furthermore, while studying the relationship between parenting style and youths' religious commitments, it has been concluded that democratic and supportive parenting styles is an instrument for youths' inner religious commitment. Therefore, parenting style and parents' god concept predicts the image of children's god<sup>36</sup> and it would be better to explain that when parents and children have emotional support and positive emotional relationship, children show a higher religious commitment to spiritual value. In addition, when parents support their children while controlling them, their children show the same moral and religious values of their parents.<sup>29</sup> In this regard, Dudley and Wisbey know parents' friendly and support relationship as the most important factor of conveying religious and spiritual values to children.<sup>28</sup> Sadeghi, Mazhari and Asgari<sup>37</sup> in another conducted research to study the quality of parent-child relationship as a precondition of religious nurture of children found out that sources of religious knowledge are different in different parenting style in a way that in democratic parenting style, religious cognition is mostly taken place through families. In general, children internalize their conception of their parents in their own vision and their self-image which is similar to their parents.<sup>38</sup> Furthermore, researchers' findings about the relationship between autocratic parenting style and spiritual health have shown that autocratic style has a negative meaningful relationship with children's spiritual health. 30,39 On the other hand, findings of the other researchers showed that permissive parenting style has a negative relationship with selfawareness dimension and children's spiritual experience and has a negative meaningful relationship with other dimensions of spiritual health. 30 As a result, children's perception of their parents in childhood predicts children's self-image and image of god in adulthood. According to what has already been discussed about, it can be interpreted that we will be able to have increased spirituality and subscales in children while

adjusting dysfunctional styles and achieving efficient functional styles by training multi-faceted parenting style. This conclusion can also be considered in line with Hood, Hill and Spilka<sup>40</sup> findings based on this point that negative perception of god has a reverse meaningful relationship with democratic parenting style. For further explanation it can be cited to the research conducted by Movahhedi, Kariminezhad, Hashemi, Nosratabadiand Movahhedi<sup>41</sup> based on which educational program based on spirituality is effective on the promotion of students' quality of life components. The research findings showed that training spirituality results to improvement of students' quality of life components and vice versa. This finding is to some extent in line with findings of Aidari and et al, 42 Gholami and Beshlideh, 43 Hackney and Sanders, 44 Hills and Francis. 45 Hence, multi-faceted parenting training focused on spirituality can contribute to increase children's quality of life and their other social and psychological dimensions by altering dysfunctional parenting styles to functional parenting styles, 46 as a result it causes the promotion of spiritual health and the other subcomponents in children. In addition to these findings, some studies show that other biological and psychological dimensions will not result to appropriate function without considering spiritual dimension and the person will not be able to become actualized in all their potentials.29

On the other hand, finding of this research has concordance with research findings of Johnson,<sup>5</sup> Sussner, Lindsay and Gortmaker, <sup>10</sup> Walton, <sup>11</sup> Ritchies, Welk and Styne <sup>13</sup> based on the point that parenting styles have a relationship with children's body mass index (BMI). Besides, Sussner and et al10 represented significant effect of parents' cooperation on children's weight loss. In another research Savage, Fisher and Birch showed that family is significantly important from different aspects as it is the first place that children are grown up. 47 Since family life style, parenting style and food habits are formed in family, 48 they play an important role in children's type of nutrition and weight. It can be added to this point that training multi-faceted parenting skill results to formation of healthy behaviors. The role of parenting is very important to children since parents directly affect children's social and physical environment and indirectly influence children's behaviors, habits and attitudes by socialization and modeling processes. 49 This research showed that training multi-faceted parenting focused on spirituality includes components such as; how to encounter mental problems and negative excitements by applying techniques such as; pausing before eating with naming and thanking god, taking deep breaths and relaxing, talking about constant presence of god in life and problems (on/ off presence of god) training god monotheism discussion, respecting oneself and the others' rights while eating, training three dimensions of spirituality (giving meaning, purpose and value) for behavior and personal activities (here we are mostly concerned with eating habits), start and stop of eating. How much our behavior is assessed with origin and resurrection? What is the purpose of eating? What criteria are there to choose food? How much self-control and accounting are there in eating and other behaviors? It can be both reducing children's weight in a standard range and leading to promotion of spirituality in mothers by using a mixture of these techniques in the form of training multi-faceted parenting skill.

Regarding research limitations, it can be pointed to some participants' irregular cooperation that sometimes unpredictably changed the research process, participants' cancellation and lack of follow-up studies. It is also suggested that; 1) education authorities consider training multi-faceted parenting focused on spirituality as one of their prioritize to promote students' biological, psychological, social and spiritual health in a long-term process and investigate its positive effects on normal population, 2) training protocol of multi-faceted parenting focused on spirituality will be available for school teachers to train both parents and students, 3) evaluating the effects of multi-faceted parenting focused on spirituality on other components such as; anxiety, depression and etc., and also training multi-faceted parenting based on spirituality takes place for public.

#### Acknowledgement

The authors would like to thank mothers, children and principles of Farid and Javid schools in regions 2 and 5 in Tehran that supported this research. I also would like to show my gratitude to Hamideh Vazirkhanlou who provided insight and expertise that greatly assisted the research.

### **Conflict of Interest**

The authors declared that they have no conflict of interest.

#### References

- Sigmundová D, Sigmund E, Hamrik Z, Kalman M. Trends of overweight and obesity, physical activity and sedentary behaviour in Czech schoolchildren: HBSC study. Eur J Public Health 2014;24:210-5. doi:10.1093/eurpub/ckt085
- Biro FM, Wien M. Childhood obesity and adult morbidities. Am J Clin Nutr 2010;91:1499S-505S. doi:10.3945/ajcn.2010.28701B
- Taheri F, Kazemi T, Sadeghi H. Prevalence of Overweight and Obesity among Primary School Children in Iran from 2001-2013: A Systematic Review. Modern Care Journal 2015;12:139-45.
- Fan M, Jin Y. Do neighborhood parks and playgrounds reduce childhood obesity? Am J Agric Econ 2013;96:26-42. doi:https://doi.org/10.1093/ajae/aat047
- Johnson RR. Parenting styles, child BMI, and ratings of obesigenic environments in families of children age 5-11. Iowa State University 2010:1-50
- Vanhala M, Korpelainen R, Tapanainen P, Kaikkonen K, Kaikkonen H, Saukkonen T, et al. Lifestyle risk factors for obesity in 7-year-old children. Obes Res Clin Pract 2009;3:99-107. doi:10.1016/j.orcp.2009.01.003
- 7. Han JC, Lawlor DA, Kimm SY. Childhood obesity. Lancet 2010;375:1737-48. doi:10.1016/S0140-6736(10)60171-7
- Pradinuk M, Chanoine JP, Goldman RD. Obesity and physical activity in children. Canadian Family Physician 2011;57:779-82.
- Liang Y, Hou D, Zhao X, Wang L, Hu Y, Liu J, et al. Childhood obesity affects adult metabolic syndrome and diabetes. Endocrine 2015;50:87-92. doi:10.1007/s12020-015-0560-7
- Lindsay AC, Sussner KM, Kim J, Gortmaker S. The role of parents in preventing childhood obesity. Future Child 2006;16:169-86.
- Walton K. Parenting Stress: Associations with Childhood Obesity Risk and Related Risk Behaviours. The Atrium 2013:1-131.
- 12. Cline K, Ferraro KF. Does religion increase the prevalence and incidence of obesity in adulthood? J Sci Study Relig 2006;45:269-81.
- 13. Ritchie LD, Welk G, Styne D, Gerstein DE, Crawford PB. Family environment and pediatric overweight: what is a parent to do? J Am Diet Assoc 2005;105:70-9. doi:10.1016/j.jada.2005.02.017
- Wake M, Nicholson JM, Hardy P, Smith K. Preschooler obesity and parenting styles of mothers and fathers: Australian national population study. Pediatrics 2007;120:e1520-7. doi:10.1542/peds.2006-3707

- Regber S, Berg-Kelly K, Marild S. Parenting styles and treatment of adolescents with obesity. Pediatr Nurs 2007;33:21-8.
- Golan M, Crow S. Parents are key players in the prevention and treatment of weight-related problems. Nutrition reviews 2004;62:39-50. doi:https://doi.org/10.1111/j.1753-4887.2004.tb00005.x
- 17. Coplan RJ, Hastings PD, Lagacé-Séguin DG, Moulton CE. Authoritative and authoritarian mothers' parenting goals, attributions, and emotions across different childrearing contexts. Parenting 2002;2:1-26. doi:10.1207/S15327922PAR0201\_1
- Olson SL, Sameroff AJ. Biopsychosocial regulatory processes in the development of childhood behavioral problems. Cambridge University Press; 2009. 318 p.
- Rutledge JM, Topham GL, Kennedy TS, Page MC, Hubbs-Tait L, Harrist AW. Relation between parenting style and child weight. The FASEB Journal 2007;21:A160-A. doi:10.1096/fi.1530-6860
- Johnson R, Welk G, Saint-Maurice PF, Ihmels M. Parenting styles and home obesogenic environments. Int J Environ Res Public Health 2012;9:1411-26. doi:10.3390/ijerph9041411
- Hosseini Dowlatabadi F, Saadat S, Ghasemi Jobaneh R. Relationship Between Parenting Styles, Self-Efficacy and Attitude to Delinquency Among High School Students. Pazhouhesh Name Hoghough E Keyfari 2014;4:67-88.
- Bolghan-Abadi M, Kimiaee SA, Amir F. The Relationship between Parents' Child Rearing Styles and Their Children's Quality of Life and Mental Health. Psychology 2011;2:230-4. Doi:236/psych.2011.23036
- Niaraki FR, Rahimi H. The impact of authoritative, permissive and authoritarian behavior of parents on self-concept, psychological health and life quality. European Online Journal of Natural and Social Sciences 2013;2:78-85.
- Aslani K, Derikvandi N, Dehghani Y. Relationship between parenting styles, religiosity, and emotional intelligence with addiction potential in high schools students. Journal of Fundamentals of Mental Health 2015:17:74-80.
- Haji Kazem Tehrani M, Esmaeili M, Fathi Ashtiani A. Relationship between percieved parenting styles, early maladaptive schema and religios orientation. The Journal of Psychology and Religion 1393;3:93-108.
- Palkovitz R, Palm G. Fatherhood and faith in formation: The developmental effects of fathering on religiosity, morals, and values. The Journal of Men's Studies 1998;7:33-51. doi:10.3149/jms.0701.33
- 27. Spilka B, Hood RW, Hill PC The psychology of religion An empirical approach. 4th ed. London: Guilford Press; 2003. 49 p.
- Dudley RL, Wisbey RL. The relationship of parenting styles to commitment to the church among young adults. Religious Education 2000;95:38-50. doi:10.1080/0034408000950105
- 29. Ross L. Spiritual care in nursing: an overview of the research to date. J Clin Nurs 2006;15:852-62. doi:10.1111/j.1365-2702.2006.01617.x
- Abbaspour Z, Farrokhi NA, Ali AB. Explaining the Relationship between Parenting Styles, Identity Styles and Spiritual Health in Adolescents. European Online Journal of Natural and Social Sciences 2015;4:450-60.
- Dede Yildirim E. Relationships between parenting styles, severity of punishment, importance of religion in child development and childhood social behaviors in Caribbean immigrant families 2013:1-69.
- 32. Corey G. Theory and practice of counseling and psychotherapy. Boston, MA: Cengage Learning (9th ed). 2014 Nov 24.

- Hernandez BC. The Religiosity and Spirituality Scale for youth: Development and initial validation. Louisiana State University 2011.
- 34. Nouhi SH. The effectiveness of comprehensive parenting training healthy based to mothers with permissive and authoritarian child-rearing style on improving healthy indices of overweight children. Islamic Azad University Of Tehran 2016: 355 p.
- Dickie JR, Eshleman AK, Merasco DM, Shepard A, Wilt MV, Johnson M. Parent-child relationships and children's images of God. Journal for the Scientific Study of Reli 1997;36:25-43.
- Hertel BR, Donahue MJ. Parental influences on God images among children: Testing Durkheim's metaphoric parallelism. Journal for the Scientific Study of Reli 1995:34:186-99.
- Sadeghi MA, Mazaheri MA, Malekasgar S. Parents, Self, and Important Others; Source of God Image 2008;2:83-96.
- Dickie JR, Ajega LV, Kobylak JR, Nixon KM. Mother, father, and self: Sources of young adults' God concepts. Journal for the Scientific Study of Religion 2006;45:57-71. doi:10.1111/j.1468-5906.2006.00005.x
- Boyatzis CJ, Dollahite DC, Marks LD. The family as a context for religious and spiritual development in children and youth. The handbook of spiritual development in childhood and adolescence 2006:297-309.
- Hood Jr RW, Hill PC, Spilka B. The psychology of religion: An empirical approach: Guilford Press 2009.
- 41. Movahhedi y, Kariminezhad k, Hashemi Nosratabadi T, Movahhedi M. The effectiveness of an educational model based on spirituality on improving the components of life quality in high school students. Ravanshenasi Va Din 2014-7:1-7
- Ajdari fard pariS, Ghazi GH, Noorani pur RA. The effect of mysticism and spirituality training on mental health of students. Andishe haye Tazeh Dar Olume Tarbiati 2010:105-127.
- Gholami a, Beshlideh k. The effect of spiritual therapy on mental health of divorced women 2012;1:331-48.
- Hackney CH, Sanders GS. Religiosity and mental health: A meta-analysis of recent studies. Journal for the Scientific Study of Religion 2003;42:43-55.
- 45. Hills P, Francis LJ, Argyle M, Jackson CJ. Primary personality trait correlates of religious practice and orientation. Personality and Individual Differences 2004;36:61-73.doi:10.1016/S0191-8869(03)00051-5
- 46. Eiser C, Eiser JR, Greco V. Surviving childhood cancer: Quality of life and parental regulatory focus. Pers Soc Psychol Bull 2004;30:123-33. doi:10.1177/0146167203259936
- Savage JS, Fisher JO, Birch LL. Parental influence on eating behavior: conception to adolescence. J Law Med Ethics 2007;35:22-34. doi:10.1111/j.1748-720X.2007.00111.x
- Davison KK, Jurkowski JM, Li K, Kranz S, Lawson HA. A childhood obesity intervention developed by families for families: results from a pilot study. Int J Behav Nutr Phys Act 2013;10:1-11. doi:10.1186/1479-5868-10-3
- 49. Zurriaga O, Pérez-Panadés J, Izquierdo JQ, Costa MG, Anes Y, Quinones C, et al. Factors associated with childhood obesity in Spain. The OBICE study: a case–control study based on sentinel networks. Public Health Nutr 2011;14:1105-13. doi:10.1017/S1368980010003770