



Conforming and Nonconforming Personality and Stress Coping Styles in Combat Athletes

by

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The main objective of this study was to investigate whether the personality dimension of conformism/nonconformism was a predictor of stress coping styles in athletes training combat sports, and to present the characteristics of this personality dimension in the context of the competitors' adaptive/innovative sport performance. Scores of 346 males practising combat sports such as kick boxing, MMA, thai boxing, boxing and wrestling were analyzed. The participants completed the Creative Behaviour Questionnaire (KANH III) measuring the conformity/nonconformity personality dimension and the Coping Inventory for Stressful Situations (CISS) measuring stress coping styles. The comparative analyses were conducted only for the groups of conformists and nonconformists. Differences in stress coping styles between conformists and nonconformists training combat sports were found as nonconformists tended to prefer the task-oriented coping style. Conclusively, a higher rate of nonconformity was associated with increasingly frequent occurrence of task-oriented coping and decreasingly frequent emotion-oriented coping.

Key words: combat sports, conformism, coping styles, nonconformism, personality, stress.

Introduction

The principal aim of the study was to verify whether the personality dimension of conformism/nonconformism was a predictor of a stress coping style in combat athletes. We were especially interested in psychological factors in emotional and motivational mechanisms impacting athletes' behaviours. This investigation was expected to provide some insight into behaviours of contestants with (non)conforming personality in stressful situations which are very common to competitive sports. The present study related to issues investigated by psychology of sport, personality and creativity.

The study was based on the assumption that stress coping styles and conformism/nonconformism constituted a permanent predisposition in an individual

(Bernacka, 2009; Endler and Parker, 1999; Tomczak et al., 2013). According to this approach the probability of a specific behaviour increases with the intensity of a trait, despite situational differences (McCrae and Costa, 1991). A stress coping style is a relatively permanent, individual-specific way of facing difficulties in stressful situations (Tomczak et al., 2013). Endler and Parker (1999) distinguish three stress coping styles: task-oriented, emotion-oriented and avoidance-oriented coping. Task-oriented coping is based on attention to the problem which is to be solved through a cognitive transformation of a difficult situation, by taking definite actions or making plans that will contribute to solving of the problem. Emotion-oriented coping involves concentration on oneself and on one's emotions

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(anger, tension, sense of guilt). On the other hand, the avoidance-oriented coping style is employed to avoid thinking about the stressor or experiencing stress in a difficult situation. The avoidance-oriented strategy is broken down into distraction and social diversion.

Another aspect of conformity/nonconformity and stress coping styles, which can be investigated, relates to their role in adaptive functioning of an individual, and their impact on contestants' sport performance. It is compatible with the main purpose to characterize this personality dimension as a factor differentiating contestant's potential in the context of adaptive/innovative sport performance. The notion of nonconformity appeared in the context of personality in studies carried out by the Institute of Personality Assessment and Research in Berkeley, and aimed at determining characteristic personality traits of creative people. Nonconformity in this context is referred to as an independent stance (MacKinnon, 1975). Yet, it was only Popek's original theory of human creative attitude and the development of the KANH questionnaire which made it possible to initiate research of (non)conformity as a dimension of human personality (Bernacka, 2009). The dimension means a possibility to classify people according to a degree of a given characteristic displayed by them. A higher degree of a given characteristic goes with greater probability of behaviours to which one is predisposed by this particular trait (McCrae and Costa, 1991).

Nonconformity, as a set of inter-related traits, especially self-esteem, activeness, courage, resilience, perseverance, independence and tolerance, constitutes personality motivation (energy) which liberates, organises and determines the direction of activity (Bernacka, 2009). This motivation is of key importance for expressing (realising) the human capacity for self-actualisation. In accordance with the concept of creative attitude (Bernacka, 2009; Grohman and Schmidt, 2013), conformists are predisposed to a highly adaptive style, whereas nonconformists express themselves in a highly-innovative manner.

A general tendency observed in people involves adjustment or creative adaptation. Given the specificity of combat sports, such as work-out

routines, rules and regulations, codes of conduct, ceremonial and morale (Foretić et al., 2011; Litwiniuk et al., 2009), it can be assumed that conformity is an inherent element of this type of sport. Basically, adaptation in sport may be understood as more effective performance of the competitors who prefer sticking to an already developed fighting strategy and following their coaches' suggestions, and they use their sport skills more efficiently based on their experience. On the other hand, the point of reference for innovative solutions in sport is the competitors' critical reflection, awareness of their competences and their own creativity. Like in other areas of life, achievements in sport may result from craftsmanship as well as specific type of "virtuosity". There are many able competitors, but only few are truly talented and they can push the limits or succeed in sport related transgression (Tański, 2015). Creativity and innovativeness are the driving force for progress in various areas including sport. This leads to the question whether, from the point of view of innovative solutions in sport, the personality dimension of (non)conformity is a supporting factor indicating psychological potential of a competitor.

The literature presents little information about personality traits and stress coping styles in combat athletes. A few studies have investigated five dimensions of personality structure in individuals training combat sports (wrestling and ju-jitsu). Wrestlers from the Polish National Cadet Wrestling Team were characterized by low neuroticism, high extraversion, low openness and high conscientiousness in comparison with the general population (Tomczak et al., 2013). Both wrestlers and ju-jitsu fighters were mainly characterized by low and medium levels of neuroticism as well as medium and high levels of extraversion. On the other hand, the level of psychoticism was low in wrestlers and medium in ju-jitsu competitors (Litwiniuk et al., 2009). Female athletes training combat sports were found to have a significantly higher level of nonconformism (Burdzicka-Wołowik and Góral-Radziszewska, 2014).

Research has shown that personality can be a good predictor for a wrestler's individual style of coping with stress. Conscientiousness was a predictor for task-oriented male wrestlers. Both, the more agreeable and less conscientious male

wrestlers were characterized by the emotion-oriented coping style (Tomczak et al., 2013). Highly effective wrestlers showed both task-oriented and emotion-oriented strategies (Kristiansen et al., 2008). There are available data regarding stress profiles of combat athletes, however, there are only few studies (Stevens et al., 2006; Tomczak et al., 2013) providing data on how they cope with these emotions (Ziv and Lidor, 2013). "In modern psychology of sport, researchers ponder on personality of competitors and the level of intensity of its features depending on a particular sport" (Litwiniuk et al., 2009). In summary, no previously published studies had investigated the relation between (non)conforming personality and styles of coping with stressful situations. Generally, in the literature there is a shortage of systematic research of conforming/nonconforming personality, in particular related to sport where it seems both qualities may be reflected by the quality of sport-related achievement.

Thus, the goal of the present study was to verify whether there were differences between conformists and nonconformist practicing combat sports in terms of their stress coping styles. Moreover, we wanted to examine the relationship between conforming/nonconforming personalities and the predominant stress coping styles.

Material and Methods

Participants

The sampling frame was a list of sports clubs located in South-Eastern Poland. Stratified sampling was used (small-town and large-city clubs). The size of samples was defined according to a proportional variant. The specific clubs were selected based on an unlimited formula. The group was defined as a result of purposive sampling, taking into account similar rates of individuals practising the following combat sports: kick boxing, MMA, thai boxing, boxing and wrestling. The group consisted of 346 males, with a mean age of 22 ± 3.5 years.

Measures

1. The KANH III (Creative Behaviour Questionnaire III) is a modified by Bernacka version of the original Creative Behaviour Questionnaire KANH by Popek (Burdzicka-Wołowik and Góral-Radziszewska, 2014; Nęcka et al., 2006). This questionnaire comprises 26

statements, all in the form of declarative sentences (Bernacka, 2009a). It is composed of 2 subscales, in line with the concept of human creative attitude formulated by Popek (Grohman and Schmidt, 2013): Conformity/Nonconformity, which relates to the sphere of personality, and Algorithmic Behaviour/Heuristic Behaviour, which belongs to the cognitive sphere. Each subscale controls 13 traits distributed dichotomously as continuous traits (continuum). The present study used the Conformity/Nonconformity subscale. The KANH III has the following format of answers: A - yes, B - rather yes, C - I don't know, D - rather no, E - no. The psychometric characteristics of the scale were confirmed for reliability (Cronbach alpha 69) in the group of combat athletes.

2. The applied CISS (the Coping Inventory for Stressful Situations) (Endler and Parker, 1999) was a Polish adaptation by Strelau, Jaworowska, Wrześniewski and Szczepaniak (Tomczak et al., 2013). The questionnaire comprises 48 items which present the course of action commonly taken by people in stressful situations. The questionnaire consists of three scales which refer to the following ways of coping with stress: task-oriented coping, emotion-oriented coping and avoidance-oriented coping. The CISS has a five-digit answer format. The psychometric characteristics of the scales were confirmed (Cronbach alpha 80) in the group of combat athletes.

Procedures

Both questionnaires, KANH III – only the Conformity/Nonconformity subscale, and CISS, were voluntarily and anonymously completed by athletes in their club before a training session.

Statistical Analyses

Based on the high and low Sten scores for the KANH III Conformity/Nonconformity subscale two groups were distinguished, i.e., 54 conformists and 51 nonconformists.

Conformists were, in accordance with the norm, assigned appropriate Stens 1, 2, 3 - the lower the Sten the higher the intensity of conformism. Similarly, nonconformists were, following the norm, assigned appropriate Stens 7, 8, 9 - the higher the Sten the stronger the nonconformism.

The CISS scores acquired by 54 conformists and 51 nonconformists were subjected to statistical analysis using SPSS 22.

A one-way ANOVA was employed to compare particular stress coping styles with one another in terms of the frequency with which they were used within each group of conformists and nonconformists. Subsequently, in order to make multiple comparisons, the Tukey's HSD post-hoc test was used.

Statistical analyses were conducted using regression analysis in order to examine whether there was a relationship between conforming/nonconforming personalities and the prevailing stress coping styles.

Results

The first hypothesis regarding differences in stress coping styles between conformists and nonconformist practicing combat sports was checked by one-way ANOVA. The analysis showed statistically significant effect of the conforming/nonconforming personality variable related to task-oriented coping $F(5, 99) = 6.89, p =$

$.000, \eta^2 = .26$ and emotion-oriented coping $F(5, 99) = 2.85, p = .019, \eta^2 = .13$. Conforming and nonconforming combat athletes did not differ in terms of the frequency of occurrence of avoidance-oriented coping (Table 1).

The Tukey's HSD post-hoc test showed a significant increase ($p = .001; p = .010; p = .019; p = .048$) in the frequency of occurrence of task-oriented coping in the nonconforming group compared to the conformists as well as a significant increase ($p = .029$) in the frequency of occurrence of the emotion-oriented style in the group of conformists - Sten score 2, in comparison to the nonconformists - Sten score 9 (Table 2).

In order to examine the second hypothesis with regard to a relationship between conforming/nonconforming personalities and the prevailing stress-oriented coping style, statistical analyses were conducted using regression analysis.

Table 1
Comparisons between the groups: conformists (N = 54), nonconformists (N = 51) and stress coping styles (one-way ANOVA)

Stress coping styles	Sten	N	Mean	Std. Deviation	Std. Error	Mean Square		F	p
						Between Groups	Within Groups		
task	1.00	17	59.87	8.568	2.212	324.585	47.101	6.891	.000
	2.00	19	61.71	9.621	3.637				
	3.00	18	59.69	5.349	.946				
	7.00	17	64.76	7.076	1.716				
	8.00	18	63.82	8.134	1.734				
	9.00	16	72.33	7.492	.142				
	Total	105	62.98	7.774	.759				
avoidance	1.00	17	41.40	5.356	1.383	162.664	135.360	1.202	.314
	2.00	19	43.43	14.432	5.455				
	3.00	18	41.97	14.354	2.537				
	7.00	17	46.53	10.229	2.481				
	8.00	18	37.55	12.659	2.699				
	9.00	16	40.67	5.416	1.563				
	Total	105	41.65	11.691	1.141				
emotion	1.00	17	40.47	5.343	1.380	170.328	59.743	2.851	.019
	2.00	19	46.43	3.207	1.212				
	3.00	18	41.47	9.685	1.712				
	7.00	17	44.53	7.867	1.908				
	8.00	18	40.95	5.736	1.223				
	9.00	16	35.00	8.863	2.558				
	Total	105	41.30	8.066	.787				

Between groups df=5
Within groups df=99

Table 2
Comparisons between the groups: conformists (N = 54), nonconformists (N = 51) and task coping styles and emotion coping styles (Tukey's HSD post-hoc test)

Stress coping styles	I Sten CN	J Sten CN	Mean Difference (I-J)	Std. Error	p
task	9	1	12.467	2.658	.000*
		2	10.619	3.264	.019*
		3	12.646	2.322	.000*
		7	7.569	2.588	.048*
		8	8.515	2.463	.010*
emotion	9	1	-5.467	2.994	.454
		2	-11.429	3.676	.029*
		3	-6.469	2.616	.142
		7	-9.529	2.914	.418
		8	-5.955	2.774	.272

* $p < .05$

CN- conformism/nonconformism

Table 3
Predicting stress coping styles in combat athletes with nonconforming personality

Stress coping styles	Beta	t	p	F	p	df	R ²
task	.45	3.55	.001*	12.58	.001*	1.88	.20
emotion	-.53	-4.39	.001*	19.24	.001*	1.79	.28

* $p < .01$

We used a nonconformism dimension to predict task-oriented coping and emotion-oriented coping. Results showed that the nonconformism explained 20% of variance in task-oriented coping ($F(1, 49) = 12.58, p = .001$) and 28% of variance in emotion-oriented coping ($F(1, 49) = 19.24, p = .001$). The predicted relationship between nonconformism and task-oriented coping turned out to be strong (Beta = .45, $p = .001$),

while the relationship between nonconformism and emotion-oriented coping was strong and negative (Beta = -.53, $p = .001$) (Table 3).

A higher rate of nonconformity is associated with a greater frequency of task-oriented coping as well as a decreasing incidence of the emotion-oriented style of coping.

Summing up the findings of the above analyses, the difference in terms of stress coping

styles in the group of combat athletes was confirmed for task-oriented coping in the nonconforming group compared to the conformists. A strong relationship was found between the nonconforming dimension and task-oriented coping, and a strong, but negative relationship was found between the nonconforming dimension and emotion-oriented coping. The correlation between conformism and emotion-oriented coping was found to be statistically non-significant despite a high frequency of the emotion-oriented style in the group of conformists, in comparison to the nonconformists. Therefore, both hypotheses of the study were partly confirmed

Discussion

The analyses of the differences in stress coping styles adopted by the conforming and nonconforming combat athletes showed that nonconformists were more likely to use the task-oriented style of coping.

A higher rate of nonconformity was associated with more frequent occurrence of task-oriented coping and decreasingly frequent occurrence of emotion-oriented coping. Nonconforming athletes, due to the specific personality-related energy as well as a general tendency expressed in the style of coping with stress in various sport-related situations will respond in a task-oriented manner by taking definite actions or making plans that contribute to solving of the problem and changing the situation (Anshel et al., 2009). Task-oriented coping is a more adaptive strategy before a competition or a fight (Tomczak et al., 2013). We can conclude that nonconformity as a personality trait can, actually, be a good predictor for task-oriented coping with stress displayed by combat athletes. By diagnosing a competitor's personality dimension at an early stage of training, it may be possible to identify high adaptive capabilities to cope with sport-related stress. Findings of this study contribute to the existing knowledge regarding personality traits which are predictors for the styles of coping with stress in combat sports (Tomczak et al., 2013).

Understanding the innovative role of nonconformism and the task-oriented coping style reflected in the competitor's performance could be clearer if we analyse the function of the

personality mechanism (Bernacka, 2009) in the light of the theory of creative attitude (Grohman and Schmidt, 2013).

Task-related energy in a nonconforming personality, giving direction to the individual's relatively permanent behaviour (e.g. with respect to sport, as well as daily and sport-related stress), is a result of an interaction between such qualities as: resilience and persistence, consistency, independence and self-criticism (Bernacka, 2009). These qualities have motivational impact and are comparable to the high level of conscientiousness, which has been shown to be related to the individual's effectiveness in a given sport (Tomczak et al., 2013). Performance in sport depends on high self-motivation for training, self-discipline, persistence in action and motivation when faced with a goal, development of one's own capacities by attaining targets and positive experience of competition. Nonconformists are ambitious, persistent, determined, as well as competition-oriented, and thus, they seem to resemble competitors characterized by low agreeableness (Tomczak et al., 2013) as they can constructively cope with defeat, learn from their mistakes and overcome their own weaknesses. A higher level of nonconformity in athletes is a motivational force leading to a greater need for knowledge and learning. Its main ingredient is curiosity and a tendency to analyze events and draw conclusions from them as well as capacity for constructive criticism. This need emphasizes the insatiable cognitive curiosity of the nonconformist and their innovative aspirations which may be expressed with the athlete's willingness to improve their professional qualifications and by critical, yet constructive attitude to the "sport order" existing in various areas.

The sense of self-efficacy and tendency for innovativeness in nonconforming personality are strengthened by the energy inherent in the need to counteract difficulties as well as instruct and teach others. This may be expressed by a tendency to seek out problems and solutions and by unwillingness to accept the first idea which comes to mind. This is also courage to suggest changes, apply novel concepts and cherish major professional aspirations (Bernacka, 2009).

We should also mention the quality of selective perfectionism, which is typical of

nonconformists (Bernacka, 2009). Previous research suggested it was a domain-specific quality rather than a personality disposition (Dunn et al., 2012). Nonconforming personality is open and flexible at the stage of “creative exploration”, yet at the stage of implementation their behaviour is motivated by the need for order and neatness; this means they require and adhere to schedules with precision and perfectionism of a bureaucrat, and in this they resemble conformists. This duality in nonconformists’ behaviour, i.e. the flexibility and rigidity sometimes may be perceived by other athletes as surprising and incomprehensible. Situational changes initiate adaptive flexibility in nonconformist’s behaviour (Schmitt and Pilchner, 2004).

A nonconformist with his/her task-oriented emotional and motivational energy and stress coping style aims for sport-related achievement, which is understood as a combined result of a novel and original approach to the dynamic and rapidly changing situation in combat sports, peaking under pressure and goal setting (Kruger et al., 2013; Tomczak et al., 2013) as well as an innovative approach to combat rules and strategies (Gould et al., 1993). The need for creativity is expressed as unique behaviour motivated by ingeniousness, intuition and an unconventional approach.

Another set of qualities typical of the nonconforming personality mechanism includes dominance, tolerance, high self-esteem and a high activity level as well as originality (Bernacka, 2009). Just like openness, adaptive flexibility and courage, these traits support the task-oriented stress coping style. The way nonconforming competitors function is characterized by openness to new experience; the low level of this trait in wrestlers was a surprise for the researchers (Tomczak et al., 2013). This finding may be explained, on the one hand, by the specificity of the sport, and on the other hand, by the subjects’ age and a low level of their professional experience. Literature suggests that conformity is treated as an advantageous strategy for acquiring qualifications and gaining a satisfying professional position (Bernacka, 2009). Perhaps for this reason youth athletes prefer sticking to an already developed fighting strategy and following their coaches’ suggestions. On the other hand, nonconforming athletes, regardless of their age

and professional experience, are open to new ideas and demonstrate cognitive curiosity by seeking their own, more creative solutions. It should also be pointed out that nonconformists’ behaviour aimed at expressing their self-confidence and drawing attention to themselves as well as their sport-related skills is based on their high self-esteem and sense of their uniqueness, and at the same time manifests their insatiable need for recognition (Bernacka, 2009). Similarly, it was demonstrated that more successful wrestlers were more self-confident (Gould et al., 1981; Sterkowicz et al., 2012). Notably, the present study involved exclusively male participants, and according to a literature review the task-oriented coping style is indeed more characteristic of men (Tomczak et al., 2013), which suggests emotion-oriented coping is less frequent in male subjects. By making reference, on the one hand to studies focusing on the relation of personality characteristics and performance under pressure (Geukes et al., 2012) and on the other hand, to the specificity of combat sports, we can conclude that the interaction of nonconforming dimension traits with the task-oriented stress coping style sets the direction of behaviour under high pressure in combat sports and constitutes a factor supporting the athletes’ sport performance.

Investigating sports performance in the context of a personality dimension we should emphasize that innovative and adaptive potential has its own strengths and weaknesses, and both of these qualities are useful.

Conformists are characterized by precision, reliability, efficiency, discipline, hence they “do things better” (Kubes, 1998; Puccio, 1999). Such qualities as timeliness, accuracy, attention to details, timely coordination and dependable follow-through correlate positively with performance. Such behaviours are also displayed by nonconformists who also prefer to do things differently, to challenge the paradigm or structure, and due to this are sometimes seen as undisciplined. Innovation potential may be viewed in the sport as a set of dysfunctional traits such as arrogance, manipulation, drama, eccentricity and lower levels of caution, perfection and dependence (Zibarras et al., 2008); these may be expressed in socially unacceptable behaviour. The above-mentioned traits in the light of what we know about the mechanism of

(non)conformism (Bernacka, 2009) should be interpreted as signs of individual's usage of his/her creative personality, which is made difficult by some external subjective factors.

An important observation of the present study is the fact that conformists significantly more often use the emotion-oriented coping style, but only at the low intensity of conformism, as opposed to the average and extremely low intensity of the trait. This finding, however, is quite puzzling as it has not been confirmed in the light of the relation between conformism and emotion-oriented coping. A tendency to concentrate on oneself and on one's emotions as well as an inclination to wishful thinking and fantasizing in stressful situations are not only typical of women as suggested by research (Crocker and Graham, 1995; Tomczak et al., 2013); in accordance with the present findings this approach is also characteristic of conforming male subjects training combat sports. It is probable that with regard to conformists, the stress coping style depends to a greater degree on the situational factors, therefore, the variety of sport-related stressors will activate the use of diverse styles of

coping with stress in conforming competitors. Conforming competitors require monitoring related to the styles of coping with varied sport-related stressors and possibly psychological counselling to improve their skills in this area, which may then be reflected in their sport achievements.

We can recapitulate that the findings presented in this article should be treated as preliminary data for subsequent in-depth studies, but it should also be emphasized that the characteristics of the personality mechanism in the performance of nonconforming combat athletes and their task-oriented coping style may be helpful in understanding the role of nonconforming personality in sport achievements. It should also be inspiring for coaches and sport psychologists to identify talented competitors taking into account their psychological abilities which play a significant role in sport performance and to adequately employ their creative potential for transgression, which is also feasible in combat sports.

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