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SPORTSPERSONSHIP IN MARTIAL ARTS

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Abstract

Studies on psychological outcomes related to individual differences have increased showing contradictory results, especially in martial arts. The difficulty to provide conclusive evidence for the psychological outcomes of martial arts practice and to determine if and to what extent martial arts trainings explain the above mentioned effects needs a more in-depth analysis of those dispositional aspects which can impact adaptive behaviors in terms of sportspersonship. Since no studies on sportspersonship and goal orientations has been carried out in the specific context of martial arts, the current research aimed at examining the role of goal orientations and trait aggressiveness as predictors of sportspersonship. A cross-sectional study was conducted. 389 Italian martial artists (M_{age} = 29.60, SD = 9.22) completed a questionnaire composed of four sections: a socio-anagraphic section, the Multidimensional Sportspersonship Orientations Scale, the Task and Ego Orientation in Sport Questionnaire, and the Aggression Questionnaire. Descriptive and casual analyses were applied to data. The expected hypotheses were generally confirmed. Results suggested that ego orientation and trait aggressiveness negatively predicted sportspersonship, whereas task orientation positively predicted a sportspersonship attitude. In sum, this research contributed to a better identification of the dispositional factors which prevent antisocial behaviors, especially in the context of martial arts.

Keywords: Dispositional factors; Sportspersonship; Trait aggressiveness; Goal orientations.

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1. Introduction

In the last decades psychological research on martial arts has provided contradictory results concerning their benefits (Vertonghen & Theeboom, 2010). According to Bandura's social learning theory (Bandura, 1973), the exposure to hostility in martial arts training increases hostile acts and violent behaviours. This perspective was supported by some empirical findings which confirmed the positive association between martial arts and higher inclinations towards aggressiveness (Edressen & Olweus, 2005; Reynes & Lorant, 2002a, 2002b). Conversely, negative associations were found between color-belt levels in Karate and Taekwondo and levels of aggressive fantasy (Skelton, Glynn, & Berta, 1991), as well as between length of training and hostility scores (Daniels & Thornton, 1990; Kurian, Caterino, & Kulhavy, 1993; Nosanchuk, 1981). Researchers have also focused on the comparison between personality traits and performance levels of martial arts athletes. While Richman and Rehberg (1986) demonstrated the positive impact of performance levels on personality traits, McGowan and Miller (1989) referred that successful levels of performance increased anger in terms of the energy needed to win a competition. More recent results have confirmed the important role of success in martial arts thanks to its positive effects on personality traits, such as self-esteem, self-confidence, personal growth, wellbeing, etc. (Focht, Bouchard, & Murphey, 2000; Kuan & Roy, 2007; Lakes & Hoyt, 2004; Stey & Roux, 2009; Wargo, Spirrison, Thorne, & Henley, 2007).

The difficulty to provide conclusive evidence for the psychological outcomes of martial arts practice and to determine if and to what extent martial arts trainings explain the above mentioned effects (Guivernau & Duda, 2002; Kavussanu & Ntoumanis, 2003; Miller, Roberts, & Ommundsen, 2005; Ommundsen, Roberts, Lemyre, & Treasure, 2003), needs a more in-depth analysis of those dispositional aspects which can impact adaptive behaviors in terms of sportspersonship. Such individual characteristics can theoretically involve not only dispositional goal orientations, namely task and ego orientations, but also personality traits, such as trait aggressiveness.

The relationship between dispositional goal orientations and sportspersonship has been widely analyzed (e.g., Bortoli, Messina, Zorba, & Robazza, 2012; Jing-Horng Lu, & Hsu, 2015; Monacis, de Palo, & Sinatra, 2014), supporting the assumption that task orientation is associated with high level of sportsmanship, enjoyment, and effort in sport participation, whereas ego orientation is linked to performance impairment and higher levels of trait and state anxiety.

2. Problem Statement

However, no study on sportspersonship and goal orientations has been carried out in the specific context of martial arts. Actually, motivational orientations have been investigated in relation to martial artists' performance and fun (King & Williams, 1997) or to the type of martial arts (Gernigon & Le Bars, 2000). As for as trait aggressiveness is concerned, to our knowledge only one cross-sectional study in martial arts has showed negative associations between sportspersonship and trait aggressiveness within a causal model including other determinants strictly related to motivational dispositions, i.e., task/ego orientation and self-determined motivation (Monacis, de Palo, & Sinatra, 2015).

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3. Research Questions

In light of these two contrasting views, the current research intended to support the positive aspect of martial arts practice by providing findings which confirm the negative association between higher inclinations towards aggressiveness, ego oriented motivation, and sportpersonship behaviours.

4. Purpose of the Study

Consequently, the main purpose of the current study was to provide further empirical evidence for the potential value of martial arts in promoting personal growth and prosocial attitudes. Indeed, following Dorak's (2015) suggestion that both sportsmanlike and unsportsmanlike behaviours would require certain personality traits, this research analyzed in depth the impact of motivational dispositions and trait aggressiveness on sportspersonship. It was expected that sportspersonship was predicted negatively by ego orientation and trait aggressiveness and positively by task orientation**.**

5. Research Methods

5.1. Sample

The sample consisted initially of 389 Italian athletes. 23 of them did not complete the questionnaire, thus the final sample consisted of 366 martial artists (M_{age} = 29.60, SD = 9.22; 325 males). 67.5% took part in competitions. 9.3% of athletes competed in the junior category (under 18), 49.7% in the adult category (19 to 30 years), 15.0% in the master category (from 31 to 35 years), and 26.0% in the senior category (of 36 years and older).

5.2. Procedure and instruments

After the written consent form was signed, the participants completed voluntary the questionnaire before the training session with the presence of the authors, who explained that the questionnaire was anonymous and that personal data would be disclosed or used only for research purpose. The variables considered for analyses were goal orientations, trait aggressiveness and sportspersonship. The following instruments were used:

- The Italian version of the Task and Ego Orientation Sport Questionnaire (TEOSQ; Duda, 1989; Bortoli & Robazza, 2005), composed of 13 items rated on a 5-point Likert scale (1 = strongly disagree, 5 = completely agree), contains two subscales assessing task (α = .83) and ego orientation (α = .74).
- The Multidimensional Sportspersonship Orientation Scale (MSOS; Vallerand, Brière, Blanchard, & Provencher, 1997), translated into Italian following the parallel back-translation procedure, is composed by 25 items rated on a Likert scale 5 points (1 = not correspond at all, 5 = correspond exactly). The instrument measures 5 dimensions: respect for social conventions, respect for rules and the sports authorities, respect for the commitment toward sport participation, respect for opponents, and negative approach toward sport participation. A global sportspersonship index was calculated by recoding scores on the negative approach

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toward sport participation subscale, and then adding the mean score of each subscale (Vallerand & Losier, 1994). The internal reliability of the index was acceptable with α = .72.

- The short version of the Aggression Questionnaire (Bryant & Smith, 2001) is designed to assess the dimensions of aggression (physical aggression, verbal aggression, anger, and hostility). The questionnaire, translated into Italian, consists of 12 items rated on a response scale of 5 points (1 = completely false, 5 = completely true). For the statistical analyses it was considered the total score with a Cronbach's alpha of .80.

6. Findings

Means and standard deviations of the scores are reported in Table 1

Table 01. Means (M) and standard deviations (SD) for the total sample and the gender groups

	Total (N = 366)	**Men (N = 325)**	**Women (N = 41)**
	M (SD)	**M (SD)**	**M (SD)**
1. Task Orientation	31.02 (3.82)	30.98 (3.86)	31.37 (3.50)
2. Ego Orientation	12.24 (3.99)	12.17 (4.05)	12.78 (3.55)
3 Sportspersonship	20.13 (2.05)	20.15 (2.04)	19.99 (2.14)
4. Aggressiveness	24.00 (7.33)	23.99 (7.58)	24.05 (5.04)

In order to examine gender effect on the variables of interest, t-test was performed. Data showed no significant differences ($p > .05$) in scores between males and females. Bivariate correlations coefficients are showed in Table 2. Results indicated that sportspersonship was associated negatively with aggressiveness and ego orientation and positively with task orientation.

Table 02. Bivariate correlations between the variables

	1	**2**	**3**	**4**
1. Task Orientation	-			
2. Ego Orientation	.08	-		
3. Sportspersonship	.44**	-.24**	-	
4. Aggressiveness	-.08	.29**	-.32**	-

(*) $p < .05$; (**) $p < .01$

Causal relationships were examined by hierarchical regression analysis with sportspersonship as dependent variable and the other constructs as independent variables. The criteria for entering variables into the regression model were based on the *r* coefficients: the first predictor with the largest correlation was task orientation (step 1), the second predictor with the next highest shared variance was aggressiveness (step 2), and the last was ego orientation (step 3). The first step accounted for 20% of variance ($Adj\ R^2 = .194$), the second for 28% of variance ($Adj\ R^2 = .272$), and the third for 32% of variance ($Adj\ R^2 = .313$). Both aggressiveness and ego orientation significantly increased the predicted

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variance, *Adj* R^2 *change* = .080 and *Adj* R^2 *change* = .043, respectively. Sportspersonship was predicted positively by task orientation (β = .44) and negatively by aggressiveness (β = -.28) and ego orientation (β = -.22).

7. Conclusion

The present study was designed to examine the antecedents of the sportspersonship with a particular attention to dispositional factors, namely motivational orientations and trait aggressiveness, in the specific context of martial arts. The expected hypotheses were generally confirmed. Correlations revealed that higher is the tendency to focus on personal improvement and to perceive success as a product of effort and persistence, greater the level of sportspersonship. In contrast, higher is the athletes' tendency to focus on winning and to perceive success as a competence relative to others, as well as higher is the level of trait aggressiveness, lower are the sportspersonship orientations. These findings are consistent with the relative scientific literature dealing with the above mentioned relationships in different sports domains (Kavussanu, 2007; Lee, Whitehead, Ntoumanis, & Hatzigeorgiadis, 2008; Lemyre, Roberts, & Ommundsen, 2002), except for martial arts.

A noteworthy result of the current study was the higher predictive power of aggressiveness compared to ego orientation in negatively impacting sportspersonship, as it can be noted in the change of the adjusted R^2 values. One possible explanation may be due to the positive association between martial arts, considered a setting in which there is a relatively high base rate of physical aggression, and a higher inclination towards aggressiveness (Edressen & Olweus, 2005; Reynes & Lorant, 2002a, 2002b, 2004). That is, trait-aggressive individuals display more hostile tendencies in their perceptions of interpersonal relations and, thus, less respect for rules, authorities, and opponents than ego-oriented athletes who, in any case, show a few enthusiasm in sport participation, compare themselves with others, and use traps or deception during a competition, implementing antisocial behaviors.

However, based on the beta coefficients, task orientation resulted the most influential positive factor predicting prosocial sport behaviors. That is, in judging their level of ability on the basis of the their own standards and in exerting high levels of efforts demonstrating high levels of persistence and a scarce fear of failure, task-oriented athletes exhibit positive attitudes toward sport participation in terms of respect for rules, authorities and opponents.

In conclusion, following the request of many researchers who insist on the need to analyze those dispositional aspects able to transform martial arts into an effective tool for preventing antisocial attitudes (Guivernau & Duda, 2002; Kavussanu & Ntoumanis, 2003, Miller, Roberts, & Ommundsen, 2005; Ommundsen, Roberts, Lemyre, & Treasure, 2003; Zivin et al., 2001), this study motivates future research in this direction.

Some limitations must be noted. First, the unbalanced sample in terms of gender, which is overwhelmingly male, did not allow the generalization of the results. This limitation is mainly due to the type of sport characterized by limited female practitioners. Second, as self-report measures are affected by social desirability biases, they should be combined with more objective instruments. In addition, the order in which the questionnaires are presented should be more sophisticated to prevent possible effects

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of scale format (Duffy, 2003). Besides these indications, further research should take into account the age category (juniors, adults, seniors, etc.) as well.

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