

The Effects of Coaching Styles on Artistic Swimmers' Intention to Continue Athletic Career

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The main purpose of the current study was to analyze the effects of coaches' leadership styles on athletes' intention to continue their athletic career in the sport of artistic swimming. The population of this study was all athletic swimmers at the elite level. A sample of 196 artistic swimmers from 23 countries participated in a questionnaire pertaining to autocratic coaching, democratic coaching style, and intention to continue athletic career. Frequent analysis and multiple regression analyses were conducted to examine the relationships between two coaching styles and the outcome variable. The results revealed that democratic coaching style had a positive influence on athletes' intention to continue, whereas autocratic coaching style had negative influence on athletes' intention to continue. The results suggest that democratic coaching style could be more effective than autocratic coaching style to induce a long-term participation in the sport.

Key word: coaching styles, artistic swimmer, intention to continue

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Introduction

Extensive participation is critical a sport to become and remain globally competitive. Consequently, it is vital for each sport association to discover factors that could attract more people to participate in a given sport and increase participants' level of athletic enjoyment, which lead them to continue their participation in the sport. Various aspects like teams, teammates, and coaches have been identified and found to influence participants' athletic satisfaction in sports and their intention to continue or withdraw from their athletic career (Fraser-Thomas, Côté, & Deakin, 2008; Gearity & Murray, 2011). Among these factors, coaches have been considered one of the important aspects because they should play a critical role in developing athletes' performance and satisfaction levels, as athletes spend a lot of time with their coaches during training and competition. In sports, coaches play multiple roles, including as mentors, teachers, and leaders. They are also tasked with designing training programs, supervising trainings, and planning tactical supports before and during competitions for their teams and athletes. Given the deep relationship between coaches and athletes, coaches are influential figures who have the most impact—positive or negative—on athletes' lives (Smith & Smoll, 1996). The impact could be even greater for athletes at the elite level, as these athletes spend considerably more time engaging in intensive training with coaches.

Elite athletes who regard their sports as an important part of their lives will give significant consideration to deciding whether or not to continue their athletic careers. Many studies in the literature have found that athletes' enjoyment of their sports is a key factor that could influence their persistence and performance in a sport (Bengoechea, Streat, & Williams, 2004; Mageau & Vallerand, 2003). In other words, increasing participants' enjoyment levels in sports is important in encouraging more people to engage in sports. Coaches are responsible for providing and preserving the ideal conditions for athletes to exhibit their full potential in competitions. Coaches should have an appropriate coaching style, which gains the respect of athletes and motivates them to improve (Marcone, 2017).

A coach could be often one of the main reasons of athletes' worry to continue or withdraw from one's athletic career since the relationship between a coach and an athlete could have a significant effect on athletic experiences physically and psychologically (Parker, 2010). However, some coaches underestimate their impact as mentors on athletes and are more interested in winning and achievement than creating an environment to provide athletes with the best experience and value (Parker, 2010). Athletes who have negative experiences with their coaches would feel difficulty developing the effective coach–athlete relationship, which eventually have negative impacts on athletes' perspectives toward sports and participation. Furthermore, research has found that withdrawal decisions may arise from displeased relationships with their coaches (Fraser-Thomas, Côté, 2009).

How coaches communicate with and train their athletes is critical in shaping athletic experiences.

Therefore, the current study attempted to investigate the relationship between coaching styles and athletes' intention to continue in the sport of artistic swimming. It is important to understand the preferences of coaching styles among the athletes in order to improve the development of the sport and its athletes (Parker, 2010).

Research Model and Hypotheses

The proposed relationships between coaching styles and intention to continue a sport are illustrated in Figure 1. The research model includes three variables: (a) autocratic coaching style, (b) democratic coaching style, and (c) intention to continue a sport.

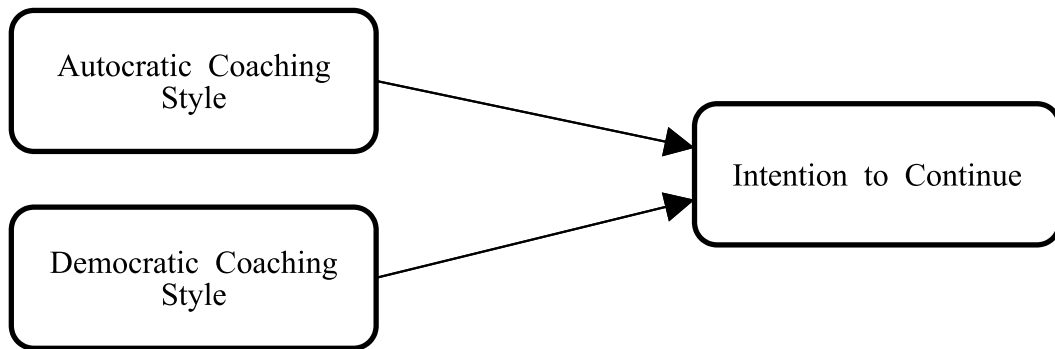


Figure 1. *Research model*

Autocratic Coaching Style

An autocratic style is defined as a leadership style on the basis of the belief that authority and decision-making should be centralized to a powerful leader (De Cremer, 2006). For example, according to the leadership, a coach as a powerful figure should make all important decisions for his/her team and players rather than provide opportunities to his/her athletes to bring their opinions and ideas regarding matters with the team. Particularly, coaches employ this specific coaching style to achieve important goals (Van Vugt, Jepson, Hart, & De Cremer, 2004). Coaches with autocratic leadership expect that athletes should be self-disciplined and highly obedient to the rules, policies, and decisions made by the coaches and organization. Thus, the coaches with an autocratic coaching style will take an advantage of their position power to force their athletes to follow their direction. In addition, the coaches will tell athletes how to behave and control how each member can contribute to the sport team (Castillo et al., 2014).

According to Castillo et al. (2014), autocratic coaches can be effective and beneficial when athletes are at the phase of learning and developing their skills because they demand more directions and specific trainings to enhance their athletic skills. Particularly, the coaching style can be more effective since it may help athletes their performance in closed-skill sports in which the environment is relatively highly constant, foreseeable, and self-paced like dancing, swimming, artistic swimming, and running (Wang et al., 2013). Closed-skill sports refer to sports. In addition, when discipline and obedience are seen as the critical aspects to successfully mastering skills and achieving high levels of success, athletes are likely to prefer an autocratic coaching style to enhance their skills (Bass, 1998). Lyle (2005) insisted that an autocratic coaching style as a one-way learning process should involve little empathy. Thus, the autocratic coach gets involved with setting regulations, rewards, and standards for a team, and he/she does not provide any alternatives or explanations for his/ her athletes (Mageau & Vallerand, 2003).

This coaching style allows a coach to have quick decision makings during their trainings or competitions when their athletes are needed, which may lead athletes to be more focused on their trainings and competitions. However, there are also negative aspects of the autocratic coaching style. An autocratic coach will also provide some feedback to his/her athletes, but this feedback is usually not encouraging, but negative. When athletes under an autocratic coaching style fail to comply mandatory strategies like rules and instructions employed by the coach, the failure to meet the coach's expectations or rules may result in punishment. Therefore, the athletes are likely to attempt to have the flawless accomplishment of their tasks given by the coach to avoid this punishment (Bass, 1998). The potential punishment from their failure make the athletes disfavor their autocratic coach and develop low levels of loyalty and commitment to their team or coach.

Democratic Coaching Style

A democratic coaching style refers to a "nice-guy" coaching style which allows and encourages athletes to have high levels of participation in the decision-making process within a team (Mageau & Vallerand, 2003). This coaching style highly highlights interpersonal relationships and communications between a coach and athletes. Thus, the democratic coach often adopts an approach to set rules and policies as well as provides instructions based on athletes' perspectives (Castillo et al., 2014).

Mageau and Vallerand (2003) identified democratic coaching behaviors: (a) provision of alternatives to athletes under specific regulations and limits, (b) explanation of rationales of tasks and limits to athletes, (c) consideration for athletes' feelings and viewpoints, (d) giving opportunities to athletes to be independent through their own decisions on tasks, and (e) provision of non-controlling feedback and avoidance of controlling behaviors like mandatory instructions and criticism.

Coaches with A democratic coach creates an encouraging atmosphere for his/her athletes during the learning and training process, which also can build a cohesive team with other teammates. In this less-intense and relaxed atmosphere, athletes are easily able to engage in their learning and training process (Lyle & Cushin, 2016) because this environment helps the team reduce stress and allows them to be physically and emotionally comfortable during the process. However, Lyle and Cushin (2016) also pointed out some concerns over the democratic coaching style because this coaching style tends to establish vague goals rather than rigorous and specific goals for his/her athletes (Catello et al., 2014). Thus, the athletes may ignore and disrespect the coach's instructions and decisions. Catello et al. asserted that unclear goals employed by the democratic coach would keep the athletes from achieving their tasks efficiently and effectively.

Outcomes of Coaching Styles

Each coach may have significant impacts on athletes through different coaching styles whether the impacts could be positive or negative (Marcone, 2017) since coaching styles that coaches adopted could influence athletes' motives and satisfaction with their sporting experience. A lot of studies have also found that athletes' emotional reactions are closely related with their motivation and willingness to train with their coaches based on interaction with them (De Cremer, 2006). In fact, each coaching style has its own ways of interaction and communication with their members. This coach's communication style may have a positive or negative impact on their athletes, depending on whether the style fulfills or neglects the athletes' needs and feelings in their specific athletic situations. Hoffman et al. (2009) claimed that when there is the congruency between actual coaching behaviors and athletes' preferences and needs, a coach should have a positive effect on athletes' attitude toward the coach and athletic experience. In other words, when the athletes can participate in their sports under the optimal coaching style that well matches with their need, they would develop higher levels of athletic enjoyment and a beneficial experience.

On the basis of self-determination theory (Mageau & Vallerand, 2003), coaches play a crucial role in ensuring athletes' satisfaction with their sport experiences. Athletic satisfaction should not only be related to an athlete's individual and attitudes toward the sports, but also strictly linked to the coaching style and behaviors that the athlete experienced within his/her team. Consequently, athletic satisfaction had a significant relationship with their intention to continue the sport (Zucchetti, Candela, Rabaglietti, & Marzari, 2013).

Level of enjoyment is vital to one's intention to continue a certain behavior (Ryan & Connell, 1989). Barnett, Smoll, and Smith (1992) revealed that athletes led by democratic coaches showed high levels of positive attitudes and self-esteem and low levels of sport withdrawal. The findings indicated

that a coaching style may influence athletes' perception about their athletic experiences and their intentions to continue their participation in the sport recreationally or professionally. When athletes' psychological needs are met or unmet, they will assess positively or negatively their experience with activities or sports, resulting in the willingness and effort to improve or ignore (Marcone, 2017). The findings of previous studies regarding the relationships between types of coaching styles and the outcome variables lead to the proposed model of the current study. Therefore, the main purpose of the current study was to analyze the effects of coaches' leadership styles on athletes' intention to continue their athletic career in the sport of artistic swimming. It is expected that athletes with democratic coaches will show a higher level of intention to continue in their sport because these coaches demonstrate compassion, consider athletes' abilities, understand their views and ideas, and respond positively. Therefore, this study created the following two hypotheses based on theoretical background mentioned above.

Hypothesis 1: Autocratic coaching style influence on intention to continue sport participation.

Hypothesis 2: Democratic coaching style influence on intention to continue sport participation.

Method

Participants and Survey Procedure

The population of the current research consists of athletic swimmers at the elite level from 23 countries. This study used both online and offline survey methods to collect data. For the offline survey, the questionnaires were distributed to the athletes before or after their training sessions, and the participants voluntarily completed the surveys. For the online survey, e-mail links to the survey, along with relevant information and instructions, were sent to the swimmers. E-mail reminders were also sent to encourage participation in the study. A total of 196 athletic swimmers completed the questionnaires. The majority of the participants were female ($n = 195$; 99.5%) and all of the participants were 18 to 25 years old. Table 1 shows a complete demographic profile of the participants.

Table 1. *Frequencies and Percentages of Respondents by Gender & Country*

	Frequency	Percentage
Gender		
Female	195	99.5
Male	1	0.5
Country		
Hong Kong	26	13.3
England	19	9.7
Macau	17	8.7
Singapore	14	7.1
France	9	4.6
Malaysia	9	4.6
Indonesia	8	4.1
Ukraine	8	4.1
United States	7	3.6
Switzerland	7	3.6
Canada	7	3.6
Egypt	7	3.6
Others	56	28.5

Instrumentation

Seventeen items from previously validated instruments were used to assess the variables of the current study; a) autocratic coaching style (five items), b) democratic coaching style (nine items), c) intent to continue (one item), and d) demographic information. Autocratic and democratic coaching behaviors were measured using the Leadership Scale for Sports (LSS), which was developed by Chelladurai and Saleh (1980). Although the original LSS scale includes a) training and instruction, b) autocratic behavior, c) democratic behavior, d) social support, and e) positive feedback with 40 items, this study chose 14 items from two dimensions. In terms of scale reliability, Chelladurai and Saleh reported .66 for autocratic behavior and .77 for democratic behavior. Sample items include “Does not explain his/her action” and “Speaks in a manner not to be questioned” for autocratic behavior and “Asks for the opinion of the athletes on strategies for specific competitions” and “Lets his/her athletes share in decision-making” for democratic behavior. A five-point Likert-type scales, ranging

from 1 (*never*) to 5 (*always*) were used. In order to measure intention to continue, we created one item “I will continue to participate in artistic swimming.” A five-point Likert-type scale, anchored by 1 (*absolutely not*) and 5 (*definitely yes*) was used.

Data Analysis

First, frequency analysis (e.g., gender and country) was performed. Second, descriptive statistics, Cronbach’s alpha, correlation coefficient among three variables were calculated. Finally, a multiple regression analysis was utilized to explore the relationships between the two types of coaching behaviors and intent to continue. In determining whether all of statistical tests were significant or not, this study used $p < .05$ as the criteria.

Results

Reliability and Validity

Cronbach alphas were calculated to determine reliabilities for democratic and autocratic coaching styles. The results of the reliabilities ranged from $\alpha = 0.701$ for autocratic coaching style and $\alpha = 0.930$ for democratic coaching style), which satisfied the recommended benchmark of $\alpha = .70$ for internal consistency (Nunnally & Bernstein, 1994). As shown in Table 2, all constructs were significantly correlated with each other and all Pearson correlation coefficients were below the recommended threshold of $r = .85$ for multi-collinearity.

Table 2. *Correlation coefficients between coaching styles and intention to continue*

	Autocratic Coaching Style	Democratic Coaching Style	Intention to Continue
Autocratic Coaching Style	1		
Democratic Coaching Style	-.569**	1	
Intention to Continue	-.554**	.475**	1
Mean	2.689	2.715	3.785
Standard deviation	.999	.851	1.405
Cronbach’s alpha	0.701	0.930	

** $p < .01$

Hypothesis testing

Multiple regressions were performed to examine the relationships between types of coaching style and intention to continue. As a result, the regression model of was significant, $F(2, 193) = 50.679$, $p < .001$, $R\text{-square} = .344$, indicating that 34.4% of the variance in intention to continue can be explained by these two coaching styles. The unstandardized coefficients (b) of autocratic coaching style and democratic coaching style were $b = -.692$ ($\beta = -.419$) and $b = .332$ ($\beta = .236$) respectively, which supports Hypothesis 1 and 2.

Table 3. *Effects of Coaching Style Intention to Continue*

	b	se	beta	t	p
Constant	4.774	.526		9.077	.000
Autocratic Coaching Style	-.692	.117	-.419	-5.915	.000
Democratic Coaching Style	.332	.100	.236	3.328	.001

$F=50.679$, $p=.000$, $R^2=.344$, adjusted $R^2=.338$

Discussion

The main purpose of this study was to investigate the relationship between coaching style (autocratic and democratic) and athletes' intention to continue sport participation as athletes. The findings of this study should enable us to see which coaching style is more likely to increase their intrinsic motivation to continue artistic swimming. Based on previous research and theories on the relationships between coaches and athletes, two research hypotheses (H1: Autocratic coaching style influence on intention to continue sport participation and H2: Democratic coaching style influence on intention to continue sport participation) were proposed, and all two hypotheses were supported. Therefore, the results of this study yield insight into the importance of coaching style on athletes' behavioral outcomes and provide important practical implications for sport managers and coaches to be more effective.

The results of descriptive statistics show that artistic swimmers reported the means scores of $M = 2.689$ for autocratic coaching style, $M = 2.715$ for democratic coaching style, and $M = 3.785$ for intention to continue the sport. Particularly, the mean score of intention to continue was found to be above the mid-point of the scale ($M = 3.00$), which may indicate an outcome of positive experience with their athletic career because satisfaction and enjoyment in sport may result in high intention to continue their sport activities.

The findings of this study also revealed that an autocratic style has a negative impact on athletic intention to continue, whereas a democratic style has a positive impact on the outcome. The results of this study were consistent with previous studies in the relationships between coaching style and its outcomes. Barnett, Smoll, and Smith (1992) proposed that athletes who show a positive attitude toward coaches have a higher level of enjoyment in their sport and future intention. Because democratic-style coaches are likely to offer more positive feedback to their athletes regarding their performance and progress and to ask the athletes to actively share their opinions and thoughts on training and game strategies with the team, they tend to develop the perception of higher involvement as a member within the team (Henson, 2010). The findings of the current study also found that the experienced athletes at the elite level of artistic swimming as a closed-skill sport were influenced both democratic and autocratic coaching styles and showed higher levels of intention to continue artistic swimming when they had coaches with a democratic coaching style.

The findings showed that there were the positive association between democratic style and the intention and the negative association between autocratic style and the intention. However, the mean scores of both coaching styles indicated some room for improvement for both outcomes because the score for autocratic coaching style was only slightly lower than the midpoint the score for democratic coaching style was only slightly higher than the midpoint. Given the situation where athletes—especially elite athletes—and coaches need to spend large portions of time together in training and at competitions, it is very critical for each coach to fully understand what type of coaching style should be perceived as democratic or autocratic coaching style by his or her athletes and behave as they prefer to be treated in order to enhance athletes' enjoyment and eventually positively influence their behaviors. For example, a coach should be aware of what their coaching style is required and preferred and whether his or her coaching style is the most effective to achieving his or her team's performance and goals. There is no right or wrong coaching style and there are advantages and disadvantages each coaching style. Thus, it is important that coaches should choose and use an appropriate suitable coaching style to suit every different situation. A democratic-style coach should present appropriate reasons for commands and instructions and ask for their views rather than present unilateral orders and instructions (Castillo et al. 2014). In terms of artistic swimming, a closed-skilled sport, the coaches of artistic swimmers should think of a reasonable explanation for athletes' annual or seasonal training plan. Since the athletes need to train the same routine hundreds or even thousands of times, they easily become bored in the training and lose concentration from their routine works. When the coach could sufficiently explain why the artistic swimmers have to repeat certain trainings, the athletes are more likely to accept the training and overcome the exhausting time, which eventually helps the athletes successfully master the intended skills and performances.

Future Studies

While the current research helps the existing literature have more understanding of the importance of right coaching style by exploring the relationships between coaching styles and athletes' intention to continue in a sport, this study also prove a strong need for further studies on this topic because of its weakness and limitations. Future studies should explore the relationships between coaches' leadership styles and other relevant variables in sports using various approaches and methods. First, future studies should incorporate potential moderating variables like age, gender, length of athlete-coach relationship, and level of participation. Second, future studies should utilize potential mediators (e.g., leader-member exchange, perceived organizational support, satisfaction, involvement, and commitment) or outcomes (organizational citizenship behaviors and withdrawal) that could be impacted by coaching styles. Third, the current study collected data from fewer than 200 athletes, all artistic swimmers at the elite level; however, different groups (open-skill sports vs. closed-skill sports, recreational sports vs. competitive sports, or amateur vs. professional) of athletes can be distinguished in terms of perceived coaching behaviors which may affect athletes' attitudes and behaviors in their team and sports. Therefore, future studies should collect data from diverse sports to investigate differences. Finally, future studies should include qualitative approaches, (e.g., focus and individual interviews) to capture specific and individual information from the relevant personnel for more in-depth research on the coach-athlete relationship.

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