

## Sport referees' career commitment as a mediator between quality of work life (QWL) and turnover intent

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### Abstract

Referees as facilitators or conductors of every game play an extremely critical role in sports because they are one of the most important elements in providing pleasant and fair experiences to participants, spectators, and others in sporting events (Cuskelly & Hoyer, 2013; Grunski, 2002). Referees' role becomes even more significant in sanctioned, formal, or important competitions (Yip, Kim, & Love, 2017). To smoothly manage each game, referees should have not only sufficient knowledge of the rules and regulations of their sport but also a correct understanding of the aims of each event based on the level of competition so that they can adopt an appropriate standard in officiating in line with those aims. For instance, the objectives and values of recreational sports are fun, a healthy lifestyle, and skill development through sport participation rather than winning, which is the most highly valued element in competitive sports (Chelladurai & Kerwin, 2017). Therefore, referees' approach to recreational sports should focus more on positive sport experiences and enjoyment than on winning.

Sport officiating is a challenging and demanding task performed under great stress because referees are expected to continuously make correct, safe and fair judgments of every individual play during a match (Kim, 2017; Yip et al., 2017). Since referees are well aware of how important their calls are in a game, they make great efforts to remain focused on each play to meet these expectations. However, it is almost impossible for them to perform perfectly with no mistakes during every competition. Although bad calls unwittingly made by referees are often accepted as part of a game, it is not uncommon to see fans and media criticizing and blaming bad calls that may actually have altered the outcome of a match, which could ultimately intensify the stress and pressure on referees (Folkesson, Nyberg, Archer, & Norlander, 2002; Parsons & Bairner, 2015). Infuriated critics often go beyond merely blaming referees for bad calls. Players and coaches often verbally abuse and even physically attack referees when the players and coaches do not agree with their calls. For instance, soccer players who were angry about being shown a red card killed referees during amateur soccer matches in Argentina and Mexico in 2016 (Couzens, 2017; Gibson, 2016).

Key words: Sport officials, Career commitment, Work life, Turnover intent

### Sport Officials

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Submitted : 19 July 2018  
Revised : 21 August 2018  
Accepted : 6 September 2018  
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A number of studies (Anshel & Weinberg, 1999; Dorsch & Paskevich, 2007; Folkesson et al., 2002; Rainey, 1999; Voight, 2009) have been conducted to understand the

sources of the stress that sport referees experience. The identified stressors include a) interpersonal conflicts with athletes, coaches, other referees, and family members; b) fear of mental or physical harm from potential threats, abuse, or other verbal or physical forms of aggression from fans, athletes, and coaches; c) performance concerns regarding bad calls or controversial calls; d) time pressure; e) the presence of supervisors and media; f) injury; g) lack of recognition for their work or job performance by others; and h) other personal issues (e.g., conflicts between family life and officiating duties). Along with efforts to identify stressors of referees, researchers have also studied potential outcomes of the stressors because those pressures and stressors could influence referees' attitudes and behaviors (e.g., performance, motivation, and intent to quit officiating). Researchers studied how those stressors could influence referees' officiating decisions in different circumstances. Folkesson et al. (2002) found that among 107 referees of a provincial soccer league in Sweden, 78 referees (72.9%) reported that they had experienced some type of aggression and threats from athletes, coaches/trainers, or fans during or after games. The study revealed that the referees' unpleasant experiences had some impact on their motivation as well as their concentration and performance during the games. Friman, Nyberg, and Norlander (2004) found that some angry and vengeful athletes, coaches, and fans who disagree with referees' calls could impact referees' subsequent decisions because frightened referees tend to worry about aggressive individuals who may become more violent and threatening in response to the referees' calls during games, particularly in important competitions. In fact, the findings may explain the home court or field advantage provided by referees. In other words, referees may be more likely to make favorable calls for home teams because they have experienced verbal and physical abuse or threats from angry home fans for controversial calls in similar situations (Balmer, Nevill, Lane, Ward, Williams, & Fairclough, 2007). For the same reason, there is a strong possibility that more foul calls may be made by referees against visiting teams than home teams in sports (Anderson & Pierce, 2009). The level of referees' stress becomes even higher for a chief

referee and in high-profile competitions, such as professional league games, world championships, and the Olympics because such high-profile competitions attract more public attention, which makes referees worry about making mistakes or their performance. A chief referee with a more important role may experience more stress (Dorsch & Paskevich, 2006). Not only situational factors but also the personal characteristics of each referee are likely to influence the level of stress. Folkesson et al. (2002) noted that the age, degree of experience, and life orientation of the referees could have some impact on the outcomes. Younger referees with less experience are more vulnerable to stress from threats and aggression during or after games, while more experienced referees are less sensitive to criticisms, threats, and aggression during the games (Balmer et al., 2007). In addition, referees with a pessimistic orientation showed lower levels of motivation and performance than referees with an optimistic orientation (Folkesson et al., 2002). Some referees under stress became burned out and in turn quit officiating (Anshel & Weinberg, 1996; Rainey & Hardy, 1999). In fact, approximately 7,000 soccer referees in Britain quit officiating every season due to excessive abuse (Graham, 2009).

Many sport associations have a hard time finding qualified referees for their sporting events (Mick, 2004). For instance, according to the Hong Kong Basketball Association (HKBA), there were only 95 officially registered referees in Hong Kong (HKBA, 2014). This small number of referees, ranging from the lowest level to the international level, had to officiate all competitions in Hong Kong, including regional, inter-high school, inter-university, and three major basketball league competitions. It is a very challenging and difficult task for the association to provide high-quality services to its participants with such limited human resources. To improve the situation by recruiting and retaining sufficient referees, sport associations should have a better understanding of sport referees. It is a fundamental and critical task for human resources managers or employers to maintain the well-being of their employees by providing a supportive and enjoyable work environment for their valuable human assets (Guest, 2017). Efforts to improve the well-being of employees

eventually lead to the overall success of the organization (Van De Voorde, Paauwe, & Van Veldhoven, 2012).

There is a lack of existing literature on sport referees based on perspectives of human resources management, even though referees are important stakeholders and human resources (Yip, et al., 2017). In fact, the majority of attention in the field of sport management is directed toward athletes, coaches, volunteers, and administrators. In addition, more research is required to gain insight into sport referees to improve their well-being, which in turn will improve the quality of the games on the field for other stakeholders, such as fans, athletes, coaches, and administrators. Therefore, the current study was designed to understand the relationships between the working conditions of sport referees and turnover intention via career commitment, which will eventually help sport association retain their valuable human resources.

### Development of Theoretical Model

Based on the literature on QWL, the proposed conceptual model (Figure 1) was designed to consist of three constructs: (a) working conditions, (b) career commitment, and (c) turnover intention.

### Quality of Work Life (QWL)

For an organization to become successful and effective

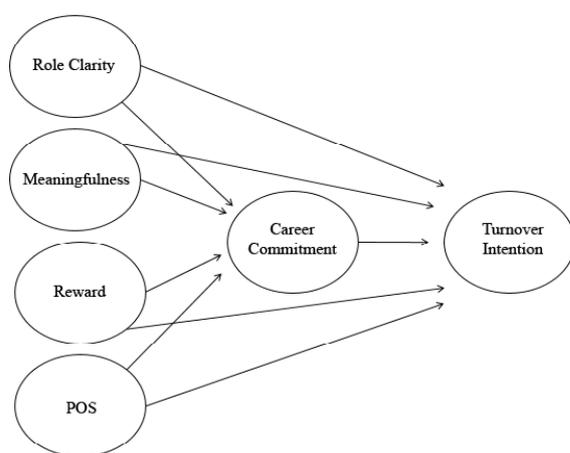


Figure 1. Proposed Research Model

in a highly competitive business environment, providing a high quality of work life (QWL) has become imperative in attracting and retaining valuable and talented employees. For example, if an organization tries to cut business costs and maximize profits by simply downsizing its current health and welfare programs, such a restructured system would have a negative impact on employees' morale and job satisfaction. Therefore, it is very important for an organization to build an organizational culture in which its people are treated with dignity and respect as the most important resource in the organization and to make continuous efforts and contributions so that they can experience a high QWL. QWL is expected to have an impact on not only work-related attitudes and behaviors but also people's life outside work (Sirgy, Efraty, Siegel, & Lee, 2001).

Given the importance of QWL in both life at work and life outside work, research on the topic has been conducted continuously over the past four decades in different business contexts such as banking, universities, information technology, and manufacturing. These studies (Farjad & Varnous, 2013; Gurses, Carayon, & Wall, 2008; Koonmee, Singhapakdi, Virakul, & Lee, 2010; Lowe, 2000; Rainyee, 2012) have identified and studied various components of QWL, including 1) fair, innovative, and equitable reward systems; 2) job security; 3) safe and healthy environments; 4) skill development opportunities; 5) occupational stress; 6) meaningfulness; 7) growth opportunities; 8) supervisory support; 9) organizational support; 10) social integration; 11) workload; 12) challenges; and 13) balance in work. In addition, many studies have investigated the relationships between QWL and related outcomes. With respect to the relationships, the studies have consistently found that QWL has positive or negative relationships with job satisfaction (Tang, 2007), organizational commitment (Farid, Izadi, Ismail, & Alipour, 2015), organizational performance (Judge, Thoresen, Bono, & Patton, 2001), intention to continue/leave (Perry, Xu, Duffield, Gallagher, Nicholls, & Sibbritt, 2017) and organizational citizenship behaviors (Pradhan, Jena, & Kumari, 2016). The current research selected the four sub-dimensions of quality of work life (role clarity, meaningfulness, reward, and organizational support) among various dimensions.

Although referees' salaries are relatively low compared to most occupations in Hong Kong, the referees are likely to continue their officiating jobs when they feel fairly treated (e.g., reward) and supported by their associations (e.g., organizational support) and are happy with their cognitive experiences (e.g., role clarity and meaningfulness) in their sports. Given the situation, these sub-dimensions seemed most applicable to Hong Kong sport referees among various dimensions.

### Career Commitment

Career commitment is defined as the extent to which people identify with and value their profession (Blau, 1985). It is expected that the more individuals become involved with their profession, the more committed they become to their job (Goulet & Singh, 2002). Previous studies have argued that career commitment has potential relationships with work-related outcomes and actually found positive relationships with salary, promotions, organizational commitment, and job and career satisfaction (Ballout, 2009; Goulet & Singh, 2002; Poon, 2004; Shah, 2011). When members of organizations have a higher commitment to both their organization and their profession, they have higher intentions to perform focal and discretionary behaviors (Tsoumbri & Xenikou, 2010). However, most studies in the field of organizational behavior have focused on organizational commitment and its antecedents and outcomes. Similarly, career commitment has not often been utilized as an outcome variable for studies on QWL, although Rashid and Zhao (2010) argued that commitment to career should be considered a more important element than commitment to organizations if the organizations wish to obtain employees' acceptance of certain changes. To enhance the level of career commitment, organizations should provide a good QWL (e.g., appropriate workloads, duties and supervision) for their employees (Baggerly & Osborn 2006; Huang, Lawler, & Lei, 2007).

### Turnover Intent

As discussed earlier, many sport referees have determined

to quit officiating due to a stressful work environment. Thus, it is very important for organizations to understand how they can enhance referees' working conditions to retain these important human resources. Huang et al. (2007) found that QWL had a negative relationship with individuals' turnover intentions as well as organizational and career commitment. In other words, when referees experience a high level of QWL in their work-related experiences, they are less likely to consider quitting. In fact, several studies on sport referees (Kellett & Shilbury, 2007; Tingle, Warner, & Sartore-Baldwin, 2014) have attempted to investigate factors that could positively or negatively influence their turnover intentions. Particularly, Tingle et al. (2014) revealed four factors that led female basketball referees in the United States to leave their careers due to a lack of opportunities to become involved with the officiating community. The factors were a) a lack of respect from men, b) perceived inequality of policies between male and female referees, c) insufficient mentoring of female referees, and d) gendered abuses.

Although the findings of such studies consistently support the benefits of QWL for work-related outcomes (e.g., job satisfaction, organizational commitment, and individual and organizational performance), and career commitment has also been shown to be an important predictor of work-related outcomes, it has rarely been adopted in examining these relations. Therefore, the current study proposed career commitment as one possible mediator of the relationship between QWL and referees' turnover intent. As discussed earlier, previous studies have demonstrated strong links between QWL and turnover intent (Perry et al, 2017) and between career commitment and turnover intent (Park & Jung, 2015). Thus, it is rationally assumed that referees who are more likely to perceive high QWL would report higher levels of career commitment and in turn have less intention to quit officiating. In other words, QWL may be related to turnover intent through the mediating mechanism of career commitment. That is, we hypothesize that career commitment at least partially mediates the relation of QWL to turnover intent.

## Method

### Participants and Procedures

The sample was drawn from 13 sport associations (badminton, basketball, fencing, gymnastics, handball, rugby, soccer, swimming, table tennis, taekwondo, tennis, track and field, and volleyball) in Hong Kong. Since this study incorporated internet survey methodologies, the researchers sent emails containing a link to an online survey (Survey Monkey) as well as relevant information and instructions regarding the research and asked the associations to forward the link to their certified sports referees. Emails were sent to the associations on three consecutive Mondays to remind their referees to complete the survey. A total of 212 sports referees participated in the survey from various sports, such as volleyball ( $n = 55$ , or 26.0%), basketball ( $n = 42$ , or 19.8%), handball ( $n = 27$ , or 12.7%), swimming ( $n = 23$ , or 10.8%), fencing ( $n = 14$ , or 6.6%), taekwondo ( $n = 13$ , or 6.1%), tennis ( $n = 9$ , or 4.2%), gymnastics ( $n = 8$ , or 3.8%), and others ( $n = 21$ , or 9.9%). There were 121 males, or 57.1%, and 91 females, or 42.9%. The majority of the participants were 21 to 30 years old ( $n = 127$ , or 59.9%), followed by 31 to 40 years old ( $n = 29$ , or 13.6%), 41 to 50 years old ( $n = 22$ , or 10.4%), below 21 years old ( $n = 17$ , or 8.1%), and above 50 years old ( $n = 7$ , or 3.3%). In addition, 77.8% of the participants in this study had another job ( $n = 165$ , or 77.8%) in addition to officiating as a referee.

### Instruments

The survey for this study contained 35 items, including demographic information (e.g., gender, age, participating sport) and the following three constructs: a) QWL [role clarity (5 items), meaningfulness (3 items), POS (7 items), and reward (5 items)], b) career commitment (7 items), and c) turnover intention (3 items). The original items from the constructs were modified for the current study.

#### *Working Conditions*

Although various sub-dimensions of QWL have been

studied in the literature (Yip et al., 2017), the current study used four sub-dimensions (e.g., role clarity, meaningfulness, reward, and POS) to examine QWL. Items for role clarity and meaningfulness were adopted from Van der Doef and Maes (1999). Sample items included “I know exactly what are my tasks” and “I know exactly what others expect of me in my job” for role clarity and “My work is worthwhile” and “The work I do is useful” for meaningfulness. Perceived organizational support (POS) was assessed using the scale developed by Farmer and Fedor (1999). Sample items included “My officiating administration truly cares about my well-being” and “My officiating administration ignores my complaints (reverse code).” For role clarity, meaningfulness, and POS, seven-point Likert scales ranging from 1 (strongly disagree) to 7 (strongly agree) were used. Reward was assessed using the distributive justice scale developed by Curry, Wakefield, Price, and Mueller (1986). The scale measured referees’ perceptions of fairness regarding their salary based on responsibilities, education and training, effort, stress, and work. Sample items included “How fair has the organization been in rewarding you when you consider the stresses and strains of your job?” and “How fair has the organization been in rewarding you when you take into account the amount of education and training that you have?” A 7-point Likert scale ranging from 1 (not fair) to 7 (very fair) was utilized to assess reward.

#### *Career Commitment*

Career commitment was assessed using Blau’s (1989) scale. Sample items were “If I had all the money I needed, I would still want to be in this vocation,” “I would take a different job that paid the same (reverse code),” and “I want a career in this vocation.” A seven-point Likert-type scale, anchored by strongly disagree (1) and strongly agree (7), was used.

#### *Turnover Intent*

VanYperen’s (1998) scale was used to assess turnover intention in this study. The scale consists of three items: “Do you intend to stop officiating at the end of this season?”

“Are you planning to officiate again next season (reverse code)?” and “If it were possible to quit officiating right now, would you quit?” Respondents indicated the extent of their agreement with each item on a seven-point Likert-type scale anchored by absolutely not (1) and definitely yes (7) to indicate the referees’ turnover intention.

## Data Analysis

A two-step approach to structural equation modeling (SEM) was employed in the current study. AMOS 22.0 was used for the process. As the first step, the researchers checked the overall measurement model by conducting a confirmatory factor analysis (CFA), which allowed them to confirm the data fit with a predetermined model (Andrew, Pedersen, & McEvoy, 2011). The six scales for role clarity, meaningfulness, reward, organizational support, career commitment, and turnover intention were included in the CFA. The researchers used the comparative fit index (CFI), the chi-square per degrees of freedom ratio ( $\chi^2/df$ ), and the root mean square error of approximation (RMSEA) to examine the model fit and the recommended values of the three indices to assess the measurement model. If a CFI value is higher than .9, it is considered a reasonable fit even though it is considered a better fit when the value is closer to 1 (Bentler, 1990). With respect to a chi-square per degrees of freedom ratio, if a value is in the range from 2 to 3, it is considered a reasonable fit. If a value is closer to 1, it indicates a better fit (Carmines & McIver, 1981). For RMSEA, if a value is .08, it is considered a reasonable fit, although a value below .06 indicates a close fit (Hu & Bentler, 1999). After the measurement model was evaluated and accepted with some necessary alternations, the proposed model was tested to examine whether the data could provide an adequate fit to the model as the second step. In this stage, the direct and indirect (mediating) relations between QWL and turnover intention through career commitment were tested. We also used CFI,  $\chi^2/df$ , and RMSEA to assess the proposed model. In testing the mediating effects of career commitment, we utilized Sobel’s formula (Sobel, 1982).

## Results

### Model Testing and Modification

The overall fit indices for the CFA demonstrated that the original measurement model had an unacceptable fit [ $\chi^2(df) = 867.83(390)$ ,  $\chi^2/df = 2.23$ ,  $p < .001$ ; CFI = .873; RMSEA = .076] compared to the recommended values of the three indices. From the original scales of the constructs, four role clarity and POS items were eliminated from further analysis due to very low factor loading values below .50 based on Bagozzi and Yi’s (1988) recommendations, and four additional POS and career commitment items were also eliminated from further analysis, although the values of the items were slightly over .50, because the relatively low factor values of the items had large negative impacts on the AVEs. Five of the deleted items were reversed, which may result in low factor loadings from respondent errors associated with negatively stated items (van Sonderen, Sanderman, & Coyne, 2013). Since the current study used items not originally developed for sport officiating, some items (e.g., I know exactly what my colleagues think about my achievements) were not applicable. After the revisions, the fit indices [ $\chi^2(df) = 315.367(193)$ ,  $\chi^2/df = 1.634$ ,  $p < .001$ ; CFI = .960; RMSEA = .055] had improved enough to be acceptable for the revised measurement model. Convergent validity was supported by all factor loadings being significant ( $p < .01$ ), and average variance extracted (AVE) values ranged from .504 to .859, which exceeded the recommended value of .50 (Fornell & Larcker, 1981; Hair, Anderson, Tatham, & Black, 2005).

### Descriptive Statistics

Table 1 shows the means and standard deviations of the items and constructs in the research model. The results show that the means of role clarity, POS, and meaningfulness were above the midpoint of the scale ( $M = 4.00$ ), while the means of reward and turnover intention were below the midpoint. The means for the constructs ranged from

2.35 (turnover intention) to 5.89 (role clarity). Table 2 shows that Cronbach's alpha coefficients ranged from .727 (role clarity) to .970 (reward), which indicated that the internal consistency reliabilities of all the constructs exceeded .70 (Nunnally & Bernstein, 1994), and all six variables were correlated.

## Structural Model Testing

After testing the measurement model through CFA, the results of the proposed structural model incorporating role clarity, POS, meaningfulness, reward, career commitment, and turnover intention revealed that all the fit indices [ $\chi^2$

**Table 1.** Means (*M*), Standard Deviations (*SD*), and Coefficients ( $\lambda$ ) for the Variables (*N*=212)

Variable	Items	<i>M</i>	<i>SD</i>	$\lambda$	AVE
Role		<b>5.89</b>	<b>.86</b>		<b>.554</b>
Clarity	I know exactly which are my tasks	6.10	.96	.843	
	I know exactly my responsibilities	6.17	.95	.832	
	I know exactly what others are expecting of me	5.39	.127	.510	
Meaningfulness		<b>5.72</b>	<b>.97</b>		<b>.504</b>
	My work is worthwhile	5.78	1.24	.730	
	I feel committed to my work	5.76	1.08	.702	
	The work I do is useful	5.61	1.24	.698	
Reward		<b>3.63</b>	<b>1.56</b>		<b>.859</b>
	How fair has the organization been in rewarding you when you consider the amount effort that you have put forth?	3.77	1.65	.961	
	How fair has the organization been in rewarding you when you consider the responsibilities that you have?	3.67	1.68	.971	
	How fair has the organization been in rewarding you when you consider the stresses and strains of your job?	3.46	1.65	.915	
	How fair has the organization been in rewarding you when you take into account the amount of education and training that you have?	3.63	1.59	.889	
	How fair has the organization been in rewarding you when consider the work that you have done well?	3.60	1.65	.895	
POS		<b>4.36</b>	<b>1.07</b>		<b>.516</b>
	Assistance is available from the officiating administration when I have a problem.	4.95	1.23	.587	
	My officiating administration really cares about my well-being.	4.16	1.36	.757	
	My officiating administration cares about my opinions.	4.31	1.36	.713	
	My officiating administration tries to make my job as interesting as possible.	4.01	1.45	.800	
Career Commitment		<b>4.50</b>	<b>1.24</b>		<b>.533</b>
	I want a career in this vocation.	4.11	1.73	.595	
	If I had all the money I needed, I would still want to be in this vocation	4.77	1.58	.637	
	I enjoy my vocation too much to give it up.	4.85	1.45	.849	
	This is my ideal vocation for my life work.	4.26	1.44	.807	
Turnover Intention		<b>2.35</b>	<b>1.35</b>		<b>.589</b>
	Do you intend to stop officiating at the end of this season?	2.36	1.53	.761	
	Are you planning to officiating again next season?	2.34	1.42	.795	
	If it were possible to quit officiating right now, would you quit?	2.35	1.44	.745	

**Table 2.** Correlations among Quality of Work Life, Career Commitment, and Turnover Intention and Cronbach Alphas ( $\alpha$ ) for the constructs

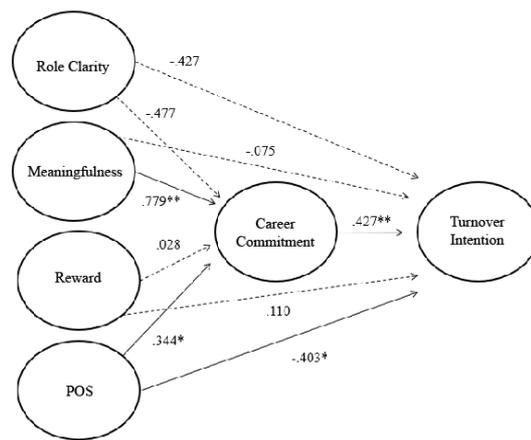
	Role Clarity	Meaningful	Reward	POS	Career Commitment	Turnover Intention
Role Clarity	( $\alpha=.727$ )					
Meaningful	.588**	( $\alpha=.730$ )				
Reward	-.025	.074	( $\alpha=.970$ )			
POS	.123	.230**	.394**	( $\alpha=.807$ )		
Career Commitment	.101	.343**	.186**	.348**	( $\alpha=.807$ )	
Turnover Intention	-.295**	-.343**	-.034	-.299**	-.373**	( $\alpha=.907$ )

Correlations were significant at the .01 level\*\* and at the .05 level\*.

( $df$ ) = 315.367(193),  $\chi^2/df = 1.634$ ,  $p < .001$ ; CFI = .960; RMSEA = .055] were acceptable. The results demonstrated that only POS had a direct impact on turnover intention ( $\gamma = -.403$ ;  $SE = .164$ ;  $p < .001$ ) among the QWL variables.

The indirect (mediated) relationships between QWL and turnover intention via career commitment were assessed using Sobel's formula (Sobel, 1982; Baron & Kenny, 1986). Sobel's formula is  $z = (a \times b) / \text{square of root of } (b2sa2 + a2sb2)$ . In this formula,  $a$  is an unstandardized regression coefficient between an independent variable and a mediator,  $b$  is an unstandardized regression coefficient between a mediator and a dependent variable,  $Sa$  is the standard error of  $a$ , and  $Sb$  is the standard error of  $b$ .

Since there were significant direct relationships between POS ( $\gamma = .344$ ;  $SE = .142$ ;  $p < .001$ ) and meaningfulness ( $\gamma = .779$ ;  $SE = .213$ ;  $p < .001$ ) and career commitment, two mediating relationships were tested. First, the indirect link between POS and turnover intention was significant ( $z = -1.95$ ;  $p < .05$ ), and the magnitude (-.147) of the link was computed by multiplying the path coefficients from the POS  $\rightarrow$  career commitment link ( $\gamma = .344$ ;  $SE = .142$ ) and the career commitment  $\rightarrow$  turnover intention link ( $\gamma = -.427$ ;  $SE = .130$ ), which revealed the partial mediating impact of career commitment between POS and turnover intention. Next, the indirect link between meaningfulness and turnover intention via career commitment was significant ( $z = -2.44$ ;  $p < .05$ ). The magnitude of the indirect link was .118 [i.e., meaningfulness  $\rightarrow$  career commitment link ( $\gamma = .779$ ;  $SE = .213$ )  $\times$  career commitment  $\rightarrow$  turnover intention ( $\gamma = -.427$ ;  $SE = .130$ )], which revealed the full mediating relationship

**Figure 2.** Final Research Model

between meaningfulness and turnover intention via career commitment. Figure 2 illustrates the final model based on the research results.

## Discussion

Sport referees play key roles in offering high-quality competitions to participants and spectators in sporting events (Cuskelly & Hoye, 2013). However, little research has been conducted to understand them as an important human resource in the field of sport management. During competitions, the referees are expected to consistently make fair and correct decisions, which may cause them to feel great stress and eventually lead them to discontinue their officiating career (Yip et al., 2017). The current study attempted to use the concept of QWL to examine the effects of referees' work experiences on turnover intention.

Based on previous studies regarding the relationships between QWL and outcome variables in the field of organizational behavior, the conceptual model was proposed. The results of the present research make a significant academic contribution to the field of sport management and have practical implications for sport associations by yielding insight into the effects of referees' QWL on turnover intention.

The findings of the current study generally support the proposed model, although all sub-dimensions of QWL had significant direct or indirect effects on turnover intentions through career commitment. Most importantly, POS was revealed as the only sub-dimension of QWL that had both direct and indirect effects on the outcome. The findings support Yip et al.'s (2017) study, which found that POS was the only sub-dimension among several sub-dimensions to have a negative impact on referees' turnover intention. Referees' intention to leave their officiating careers would depend on both a) the referees' perception of the quality of the exchange relationship with their sport association and b) their attachment to their officiating career, initially reinforced by the perceived quality of the exchange relationships. Given that most referees determine to leave their officiating career within the first five years, Cuskelly and Hoye (2004; 2013) insisted that sport organizations should provide strategically planned organizational support for referees early in their careers. The efforts of sport associations can improve work-related attitudes (e.g., job satisfaction and organizational and career commitments), which may eventually result in low referee turnover (Kim, 2017).

Therefore, sport associations should seek ways to improve referees' POS. According to the social exchange theory (Blau, 1964), when referees perceive organizational support from an organization, they tend to put more effort into reciprocating the favorable treatment. Although the mean (4.36) for POS in the current study revealed that respondents generally indicated that they perceived organizational support to be fair by reporting above the midpoint of the scale (4.00), there is still room for improvement. Many researchers have identified various elements that can help employers improve employees' perceptions of organiza-

tional support. The factors include a) opportunities to participate in decision making (Allen, Shore, & Griffeth, 2003), b) fair procedures within an organization, c) supervisory support, d) satisfactory rewards (Rhoades & Eisenberger, 2002), and f) growth opportunities (Wayne, Shore, & Liden, 1997). In addition, the associations should build effective communication with their referees and recognize the referees' need to receive what they expect from their association (Cullen, Edwards, Casper, & Gue, 2014). The associations should develop methods to regularly appreciate their referees' contributions. For example, the associations could send "thank-you" notes to their referees after a game or a tournament and create an award ceremony to make them feel appreciated by their associations. It is expected such efforts and motions of the associations could positively enhance referees' POS.

Second, the results of the present study revealed the mediating effect of career commitment between meaningfulness and turnover intention, which provides an important message to sport associations. In other words, referees who derive meaning from their work would develop higher levels of psychological attachment to their officiating career and be more likely to remain in their career despite unfavorable working conditions (e.g., low salary). Although meaningfulness had an indirect impact on turnover intention through career commitment, it is still important for a sport association to help sport officials feel that their task/work is meaningful to retain important staff. As an effort to increase the level of meaningfulness, a sport association could develop a training program emphasizing how vital the referees' contributions are in providing high-quality sporting experiences to participants and spectators. Given that a referee's single error could change the entire outcome of a match (Cuskelly & Hoye, 2013), each sport association should make its referees well aware of the importance of their jobs/tasks to the success of sporting events and demonstrate appreciation for referees' efforts to improve their level of career commitment. In turn, those highly committed referees will be more likely to stay longer with the association, which may solve the problem of insufficient sport officials in Hong Kong (Yip et al., 2017).

## Limitations and Future Research

While the current study expands the existing literature on sport referees by investigating the effects of QWL on turnover intention via career commitment, several limitations should be recognized, and further studies based on those limitations should be conducted to understand sport referees as a critical human resource in sport organizations and to discover potential solutions for the insufficient supply of referees in sports. First, the convenience sampling method based on a modest sample of 212 from 12 sports in Hong Kong was utilized by the current study, which allows us to have only limited confidence in the generalizability of the findings. Appropriate caution should be used in generalizing the findings of the present study beyond the context of Hong Kong. Thus, it is recommended that future studies recruit larger groups of participants from more different sports to increase the generalizability of the study.

Second, the current study analyzed the data as a single sample. However, classifying participants into several groups based on the different status of referees (e.g., male vs. female, part-time vs. full-time, and junior vs. senior) could enable additional comparisons among the groups. For instance, 77.8% of the participants in this study had their secondary jobs, which may influence levels of career commitment or turnover intention. Thus, future studies should identify moderating variables and compare potential differences in the proposed model.

Finally, the current study used a cross-sectional design. Since referees' work-related attitudes (e.g., job satisfaction, organizational commitment, and career commitment) and behavioral outcomes (e.g., turnover intention and organizational citizenship behaviors) may change over time, future studies should adopt a longitudinal approach to examine the transformation of attitudinal and behavioral outcomes.

## References

- Anderson, K. J., & Pierce, D. A. (2009). Officiating bias: The effect of foul differential on foul calls in NCAA basketball. *Journal of Sports Science, 27*, 687–694.
- Andrew, D. P. S., Pedersen, P. M., & McEvoy, C. D. (2011). *Research methods and design in sport management*. Champaign, IL: Human Kinetics.
- Anshel, M. H. & Weinberg, R. S. (1996) Coping with acute stress among American and Australian basketball referees. *Journal of Sport Behavior, 19*(3), 180-204
- Anshel, M., H. & Weinberg, R. S. (1999). Re-examining coping among basketball referees following stressful events: Implications for coping interventions. *Journal of Sport Behavior, 22*(2), 141-161.
- Ballout, H. (2009). Career commitment and career success: Moderating role of self-efficacy. *Career Development International, 14*(7), 655-670.
- Baggerly, J., & Osborn, D. (2006). School counselors' career satisfaction and commitment: Correlates and predictors. *Professional School Counseling, 9*(3), 197-205.
- Bagozzi R. P. & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*(1), 74-94.
- Balmer, N. J., Nevill, A. M., Lane, A. M., Ward, P., Williams, M. A., & Fairclough, S. A. (2007). Influence of crowd noise on soccer refereeing consistency. *Journal of Sport Behavior, 30*, 130-145.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238-246.
- Blau, G. J. (1985). The measurement and prediction of career commitment. *Journal of Occupational Psychology, 58*, 277-288.
- Blau, G. J. (1989). Testing the generalizability of a career commitment measure and its impact on employee turnover, *Journal of Vocational Behavior, 35*(1), 88-103.
- Carmines, E. G., & McIver, J. P. (1981). Analyzing models with unobserved variables. *Social measurement: Current issues, 65*-115.
- Chelladurai, P., & Kerwin, S. (2017). *Human resource mana-*

- gement in sport and recreation (3rd ed.). Champaign, IL: Human Kinetics.
- Couzens, G. (2016, December 31). Mexican referee dies in hospital of brain damage after being attacked by a player he sent off during match. *Mailonline*. Retrieved August 19, 2018 from <http://www.dailymail.co.uk/news/article-5224801/Mexican-referee-dies-attacked-player.html>
- Curry, J., Wakefield, D., Price, J., & Mueller, C. (1986). On the causal ordering of job satisfaction and organizational commitment. *Academy of Management Journal*, **29**, 847-858.
- Cuskelly, G., & Hoye, R. (2013). Sports officials' intention to continue. *Sport Management Review*, **16**(4), 451-464.
- Dorsch, K., & Paskevich, D. (2007). Stressful experiences among six certification levels of ice hockey officials. *Psychology of Sport and Exercise*, **8**(4), 585-593.
- Farjad, H., & Varnous, S. (2013). Study of relationship of quality of work life (QWL) and organizational commitment. *Interdisciplinary Journal of Contemporary Research in Business*, **4**(9), 449-456.
- Farid, H., Izadi, Z., Ismail, I., & Alipour, F. (2015). Relationship between quality of work life and organizational commitment among lecturers in a Malaysian public research university, *The Social Science Journal*, **52**(1), 54-61.
- Farmer, S. M., & Fedor, D. B. (1999). Volunteer participation and withdrawal. *Nonprofit Management and Leadership*, **9**, 349-368.
- Folkesson, F., Nyberg, C., Archer, T., & Norlander, T. (2002). Soccer referees' experience of threat and aggression: Effects of age, experience and life orientation on outcome of coping strategy. *Aggressive Behavior*, **28**, 317-327.
- Fornell, C., and Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, **18**(1), pp. 39-50.
- Friman, M., Nyberg, C., & Norlander, T. (2004). Threats and aggression directed at soccer referees: an empirical phenomenological psychological study. *The Qualitative Report*, **9**(4), 652-672.
- Gibson, S. (2016, February 16). Match abandoned in Argentina when red-carded player returns with gun and shoots referee and opposition player. *The Telegraph*. Retrieved August 19, 2018, from <https://www.telegraph.co.uk/sport/football/12159807/Match-abandoned-in-Argentina-when-red-carded-player-returns-with-gun-and-shoots-referee-and-opposition-player.html>
- Goulet, L., & Singh, P. (2002). Career commitment: A reexamination and an extension. *Journal of Vocational Behavior*, **61**(1), 73-91.
- Graham, M. (2009, March 8). Abuse leads 7,000 refs a year to quit. *The Observer*, Retrieved from: <http://www.theguardian.com/football/2009/mar/08/football-referees>
- Grunska, J. (2002). The official's role in promoting sportsmanship: The official's role should be that of a gentle persuader, not harsh martinet. *Referee*, **17**, 14.
- Guest, D. E. (2017). Human resource management and employee well-being: towards a new analytic framework. *Human Resource Management Journal*, **27**(1), 22-38.
- Gurses, A., Carayon, P., & Wall, M. (2009). Impact of performance obstacles on intensive care nurses workload, perceived quality and safety of care, and quality of working life. *Health Services Research*, **44**(2), 422-443.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2005). *Multivariate data analysis* (6th ed.). Prentice Hall Upper Saddle River, NJ.
- Hong Kong Basketball Association (2014a). Local competitions. Retrieved from <http://www.basketball.org.hk/index.php/match/match01>
- Hong Kong Basketball Association (2014b). Referees list. Retrieved from <http://www.basketball.org.hk/index.php/referee1/referee-list>
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling*, **6**(1), 1-55.
- Huang, T., Lawler, J., & Lei, C. (2007). The effects of quality of work life on commitment and turnover intention.

- Social Behavior and Personality: *An International Journal*, **35**(6), 735-750.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, **127**(3), 376-407.
- Kellett, P., & Shilbury, D. (2007). Umpire participation: Is abuse really the issue? *Sport Management Review*, **10**(3), 209-229.
- Kim, S. (2017). Perceived organizational support as a mediator between distributive justice and sport referees' job satisfaction and career commitment. *Annals of Leisure Research*, **20**(2), 169-187.
- Koonmee, K., Singhapakdi, A., Virakul, B., & Lee, D. (2010). Ethics institutionalization, quality of work life, and employee job-related outcomes: A survey of human resource managers in Thailand. *Journal of Business Research*, **63**(1), 20-26.
- Lowe, G. S. (2000). *The quality of work: A people-centred agenda*. Oxford University Press, Ontario, Canada.
- Mick, C. (2004, October 14). Fears over shortage of referees at top level. *The Telegraph*. Retrieved from <http://www.telegraph.co.uk/sport/rugbyunion/international/2388387/Fears-over-shortage-of-referees-at-top-level.html>.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.
- Park, I., & Jung, H. (2015). Relationships among future time perspective, career and organizational commitment, occupational self-efficacy, and turnover intention. *Social Behavior and Personality: An International Journal*, **43**(9), 1547-1561.
- Parsons, T., & Bairner, A. (2015). "You want the buzz of having done well in a game that wasn't easy.": A sociological examination of the job commitment of English football referees. *Movement and Sport Science-Science & Motricité*, **87**(1), 41-52.
- Perry, L., Xu, X., Duffield, C., Gallagher, R., Nicholls, R., & Sibbritt, D. (2017). Health, workforce characteristics, quality of life and intention to leave: The 'Fit for the Future' survey of Australian nurses and midwives. *Journal of Advanced Nursing*, **73**(11), 2745-2756.
- Poon, J. (2004). Career commitment and career success: Moderating role of emotion perception. *Career Development International*, **9**(4), 374-390.
- Pradhan, R., Jena, L., & Kumari, I. (2016). Effect of work-life balance on organizational citizenship behavior: Role of organizational commitment. *Global Business Review*, **17**(3), 15-29.
- Rainey, D. W. (1999). Sources of stress, burnout, and intention to terminate among basketball referees. *Journal of Sport Behavior*, **44**, 578-590.
- Rainyee, R. (2012). Quality of work life: An empirical comparison. *International Journals of Marketing and Technology*, **2**(12), 237-250.
- Rashid, H., & Zhao, L. (2010). The significance of career commitment in generating commitment to organizational change among information technology personnel. *Academy of Information and Management Sciences Journal*, **13**(1), 111-131.
- Shah, N. (2011). Investigating employee career commitment factors in a public sector organization of a developing country. *Journal of Enterprise Information Management*, **24**(6), 534-546.
- Sirgy, M. J., Efraty, D., Siegel, P., & Lee, D. J. (2001). A new measure of quality of work life (QWL) based on need satisfaction and spillover theories. *Social Indicators Research*, **55**, 241-302.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological Methodology* (pp. 290-312). Washington DC: American Sociological Association.
- Tang, T. (2007). Income and quality of life: Does the love of money make a difference. *Journal of Business Ethics*, **72**(4), 375-393.
- Tingle, J. K., Warner, S., & Sartore-Baldwin, M. L. (2014). The experience of former women officials and the impact on the sporting community. *Sex Roles*, **71**(1), 7-20.
- Tsoumbris, P., & Xenikou, A. (2010). Commitment profiles: The configural effect of the forms and foci of commitment on work outcomes. *Journal of Vocational Behavior*, **77**(3), 401-411.
- Van De Voorde, K., Paauwe, J., & Van Veldhoven, M. (2012).

- Employee well-being and the HRM–organizational performance relationship: A review of quantitative studies. *International Journal of Management Reviews*, **14**(4), 391-407.
- Van der Doef, M., & Maes, S. (1999) The Leiden quality of work questionnaire: its construction, factor structure, and psychometric qualities. *Psychological Reports*, **85**, 954-962.
- Van Sonderen, E., Sanderman, R., & Coyne, J. C. (2013). Ineffectiveness of reverse wording of questionnaire items: let's learn from cows in the rain. *PLoS One*, **8**(9). doi: 10.1371/annotation/af78b324-7b44-4f89-b932-e851fe04a8e5
- Van Yperen, N. W. (1998). Predicting stay/leave behavior among volleyball referees. *The Sport Psychologist*, **12**, 427-439.
- Voight, M. (2009). Sources of stress and coping strategies of US soccer officials. *Stress and Health*, **25**, 91-101
- Yip, W. C., Kim, S., & Love, A. (2017). Sport referees' quality of work life, job satisfaction, career commitment, and turnover. *International Journal of Sport Management*, **18**(1), 44-64.