

CONSTRUCTIVE DEALING WITH ANXIETY AND ANGER AS AN ASPECT OF THE QUALITY OF LIFE OF MATURING GIRLS WHO PRACTISE TAEKWON-DO

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Abstract. *The quality of life, including the quality of life connected with health covers coping with difficult emotions and the ability of fulfilling aims, despite their deconstructive effects. Constructive dealing with emotions, such as anxiety and anger (i.e. that are considered to have negative character) makes a very important aspect of the quality of one's life. The process of growing up is, to a large extent learning to cope with difficult emotions. In this work we are concentrating on one of the aspects of the quality of life connected with health-related effects of systematic physical activity performance, such as taekwon-do. One of the very important reasons of a positive influence of practising martial arts (and other forms of physical activity) on the quality of life is a beneficial impact of such an activity on a widely-understood psychophysical skills, dealing with anger and better coping with anxiety. In the light of contemporary knowledge (and old sources) taekwon-do cannot only mean physical activity, though, undoubtedly, it is a very important, key aspect of this activity. In the paper we present the results of our own research concerning the ways of dealing with anger and anxiety by the girls practising taekwon-do (with the inclusion of the period of practise). In the light of the our research girls and women who have practised taekwon-do for over 2 years are more effective in coping with the situations of the choice between different options (to choose from) if each of them has its positive and negative consequences. Maturing girls and young women who practise taekwon-do have better abilities of constructive coping with stressful situations, including reaction for the situations causing anxiety.*

Keywords: *health, physical activity, quality of life, taekwon-do, anxiety, anger.*

Introduction

Constructive dealing with emotions, such as anxiety and anger (i.e. that are considered to have negative character) makes a very important aspect of the quality of one's life (Branden, 1995; Brock et al., 2016; Tsos et al., 2017; Ortenburger et al., 2015). The process of growing up is, to a large extent, learning to cope with difficult emotions (Aronson et al., 2012; Brodani & Zuskova, 2015). The aim of this paper is to develop knowledge concerning pro-health effects (frequent activities, being the factors maintaining and improving health, such as: regularly undertaken physical activity, gradation of the degree of

difficulty of the performed physical tasks) of practising taekwon-do by maturing girls, in the context of the quality of life. This article covers the presentation of the following issues: the presentation of selected problems concerning the role of anxiety and anger in health and life quality, with respect to the important role played by the intensification and ways of coping with anxiety (that often performs warning role). Anger, though it is considered to be a difficult and potentially endangering safety emotion, in many cases plays a beneficial role through triggering in a man the strength necessary to protect one's own borders and other activities that are essential from the perspective of social order. The key role is played by coping with anxiety and anger (Aronson et al., 2012).

Taekwon-do is a Korean martial art, the name of which is composed of three words: *tae*- meaning a foot, kick, *kwon*- fist, fist hit, *do*- i.e. road, philosophy of life. The term Martial Arts is very often used as general phrase to describe many of the different combat arts and martial sports which have developed in eastern cultures (Wąsik et al., 2016).

In this paper we present the results of our own research concerning the ways of dealing with anger and anxiety by the girls practising taekwon-do (with the inclusion of the period of practise). In this work we are concentrating on one of the aspects of the quality of life connected with health-related effects of systematic physical activity performance, such as taekwon-do. The arguments of a biological and social character speak for analysing the dependencies between taekwon-do training and the ways of coping with anxiety. In this work we are concentrating on one of the aspects of the quality of life connected with health-related effects of systematic physical activity performance, such as taekwon-do. During a professionally arranged and coach-supervised physical activity, such as taekwon-do, a number of mechanisms that mobilize for activity, increase involvement, make boring, repetitive and monotonous activities nicer, is used.

Due to an increase of the degree of difficulty and controlling the performance of certain techniques in the case of maturing girls, their confidence in own psychophysical abilities is built. It helps to boost self-esteem and lower the feeling of hopelessness in the situations causing anxiety. Due to an attractive formula of classes and the programme of classes created by the coach, the participants voluntarily undertake to perform the tasks that they would find hard to perform, due to tiredness.

In the light of contemporary knowledge (and old sources) taekwon-do cannot only mean physical activity, though, undoubtedly, it is a very important, key aspect of this activity. An activity specified as taekwon-do, besides being a regularly undertaken physical activity, also covers learning self-discipline, developing ability to manage own energy (by means of proper feeding and taking care about sleeping enough), avoiding unfavourable health habits. Practising taekwon-do covers, among others, gradual preparation for the tasks of

a growing degree of difficulty and preparing for undertaking rivalry during competitions and tournaments. It does not only mean undertaking rivalry with a sparring partner and opponents during the fight, but also coping with own anxieties (including anxiety about failure, stultification e.g. in front of friends, coaches and spectators). From the developmental perspective, it may mean an increase of the possibilities of a nervous system and increase of the ability of coping with the situations that cause different anxieties and even severe fear of failure.

By many authors, practising martial arts by maturing girls and women in the early stages of adulthood, it is considered to be the source of a better quality of life during those periods and in the later stages. It may make the source of strengthening the feeling of confidence and lowering the feeling of hopelessness (Richman & Rehberg, 1986; Wąsik et al., 2016; Leite, 2014). For this reason In the paper we present the results of our own research concerning the level of anxiety and anger by the girls practising taekwon-do with the inclusion of the period of practise.

Contemporary knowledge makes it obvious that there might be many factors influencing on an illness. There are data revealing that effective dealing with anxiety, fear, frustration and anger has a positive adaptive meaning. Looking at a man as a bio-psycho-social individual one must assume that all factors, including psychological factors, play a certain role and can make the stress and anxiety element favorable for the increase of an illness (Szerla et al., 2017; Spałek at al., 2017). That is reason why coping with anxiety so considerable for quality of life. Emotions (including anxiety, fear, anger) have their body, vegetative constituent. Some of the indications of this constituent are objective, as they are visible even for the environment e.g. paleness, blushing, sweating. Others are subjective and concern only the patient e.g. dryness in an oral cavity caused by fear, accelerated heartbeat; other indications of experiencing emotions can be revealed in laboratory tests. Symptoms of anxiety: heart rate increases, heart palpitations (“flutters”), chest pain, breathlessness, perspiration (increased sweating, sweaty palms), dryness of the mouth, dizziness, tingling sensations, aches and pains, headaches, tiredness, legs weak, trembling, digestive disturbance. Physical symptoms are very real. They may be caused by a normal bodily change, or by stress or worry. The symptoms caused by anxiety and worry often are just as real as those caused by illness. The physical symptoms can become a major problem (Brock, 2016; Aronson, 2012).

Physiological components of emotions are very important for a man as they make an adaptability mechanism: as a reaction, body answer to an impulse that has emotional value for a man. They are to prepare an organism for dealing with the situation that is signalized with the abovementioned impulse. The elements of an emergency reaction provide an organism with potential energy that can be

used for active confrontation with the danger (Leite, 2014; Spielberger, 1983; Wąsik et al., 2016).

Method

The research covered the group of 71 girls practicing taekwon-do aged between 14 and 21 (average 16.9 ± 1.6 year). In the presented research the data were gathered with the use of self-elaborated questionnaire including open and close questions (anger expression forms) and the State-Trait Anxiety Inventory. The State-Trait Anxiety Inventory is a research instrument for studying anxiety defined as temporary and conditioned by the situation state of an individual as well as anxiety defined as a relatively constant personality trait (Spielberger, 1983). This Inventory consists of two subscales, the first subscale measures state anxiety, the second measures trait anxiety. Internal compliance of both scales in the Polish language version is high. The state anxiety scale additionally may be useful in experimental studies that need to record changes in anxiety intensification.

For each indicator, mean value as well as standard deviation were calculated. Normality of the distribution was verified by Shapiro-Wilk test. Data were analysed using descriptive and inferential statistics. Data were analyzed using one-way analysis of variance (ANOVA). In all cases p-values < 0.05 were considered statistically significant. All calculations were made using Statistica 12.0.

Results

In group 1 (taekwon-do practice time from 1 year to 1 year and 2 months) level of anxiety was average 47.80 ± 10.32 . In group 2 (taekwon-do practice time: from 1 year and 2 months to 2 years and 2 months) level of anxiety was 40.86 ± 9.99 (scores 20-80). The obtained results are presented in Tables 1-2. The obtained data underwent statistical analysis, including the measurement of the parameters of variability such as mean, and standard deviation (Table 1).

This table presents the results showing what the level of anxiety is among girls who practise taekwon-do. Compared with the group 2, in the group 1 (duration of taekwon-do group attendance) there is a higher mean value of level of anxiety $F(1.69) = 8.28$, $p = 0.005$.

For level of anxiety of taekwon-do athletes indicator mean value as well as standard deviation were calculated (Table 1). From the data registered we see that the average in group 1 (taekwon-do practice time: from 1 year and 2 months to 2 years and 2 months) is 47.80 ± 10.32 scores and 40.86 ± 9.99 scores for the

group 2 (taekwon-do practice time: from 1 year and 2 months to 2 years and 2 months).

Table 1 Level of anxiety of maturing girls who practise taekwon-do

Duration of taekwon-do (TDK) group attendance	Level of anxiety scores: from 20 to 80			
	N	Mean	SD	p
Group1 Taekwon-do practice time: from 1 year and 2 months to 2 years and 2 months	35	47.80	10.32	0.00
Group2 Taekwon-do practice time: from 1 year and 2 months to 2 years and 2 months	36	40.86	9.99	

SD – standard deviation

Table 2 Obtained values of the anxiety

Level of anxiety (scale from 20 to 80)	Frequency	%
28	3	4.23
29	2	2.82
31	1	1.41
32	2	2.82
33	1	1.41
34	1	1.41
35	4	5.63
36	4	5.63
37	1	1.41
38	6	8.45
39	6	8.45
40	4	5.63
41	4	5.63
42	3	4.23
43	1	1.41
44	1	1.41
48	1	1.41
49	6	8.45
52	1	1.41
53	2	2.82
55	1	1.41
56	3	4.23
57	1	1.41
58	1	1.41
59	5	7.04
63	3	4.22
65	2	2.81
68	1	1.41

Obtained responses for the Anxiety Inventory assess intensity of current feelings “at this moment”: not at all, somewhat, moderately so, and very much so (maximum was 68 and minimum 28 scores) The higher score indicating greater anxiety.

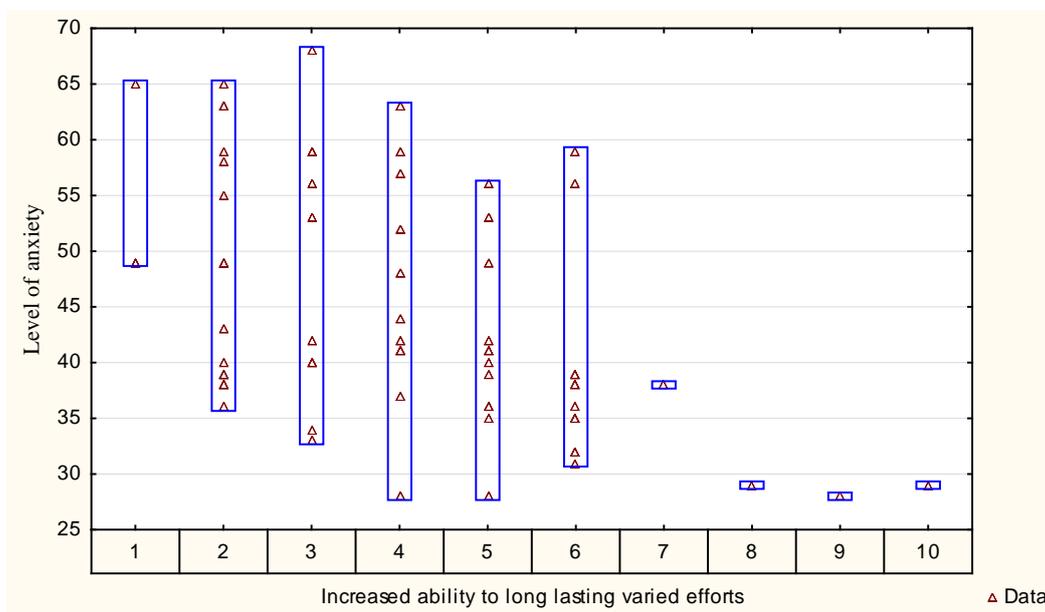


Figure 1. Level of anxiety and increased ability to long lasting varied efforts

Figure 1 presents the values of index increased ability to long lasting varied efforts and the value of the index of level of anxiety among 71 girls who practise taekwon-do. Pragmatically, the influence of the anxiety level for value of index increased ability to long lasting varied efforts is an intriguing area for future research.

Discussion

Obtained data can inform us about the average level of anxiety in tested female athletes. The results of this study showed that increased duration of taekwon-do group attendance of trainings is connected with increased the ability to restraining negative anxiety reactions (Figure 1).

In the assessment of anxiety the Polish version of Spilberger’s State-Trait Anxiety Inventory was used. The STAI scores correlate significantly with the scores of instruments measuring theoretical constructs similar to anxiety; the accuracy of the state anxiety scale has been additionally verified and confirmed in numerous experimental studies (Spielberger et al., 1983). Higher score indicating greater anxiety. Almost all levels of anxiety can be normal in specific

situations and for brief periods. However, frequent or persistent anxiety that causes distress is not healthy (Aronson et al., 2012).

Table 1 summarizes the values level of anxiety which can be experienced in varying degrees of intensity. However, frequent or persistent anxiety that causes distress influence for general functioning is predictor lower quality of live. Persistent anxiety can distort how maturing girls perceives and responds to threat (Jens et al., 1999; Aronson et al., 2012).

Data concerning expression of experienced anger were obtained. Increased frequency of trainings in connection with a longer training status (longer practice, more than 1,2 year) is connected with an increased ability of controlling oneself, restraining negative reactions. The research showed that 98 % of the girls, thanks to practising taekwon-do can cope with stress a lot better than before they started this exercising. In the light of the research girls and women who have practised taekwon-do for over 2 years are more effective in coping with the situations of the choice between different options (to choose from) if each of them has its positive and negative consequences. The sample group indicated that, under the influence of regular exercising, unpleasant anxiety connected with comparing their own body and appearance with other girls and women had lowered.

It corresponds with the research results indicating that, thanks to taekwon-do training, social anxiety, revealed in the situations of social exposure in the environment of competition, lowers (Wąsik et al., 2016; Ortenburger et al., 2015). The graph presented on Figure 1 indicates that there is need of a study of psychological aspects of physical preparation. A need exists for additional research on level of anxiety and increased ability to long lasting varied efforts (Tsos et al.).

Many authors think that practising martial arts by the maturing girls and women in the early stages of their adulthood is considered to be a source of a better quality of life during those periods and in the later phases (King & Williams, 1997; Richman & Rehberg, 1986). One of the most important reasons of the positive impact of taekwon-do (and other forms of physical activity) on the quality of life is a beneficial impact on such an activity on coping with anger and better dealing with anxiety. In light of literature the benefits to girls has been nothing less than astonishing (Wąsik et al., 2016; Richman & Rehberg, 1986). Benefits include less anxiety (Table 1) control of aggressive behavior and the gain of self-respect, self-control, self-defense and confidence. As an additional benefit, the girl will be also good in other athletic endeavors.

More active people cope better with anxiety. It is important reason (among others) why some people handle stress better than others (Szerla et al., 2017; Ortenburger et al., 2017). It shows that the influence of the anxiety level for value of index increased ability to long lasting varied efforts is an intriguing area

for future research. We all respond to stress differently, and some of us are more resilient than others (Jens et al., 1999; Leite, 2014; Spalek et al., 2017). In general, future studies that can control for a number of important influencing factors might be able to provide a better understanding of the true nature of the social-psychological outcomes of martial arts practise for adolescents (Vertonghen & Theeboom, 2010).

Summary

General activity connected with practicing taekwon-do co-create the healthy lifestyle and quality of life of maturing girls who practice this martial art. Why does the martial arts help girls keep balance? Why is it reducing the level of anxiety? Because, in order to obtain proper effects appropriate duration of trainings, intensity and frequency are necessary (Wąsik et al., 2016; Richman & Rehberg, 1986; King & Williams, 1997). These elements compose certain profile of an activity that influences on the overall functioning in the period of adolescence. It is a factor protecting against stress. Stress cannot be avoided. Stress and anxiety make an inseparable attribute of a human activity and life. Stress and the accompanying fear and anxiety are common in the world of human experience and have many different shades what makes it difficult to explain or even rationally classify them. Chronic physiological vegetative elements of emotions like strong anxiety can initially lead towards changes within body action, if they last for too long and additionally consider a weaker organ. Activity connected with practicing taekwon-do co-create quality of life of maturing girls who practice this martial art.

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