

The Impacts of Perceived Organizational Support and Psychological Capital on Sport Burnout of Junior High School Physical Education Students

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Abstract: This study mainly explores the impacts of different background variables, perceived organizational support, and psychological capital on sport burnout of junior high PE students. The participants were PE students in 7th-9th grades from 11 public junior high schools. Out of 420 distributed questionnaires, 388 valid responses were obtained with a response rate of 92.4%. The analysis result showed that in Model 1, only grade dimension of background variables had a significant explanatory power on sport burnout. In Model 2, perceived organizational support in involvement with control background variables (gender, grade, sport training seniority) was found to effectively promote the model's explanatory power at 5% level, implying the higher perceived organizational support junior high students acknowledge, the lower sport burnout possibility is. In Model 3, control background variables (gender, grade, sport training seniority) and perceived organizational support when involving four dimensions of psychological capital (self-efficacy, hope, optimism, resiliency) can additionally increase 29.2% of the explanatory power. Among these dimensions, self-efficiency and optimism are considered two most critical factors affecting sport burnout of junior high students, implying that once students have higher self-efficiency and optimism, the rate of sport burnout will be definitely lower. The achieved findings hope to provide related organizations and future studies with useful references and guidelines in their work field.

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1. Introduction

The main purpose of establishing PE courses in Taiwan is to cultivate outstanding talents with PE potential for professional training and competition as well as promote national PE achievement and fulfill the spirit of holistic education by extending students' capabilities to the full (Hung & Chua, 2005). As such, in the contexts of PE class, perceived organizational support (POS) has been emphatically explored due to its critical role in improving organizational performance (Eisenberger, Huntington, Huntington, & Sowa, 1986).

In the extant literature, the terminology of POS originates from social exchange theory which considers POS not only from the maximization of personal benefits but also from the identification of personal affections (Aselage & Eisenberger, 2003). Accordingly, POS perceives that interpersonal relationships among people are built up based on intangible psychological contracts, in which the pay of society's party will become a standard of measuring how to reply by other parties. As a result, in the workplace, the employees will decide their performance and present corresponding behavior in accordance with the extent of perceived organizational support (Eisenberger, Cummings, Armeli, & Lynch, 1997; Eisenberger, Armeli, Rexwinkel, Lynch, &

Rhoades, 2001). Due to its important role, POS has become one of the critical research issues in organizational behavior-related fields and have been widely applied in numerous investigations on organizational citizenship behavior, organizational equity, employee performance, solidarity, life conflict, organizational human relations, satisfaction, and loyalty (Conway & Coyle-Shapiro, 2012; Gavino, Wayne, & Erdogan, 2012; Hayton, Carnabuci, & Eisenberger, 2012; McCathy, Cleveland, Hunter, Darcy, & Grady, 2012). Chang, Lin, Chia, and Yang (2013) through examining PE faculties of 50 universities finds that perceived organizational support positively affects faculty's performance. Noteworthy, Chen (2011) and Lin, Hsueh, and Chiu (2012) point out that the reason of obstructing the development of physical education class is from teachers, school administration, and parents' non-support attitude. Taking this point, this study aims to further explore perceived organizational support in the context of PE students.

In terms of athlete performance, psychological feature has been proven to be an important factor (Cheng, 2000; Lin et al., 2012) since it is closely related to the fact whether the athletes can insist long and arduous training processes as well as overcome frustration suffering from competition processes and

help them adjust to the best situation in a short period in order to better face with the upcoming challenges, all of which are currently the critical concerns of sport psychology (Kuo & Chien, 2007; Smith, 1986).

In particular, human resource management in PE-related fields has paid more and more attention to psychological capital since it is an important track to investigate athlete psychological factors. Psychological capital was first proposed by Luthans (2002), referring to the adoption of positive psychological factors to explore individuals' organizational behavior performance. As such, it can promote individuals' positive psychological reaction, reduce negative psychological reaction, and assist individuals to present their optimum work performance rather than maintaining negative perspectives. In recent years, psychological capital have been widely applied in examining organizational behavior issues (Demerouti, Eeuwijk, Snelder, & Wild, 2011; Rego, Sousa, Marques, & Cunha, 2012; Roberts, Scherer, & Bowyer, 2011; Walumbwa, Luthans, Avey, & Oke, 2011) due to its benefits in promoting organizational work efficiency, organizational citizenship behavior, and leadership performance. Previous studies have also proven the positive impact of psychological capital on individuals' work performance, innovation, attitude, organizational behavior, and work devotion (Ardichvili, 2011; Peterson, Luthans, Avolio, Walumbwa, & Zhang, 2011; Sweetman, Luthans, Avey, & Luthans, 2011); however, the research focus have been mainly on business organizational members. Missing from literature is the investigation of the impact of psychological capital in the context of athletes. Taking this point, this study aims to target PE students as main research subjects to explore their psychological capital situation

In the environment of athletes, burnout is a key factor affecting their achievement performance and whether they should continue sport career. In the extant literature, a wide range of studies through exploring the issue of athlete burnout have pointed out that the main reasons are athletes' feelings of heavy training pressure and course contents during training processes and overloading training contents, which in turn makes them afraid of being unable to finish coach's requirements smoothly (Cohn, 1990; Raedeke, 1997). Aside from overtraining, previous research has also suggested that the factors of coach's leadership, athlete psychology, motivation, and pressure additionally result in athlete burnout (Gustafsson & Skoog, 2012; Isoard, Guillet, & Lemyre, 2012; Lonsdale, Hodge, & Rose, 2009). It is noted that in the context of PE students, they have to face various pressures not only from coliseum but also from long period training. From the initial athlete

selection processes for cultivating and training, PE students have to undergo a long period training process. In order to achieve outstanding performance, it is necessary for them to invest more time and efforts on stadiums. However, there is a concern that in order to train PE students, coaches will strengthen students' capabilities in accordance with improvement planning for athletes' weak parts while junior high students are under fast growing period of psychology and body conditions. Hence, the question raised is that will junior high PE students feel burnout intention when facing a series of pressures? This is also the key issue this study aims to sufficiently explore.

In general, the main function of PE class is to discover talented students with superior PE capabilities for professional training playground and stadiums. For junior high PE students, training processes are sometimes quite difficult and arduous with numerous challenges. Hence, without fortitudinous confidence, they will more easily generate confusion and suspicions on the track of PE courses. Based on this premise, this study aims to investigate the impact of perceived organizational support and students' psychological capital on sport burnout. As such, the achieved findings can serve as useful references and implications for coaches in their work field.

1.1 The relationship between perceived organizational support and sport burnout

Kelly (1990) through holding a concurrent coach position and taking PE teachers as research subjects found that the heavier work stress, the higher work burnout. In addition, Chiu (2012) confirmed the negative impact of perceived organizational support on sport burnout, especially on its dimensions of work exhaustion and service object exhaustion. This finding was in line with Tai (2009) that higher perceived organizational support would result in lower work burnout in the context of clinical nursing teachers. Moreover, Chen (2011) through defining perceived organizational support as the positive feelings acknowledged from work environment to individuals indicated that more supervisor and colleague support would effectively diminish work burnout rate. Further elaborating, Tseng (2012) through analyzing 705 service personnel in 190 service groups proposed that external organizational support could assist employees in facing stress and facilitate them to behave with stronger work ethic; additionally individuals' internal psychological capital efficiently helped adjusting stress. Similarly, Han (2012) through investigating 481 voluntary military gendarmes proved that perceived organizational support exhibited significant effect on career burnout. Based on these studies, this research aims to empirically verify the relationship

between perceived organizational support and sport burnout.

1.2 The relationship between psychological capital and sport burnout

Ho (2011) on investigating elementary teachers' psychological capital and work stress confirmed the significant impact of psychological capital on work stress, implying lower psychological capital led to higher work stress. Noteworthy, Wu (2012) further pointed out that despite a wide range of previous studies on the relationship between psychological capital and stress, its impacts on burnout intention has not been sufficiently emphasized. Since perceiving that burnout intention would be mainly triggered from stress, Wu (2012) through examining engineers' work in a science park found out that psychological capital exerted a significantly negative effect on career burnout. In line with this, Lin (2010) through investigating the impact of psychological capital on employees' quitting job intention argued that higher psychological capital effectively reduced employees' quitting job tendency. Moreover, Cheng (2008) stated that hope dimension of psychological capital had a significantly negative impact on emotional exhaustion, personal achievement degradation, and work burnout; additionally, the resiliency dimension exhibited a significantly negative impact on de-humanity and personal achievement degradation. These findings have been further supported by Chang et al. (2012) that psychological capital had a negative impact on job burnout but a positive impact on work satisfaction. Therefore, based on these premises, it is perceived that once university faculties' psychological capital capabilities are strengthened, job burnout will be effectively reduced and job satisfaction will be definitely promoted, which in turn create more valuable resource and bring competitive advantages for organizations. Taking this point, this research aims to mainly explore the impact of psychological capital on sport burnout.

According to previous studies, perceived organizational support, psychological capital, and sport burnout had correlative relationships. In the context of PE students, these aspects have been perceived to play significant roles. It is noted that PE students have to frequently play two roles of athletes and students, hence often encounter and bear external stress. Particularly, they have to spend more mental and physical efforts than ordinary students in lesson learning, sport training, competition participation, and interpersonal relationships. In case the students cannot adapt well and schools do not offer sufficient support, they will definitely encounter numerous adaptive obstacles, which in turn affect not only their achievement performance but also career development (Wang, 2007). Accordingly, this study aims to explore

the relationships among perceived organizational support, psychological capital, and sport burnout of PE students in junior high schools. The achieved findings hope to provide coaches with useful references and implications in their work field.

2. Methods

2.1 Sampling

Using convenience sampling method, survey questionnaires were sent to 11 public junior high schools in northern, middle, and southern Taiwan which have established PE class in their teaching curriculum. The research participants were mainly PE students within 7th to 9th grades. Out of 420 distributed questionnaires, 397 responses were achieved and 388 were valid for statistical analysis with a response rate of 92.4%.

The demographic analysis results, as presented in Table 1, showed that out of 388 respondents, 281 (72.4%) were male and 107 (27.6%) were female. Concerning grade, 142 (36.6%) were 7th grade students, 121 (31.2%) were from the 8th grade, and 125 (32.2%) belonged to the 9th grade. Finally, referring to sport training seniority, 130 (33.5%) were less than 3 years, 208 (53.6%) were within 4 to 6 years, and 50 (12.9%) were above 7 years.

Table 1. Demographic analysis of respondents (junior high PE students)

Variable	Category	Frequency	%
Gender	Male	281	72.4
	Female	107	27.6
Grade	7th	142	36.6
	8th	121	31.2
	9th	125	32.2
Sport training seniority	< 3 years	130	33.5
	4-6 years	208	53.6
	Above 7 years	50	12.9

2.2 Measurement Instruments

The questionnaires were divided into four main parts of (1) basic information, (2) perceived organizational support scales, (3) physiological capital scales, and (4) sport burnout scales. The details were presented as follows:

Basic information

This first part aimed to collect participants' basic information including gender, grade, and sport training seniority.

Perceived organizational support scales

In this section, based on Eisenberger et al. (1986), 7 questionnaire items for perceived organizational support scales were modified and developed in order to better suit research participants of junior high PE students. As such, five junior high school teachers

were additionally asked to review and modify the survey items. All questionnaire items were evaluated using Likert five-point scale, ranging from “totally disagree” to “totally agree”. The exploratory factor analysis (EFA) was then adopted to test perceived organizational support scales. The achieved results proved perceived organizational support to be a single factor with five questionnaire items with 57.75% total variance explained. In the next step, reliability was assessed based on coefficient of internal consistency. The obtained Cronbach’s α was .87, indicating very high internal consistency, thus confirming reliability.

Physiological capital scales

In this section, based on Lee (2009) and Luthans (2002), all questionnaire items for four dimensions of physiological capital (self-efficacy, hope, optimism, and resiliency) were modified and developed. All questionnaire items were evaluated using Likert five-point scale (1= “totally disagree”, 2= “disagree”, 3= “relatively agree”, 4= “agree”, and 5= “totally agree”). The exploratory factor analysis (EFA) was then adopted to test the validity of physiological capital scales. The results proved that self-efficacy (4 items), hope (4 items), optimism (4 items), and resiliency (4 items) took account for 57.26% of total variance explained. Additionally, the achieved Cronbach’s α coefficient values for the physiological capital scales was .92, in which the values for self-efficacy, hope, optimism, and resiliency were .85, .81, .85, and .78, respectively and, indicating a high reliability.

Sport burnout scales

In this section, based on Lu, Chu, Tsai, and Jan (2009), all questionnaire items for three dimensions of sport burnout (physical and emotional burnout, sport participation devaluation, and achievement reduction) were modified and developed. All questionnaire items were evaluated using Likert five-point scale, ranging from 1= “totally disagree” to 5= “totally agree”. On testing the appropriateness of sport burnout scales, the EFA results proved that physical and emotional burnout (4 items), sport participation devaluation (5 items), and achievement reduction (4 items) indicated 59.49% of total variance explained. Additionally, the achieved Cronbach’s α coefficient values for sport burnout scales was .89, in which the values for physical and emotional burnout, sport participation devaluation, and achievement reduction were .81, .89, and .85, respectively, indicating a high reliability.

2.3 Data Processing

The current study used SPSS for Windows 20.0 to analyze the data. The significant level of statistic test was based on $\alpha = .05$. The adopted statistical methods included descriptive statistics, factor analysis, and hierarchical regression.

3. Results

3.1 The impacts of background variables, perceived organizational support, and psychological capital on sport burnout of junior high PE students

In Table 3, the hierarchical regression analysis results divided independent variables into three blocks to respectively enter each model in order to explore their impacts on sport burnout of junior high PE students. The results showed that in Model 1, students’ background variables (gender, grade, and sport training seniority) all reached significant explanatory power on sport burnout of junior high PE students ($R^2 = .075$, $F = 10.33$, $p < .01$). However, among these variables, only grade exhibited a significantly positive impact on sport burnout of junior high PE students ($\beta = .242$, $t = 4.622$, $p < .01$), indicating that junior high PE students in higher grades has higher rate of sport burnout.

In Model 2, the results showed that control background variables in involvement with perceived organizational support all reached significant explanatory power on sport burnout of junior high PE students ($R^2 = .124$, $F = 13.579$, $p < .01$). As such, an increase in explanation power ($\Delta R^2 = .050$, $\Delta F = 21.653$, $p < .01$) proved that the involvement of perceived organizational support can effectively promote model’s explanatory power with an increase of 5%. Noteworthy, perceived organizational support was found to have a significantly negative impact on sport burnout of junior high PE students ($\beta = -.227$, $t = -4.653$, $p < .01$), indicating that junior high PE students with higher perceived organizational support has lower rate of sport burnout.

In Model 3, the results showed that control background variables in involvement with perceived organizational support and four dimensions of psychological capital (self-efficiency, hope, optimism, and resiliency) all reached significant explanatory power on sport burnout of junior high PE students ($R^2 = .416$, $F = 33.748$, $p < .01$). As such, an increase in explanation power ($\Delta R^2 = .292$, $\Delta F = 47.344$, $p < .01$) proved that the involvement of four dimensions of psychological capital can effectively promote model’s explanatory power with a sharp increase of 29.2%. Noteworthy, among these four dimensions, only self-efficiency and optimism were found to have significantly negative impacts on sport burnout of junior high PE students ($\beta = -.242$, $t = -3.893$, $p < .01$ and $\beta = -.317$, $t = -5.365$, $p < .01$, respectively), implying that self-efficiency and optimism of psychological capital were two most critical factors reducing sport burnout of junior high PE students. In other words, PE students with higher self-efficiency and optimism would exhibit lower rate of sport burnout.

Table 2. Correlation analysis among perceived organizational support, psychological capital, and sport burnout of PE students in junior high schools

	Self-efficacy	Hope	Optimism	Resiliency	Physical and Emotional burnout	Devalue sport participation	Reduce achievement
Self-efficacy	1						
Hope	.70**	1					
Optimism	.68**	.69**	1				
Resiliency	.54**	.53**	.49**	1			
Physical and emotional burnout	-.29**	-.30**	-.33**	-.34**	1		
Devalue sport participation	-.56**	-.51**	-.63**	-.34**	.51**	1	
Reduce achievement	-.47**	-.32**	-.35**	-.31**	.36**	.48**	1
Sport burnout	-.56**	-.48**	-.56**	-.41**	.78**	.84**	.77**

Table 3. Hierarchical regression analysis of sport burnout of PE students in junior high schools

Independent variable	Model 1			Model 2			Model 3		
	β	t	p	β	t	p	β	t	p
Gender	.079	1.564	.119	.047	.952	.342	-.010	-.244	.808
Grade	.242	4.622*	.000	.204	3.960*	.000	.144	3.339	.001
Sport training seniority	.032	0.596	.552	.045	.856	.393	.085	1.982	.048
Perceived organizational support				-.227	-4.653*	.000	-.037	-.868	.386
Self-efficacy							-.242	-3.893*	.000
Hope							-.027	-.437	.662
Optimism							-.317	-5.365*	.000
Resiliency							-.082	-1.669	.096
R ²	.075			.124			.416		
F	10.33**			13.579**			33.748**		
P	.000			.000			.000		
ΔR^2	.075			.050			.292		
ΔF	10.33**			21.653*			47.344**		
ΔP	.000			.000			.000		

* $p < .05$, ** $p < .01$

4. Conclusions

This study mainly aims to explore the effects of different background variables, perceived organizational support, and psychological capital on sport burnout of junior high PE students. Regarding Model 1, the analysis results show that only grade of background variables has a significant explanatory power on sport burnout of junior high students. Concerning Model 2, perceived organizational support is found to effectively promote the model's explanatory power with a 5% level. In other words, the higher perceived organizational support junior high students acknowledge, the lower sport burnout possibility is. Noteworthy, Model 3 analysis results present that control background variables (gender, grade, sport training seniority) and perceived organizational support when involving four dimensions of psychological capital (self-efficacy, hope, optimism, resiliency) can additionally increase 29.2% of the explanatory power. Among these dimensions, self-efficiency and optimism are considered two most critical factors affecting sport burnout of junior high students, implying that once

students have higher self-efficiency and optimism, the rate of sport burnout will be definitely lower.

5. Recommendations

In the extant literature, numerous studies have suggested that organizations attempt to give more support to employees increase their organizational citizenship behavior (Tung & Zeng, 2011), promote their job involvement (Chang, 2010), and reduce their quitting job intention (Hsu, Chang, & Wu, 2012). In this research, perceived organizational support was found to effectively reduce sport burnout of junior high students. Additionally, self-efficiency and optimism of psychological capital were indicated to be two most important factors toward sport burnout reduction of junior high students. Therefore, it is strongly recommended that coaches should emphatically strengthen these two factors during cultivation and training.

Currently, in practice, there are less studies focus on exploring athletes' perceived organizational support and psychological capital. Hence, this study with two crucial factors of psychological capital on sport burnout reduction of junior high students has significantly encouraged future research to prove

more empirical support on the impacts of positive psychological capital on athletes' sport burnout reduction and general performance. Future studies are also suggested to provide more evidences for explaining impacts' influential power and stability. Noteworthy, in this research, positive psychological variables were adopted due to their benefits in stimulating personal meaningful behaviors, which in turn helps enhance performance and modify negative behaviors. Therefore, future studies are suggested to examine the impacts of positive psychological behavior variables on revising sport burnout variable such as sport performance, sport achievement, and sport involvement.

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