Original Paper

Biomedical Human Kinetics, 3, 72 – 77, 2011

DOI: 10.2478/v10101-011-0016-3

Relationships between competitive anxiety, social support and self-handicapping in youth sport

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Summary

Study aim: To assess the level of self-handicapping tendency, competitive anxiety (trait) and social support within groups of young male and female athletes, as well as to determine the relationships between those variables.
Material and methods: A group of 75 athletes (46 male football players and 29 female volleyball players) from Sport Mastery School in Łódź, aged 16 - 19 years, participated in the study. Three questionnaires were administered: Anticipative Strategy of Self-Esteem Protection Scale (ASO) to measure self-handicapping tendency, Social Support Scale (SWS) and Reactions to Competition (RnW), in order to measure the competition-related anxiety (trait).
Results: Female athletes attained significantly higher scores in ASO and RnW while male players perceived their social support higher than girls. No significant correlations between self-handicapping and anxiety were found. Most of the observed relationships between self-handicapping and social support were negative, like those between anxiety and social support.
Conclusions: It is advisable to work with young athletes on eliminating self-handicapping activities and replacing them with other, more efficient, ways of coping with anxiety. Social support (adequate to the athlete's needs) might be crucial in that proceeding. The hypothesis of relationship between sport competitive anxiety and self-handicapping was not confirmed, maybe due to the relatively small number of subjects.

Key words: Self-handicapping – Competitive anxiety – Social support – Team sports – Youth sport

Introduction

Two social psychologists E. Jones and S. Berglas in the late 70's introduced the concept of self-handicapping [3]. In the literature, this phenomenon is described as any kind of action, decision or behaviour that increases the chances of externalising (or justifying) failure or internalising success [16]. Such an action is a way to protect one's self-esteem, especially under highly stressful conditions, when being individually assessed or when the subject is not sure about the effect (failure/success) of own actions are highly likely. Obvious examples of such conditions are sports competitions. Jones and Berglas [3] pointed out that self-handicapping is widely demonstrated by athletes. Other researchers confirmed the presence of this phenomenon in sport [2,4,10,19,20,22]. However, no study that examined the relationships between the 3 variables presented in this paper could be found in the available literature.

Depending on the situation, there are two ways of maintaining positive self-image after completing the task. In case of failure, an individual blames the external conditions, while after gaining success, he/she claims that it was due to own merits. This is the phenomenon known as the attributions (cf. [1]). Self-handicapping is similar, but for the moment of action. It is applied prior to (or sometimes during) performing the task. Researchers indicate three forms of self-handicapping: behavioural, claimed and symbolic [7]. The first one includes active strategies like alcohol consumption or insufficient preparation to the task. Thus, an athlete may e.g. be late for training session, spend not enough time on exercising, put not enough effort in it [7,20] or – in case of sports like long-distance running – quite the contrary, engaging oneself in great effort, consequence of which is fatigue. It seems that it is easier to admit having not completed some part of the task ('*I have lost because I was not prepared*') than not being able to do something ('*I have lost because I have got no talent*').

Claimed self-handicaps are based on reporting certain weaknesses, such as shyness, feeling anxious, or telling about specific experience, that might excuse oneself

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of failure [7]. In sports, it might take the form of telling about one's negative feelings and stress ('*I feel so nervous/shaky, I feel sick, I am trembling with fear all the time, I have problems with concentration'*, etc.) or about former injuries ('*I am afraid of twisting my ankle again'*). It does not mean that athletes are never stressed or that all of them make excuses in that way. Nevertheless, such claims/messages might be a form of self-handicapping.

Symbolic self-handicapping consists of indicating external factors as possible causes of failure. Those may be, e.g., partner's lack of talent, worse performance or bad conditions during the task (competition) such as noise, insufficient light, high temperature [7]. This kind of self-handicapping brings about lowest costs since the subject does not actively reduce own chances for success (as it happens in case of behavioural self-handicaps) and does not deteriorate his/her image by admitting weaknesses (like in claimed self-handicaps). However, overusing such symbolic strategies may lead to earning a negative reputation [7].

Anxiety, classified as state or trait [7] is a multidimensional construct which was widely described also in sport psychology (cf. [23]). State anxiety is an '*immediate emotional state that is characterised by apprehension, fear, tension and an increase in physiological arousal'* and trait anxiety is a '*predisposition to perceive certain environmental situation as threatening, and to respond to these situations with increased state anxiety'* ([6], p. 93). In this study, the sport competition-related state anxiety was assessed [14]. Anxiety contains two components: somatic and cognitive. Somatic anxiety consists in physiological reactions such as increased heart rate, muscle tension or sweating. Cognitive anxiety is manifested in negative expectations about performing the task, unpleasant emotions, worrying or problems with concentration [9,17,23]. For athletes, one of the most important things is effective coping with anxiety, as it may seriously impair their performance [9,23].

There are two possible kinds of relationships between anxiety and self-handicapping. On one hand, anxiety usually appears in case of danger (cf. [14]). Sports competition could be seen as some kind of threat and is an anxiety-evoking situation (it poses a threat to one's self-esteem), thus self-handicapping may play a protective role [2]. On the other hand, when an athlete reports in-tense somatic anxiety ('*I have butterflies in my stomach*, *I feel sick*, *My hands are shaking*, *I can't breath'*) and/or cognitive anxiety ('*I can't concentrate*, *Thoughts are racing through my head'*), it may be a form of self-handicapping [19].

Another way of coping with anxiety is making use of the received social support. Two perspectives of social support can be discerned: structural (availability of social support, sources, density of social network) and functional (type of social interaction and exchanged resources). In this study, social support was assessed by a questionnaire based on Tardy's model [12]. It enables assessing 4 types of social support: emotional (showing interest, care, positive feelings), instrumental (any kind of material support: money, time), informational (advice, knowledge, information) and appraisal (motivating, appraising, acceptance, feedback about the performance) received from any given network. In sports, there are three essential sources of social support: team (or club) mates, coaches, and family and friends [15,21]. It seems that social support plays a vital role in one's functioning by protecting self-esteem [12,18] and that may be crucial in self-handicapping, which has similar function. It was, however, reported that the higher group consistency (that theoretically implies intense social support), the more likely is the use of self-handicapping strategies. It is explained in terms of excessive, unreasonable eagerness to meet the group's expectations [4,10].

The aim of this study was to assess the level of self-handicapping tendency, competitive anxiety (trait) and social support within groups of young male and female athletes, as well as to determine the relationships between those variables.

Material and Methods

The study was conducted at the turn of 2007 and 2008 in the Sport Mastery School in Łódź. Out of 120 students aged 16 – 19 years, 46 male football players and 29 female volleyball players (62,5% in total) completed the administered questionnaires. The study was conducted upon the consent of the headmaster and approval of the local Committee of Ethics. Three questionnaires were applied:

1 - Anticipative Strategy of Self-Esteem Protection Scale (ASO) [7], based on the Jones' Self-handicapping Scale (SHS). The Polish version contained 25 items assessed on a scale from 1 (I don't agree at all) to 6 (I agree completely). Thus, the results could range 25 to 150 points and the higher the result, the higher one's self-handicapping tendency. Only the overall results were taken into consideration.

2 - Social Support Scale (SWS) [13] – consisting of 24 items assessed on 5-point scale (1 – yes, 2 – rather yes, 3 – sometimes yes, sometimes not, 4 -rather not, 5 – no). The questionnaire contained 4 subscales pertaining to various types of social support (informational, instrumental, emotional, appraisal). The participants got that test in triplicate and were asked to assess the social

support received from three sources: team/club mates, coaches, family (parents, siblings). All possible results (each type of support from each resource, as well as overall results regarding each sources and each type of support) were included in further analysis.

3 - Reactions to Competition Questionnaire (RnW) – based on Martens' SCAT; this enabled determining the level of competitive trait-anxiety. The questionnaire contained 3 subscales : somatic anxiety (9 items), worrying (7 items) and concentration distractions (5 items). All items were assess on a 4-point scale (1 – absolutely not, 2 - rather not, 3 – rather yes, 4 – absolutely yes). In further analysis, the subscale results and the overall result (indicating the level of competitive trait-anxiety) were subjected to analysis.

Results

As shown in Table 1, female subjects attained significantly ($p<0.001$) higher values in the self-handicapping tendency as well as in variables related to anxiety while male subjects attained higher results in support scales ($p<0.05 – 0.001$).

Table 1. Mean values (±SD) of examined variables recorded in male and female athletes aged 16 – 19 years

Variable \ Group	Male n = 46	Female n = 29
Age (years)	17.5 ± 2.3	18.0 ± 1.1
Training experience (years)	7.6 ± 2.1	4.1 ± 2.3
Self-handicapping tendency	74.5 ± 10.5	92.1 ± 9.9***
Competitive anxiety (total)	40.8 ± 8.1	46.8 ± 9.5**
Somatic anxiety	15.3 ± 4.5	19.8 ± 5.3***
Social support (family)	107.3 ± 9.4	93.2 ± 16.9***
Social support (total)	279 ± 31	253 ± 36**
Informational support (total)	71.8 ± 7.7	64.6 ± 10.4**
Instrumental support (total)	67.7 ± 10.3	61.4 ± 10.4*
Emotional support (total)	75.2 ± 8.7	66.3 ± 10.1***

Significantly different from male athletes: * $p<0.05$; ** $p<0.01$; *** $p<0.001$

Correlation coefficients between self-handicapping tendency and anxiety variables are presented in Table 2. No significant correlations between self-handicapping tendency and anxiety were noted except self-handicapping tendency and concentration distractions in female subjects.

Inasmuch all the relationships between the self-handicapping tendency and social support variables were of similar magnitude and negative, only those related to family or coaches were significant ($p<0.05$) in the female group, all other ones being significant ($p<0.05$) in the male group only (Table 3). Competitive anxiety significantly ($p<0.05$) correlated with informational and total support from the family, the former correlating also with worrying ($p<0.01$). Quite unexpectedly, all those correlations were positive (Table 4).

Table 2. Relationships between self-handicapping tendency and anxiety variables in male and female athletes aged 16 – 19 years

Variable \ Group	Male n = 46	Female n = 29
Competitive anxiety (total)	0.168	0.248
Somatic anxiety	0.020	0.100
Worrying	0.214	0.209
Concentration distractions	0.341*	0.197

* $p<0.05$

Table 3. Relationships between self-handicapping tendency and social support variables in male and female athletes aged 16 – 19 years

Source and type of support \ Group		Female n = 29	Male n = 46
Family	Appraisal	-0.182	-0.298*
	Total	-0.273	-0.302*
Coaches	Instrumental	-0.205	-0.317*
Total	Informational	-0.410*	-0.250
	Instrumental	-0.397*	-0.237
	Appraisal	-0.430*	-0.127
	Emotional	-0.386*	-0.126
	Total	-0. 447*	0.250

* $p<0.05$; ** $p<0.01$

Table 4. Relationships between anxiety and family support in male athletes (n = 46) aged 16 – 19 years

Kind of support	Competitive anxiety (total)	Worrying
Informational	0.341*	0.396**
Total	0.297*	0.183

* $p<0.05$; ** $p<0.01$

In female athletes, anxiety variables were mostly significantly correlated with social support variables, all the significant ones being negative (Table 5). Worrying correlated with informational, emotional and total support from mates and informational support from family, while concentration distractions were related to informational support from mates and coaches, as well as to total informational and instrumental support.

Table 5. Relationships between anxiety and social support variables in female athletes (n = 29) aged 16 – 19 years

Source and type of support		Competitive anxiety (total)	Somatic anxiety	Worrying	Concentration distractions
Team/club mates	Informational	-0.582**	-0. 488**	-0.495**	-0.379*
	Instrumental	-0.379*	-0.438*	-0.203	-0.188
	Appraisal	-0.405*	-0.445*	-0.234	-0.224
	Emotional	-0.528**	-0.525**	-0.478**	-0.108
	Total support	-0.567**	-0. 564**	-0.430*	-0.262
Family	Informational	-0.235	-0.245	-0.441*	0.023
Coaches	Informational	-0.101	-0.043	0.079	-0.450**
Social support (total)	Informational	-0.431*	-0.362*	0.179	-0.578**
	Instrumental	-0.389*	-0.418*	-0.170	-0.332
	Emotional	-0.334*	-0.492*	-0.193	-0.286
	Total support	-0.470*	-0.482**	-0.219	-0.430*

* $p<0.05$; **$p<0.01$

Discussion

Mean values obtained with the use of ASO scale in male and female subjects amounted to 74.5 and 92.1 points, respectively, or about 40 and 54% of the scale range, respectively. However, no reference values are available for that scale and no sport-related studies using the Polish version of that test exist. Therefore, it is impossible to discuss the presented results in relation to athletes or general population.

In this study, female athletes attained significantly higher results than the male ones which was not consistent with the paper of Hurt *et al*. [11] who reported that men were mostly more likely to self-handicap than women especially in terms of behavioural strategies. However, men differ from women with respect to the sources of self-esteem (intellectual vs. social tasks, respectively) and, due to that different situations may pose a threat to their self-image [7]. It seems that in sport competition (especially in team sports) certain social skills (e.g. communication, interactions and cooperation) are essential in addition to physical abilities. Moreover, sport competitions are still considered men's domain. Because of that stereotype, women can perceive such a situation as a greater threat for their self-esteem. To protect oneself from destructive criticism and unjust, harmful opinions (*'You're not able to that - it's not for women*, Y*ou're a total disaster'*), female athletes may engage in self-handicapping. They may prepare in advance specific excuses in case of failure, blaming certain changeable, external conditions (e.g. lack of proper warm-up, coming late for trainings, forgetting to bring the equipment). There might be also another, quite simple explanation for the observed difference in self-handicapping. When ASO scale was being developed, the research showed that women usually scored higher than men [7]. This may be e.g. because of a higher self-awareness of women compared with men. They usually have greater insight in themselves and their functioning.

Competitive anxiety proved also gender-specific. Male athletes demonstrated lower somatic (but not the cognitive) anxiety than women which was consistent with former research [17]. This supports the view that women are more likely to react with somatic symptoms in a difficult, stressful situation and, undoubtedly, sport competition is exactly such a situation.

Analysis of the social support scale revealed that male athletes rated the received support higher than the female ones. This might have been due to the specificity of the Sport Mastery School as other authors [15,21] did not report such differences. At the time of this study, female students attended the school just for 1½ years; they were in minority and most of them came to the school from different regions of Poland and so they received little family support.

Anxiety was reported to play a vital role in self-handicapping [7]. However, in this study, no significant correlations between those variables were found. The results obtained for female athletes may suggest a relationship between cognitive anxiety (concentration distractions) and self-handicapping but further research on a greater number of subjects would be needed to confirm that suggestion.

As far as the relationships between self-handicapping and social support are concerned, the analysis showed that male players who evaluated appraisal and total support

from families, demonstrated lower tendency to self-handicap compared with their female mates. This is not astonishing, as the appraisal support is a known protector of self-esteem. Thus, athletes who get proper appraisal support have no need to self-handicap. On the other hand, the correlation only indicated an interrelationship between variables but not a causal relationship. It was suggested that people who self-handicap may engage themselves in conflicts and arguments [8]. This may be an alternative explanation for the results obtained in this study – the higher self-handicapping tendency, the less support an individual receives.

In the female group, social support from particular sources did not prove significant in self-handicapping. However, the total informational, emotional, instrumental and appraisal supports were negatively correlated with self-handicapping tendency. It could be speculated that support from one specific source was not sufficient, but a high total support would reduce the tendency to self-handicap in female subjects.

Unexpectedly, positive correlations between competitive anxiety and social support were found in male athletes. Those who evaluated higher informational and total support received from their families, attained higher results in the RnW test (total score and in subscale "Worrying"). This could have been due to excessive family's expectations about individual's sports career and, further, to excessive information and advice resulting in mixed perceptions including feeling of being overprotected. In sports, if the coach's roles are taken over by not always competent parents, an athlete may find himself in a harmful conflict (because of contradictory information from two important groups). Furthermore, social support inadequate (in terms of type or amount) to the situation or to one's needs might prove stressful [18].

Female athletes receiving high support (total informational, instrumental and emotional) were less likely to react with somatic anxiety to sport competitions. Moreover, the higher total informational support, the lower cognitive anxiety (concentration distractions). This is not surprising, as within informational support one receives knowledge and information helpful in further actions [12]. This may alleviate the anxiety in new, unfamiliar situations or uncertainty about coping with difficult situation, as well as to prevent distractions (a person has a plan, knows what to do and has no need to think about other things or look for other solutions).

Emotional support from team/club mates correlated negatively with competitive anxiety both somatic and cognitive (worrying). This type of support includes showing positive feelings (interest, trust, care, friendliness) towards a person and that enables acting free of concerns about disappointing others or loosing their interest. It was demonstrated [5] that the failure itself poses no threat for an individual, only its negative consequences. Social support was claimed to have a protective role and to reduce stress and anxiety [10]. Nevertheless, it is also true that people having low anxiety are more friendly, confident and easy-going, so it is easier for them to access and benefit from social support [14,15].

Summing up, the presented results are at least partly consistent with the literature reports but further research is needed especially on larger groups of athletes, including individual sports. It may be, however, concluded that young athletes ought to be given support adequate to their needs. This may result in better coping with competitive anxiety and lower likeliness to self-handicap.

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Received 30.03.2011
Accepted 8.05.2011

Acknowledgements
Thanks are due to Prof. M. Krawczyński for making available Polish version of the Competition Questionnaire