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ORGANIZATIONAL COMMITMENT AND PERCEIVED RELATEDNESS AS
CORRELATES OF THE INTENTION TO CONTINUE OFFICIATING
IN TRACK AND FIELD

by

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A thesis submitted in partial fulfillment of the requirements for the degree of
Master of Arts in Applied Health Sciences

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Abstract

The objectives of the present study were to explore three components of organizational commitment (affective [AC], normative [NC] and continuance [CC] commitment; Allen & Meyer, 1991), perceived relatedness (Deci & Ryan, 1985; 2002), and behavioural intention (Ajzen, 2002) within the context of volunteer track and field officiating. The objectives were examined in a 2-phase study. During phase 1, experts ($N = 10$) with domain familiarity assessed the item content relevance and representation of modified organizational commitment (OC; Meyer, Allen & Smith, 1993) and perceived relatedness (La Guardia, Deci, Ryan & Couchman, 2000) items. Fourteen of 26 ($p < .05$) items were relevant (Aiken's coefficient V) and NC ($M = 3.88$, $SD = .64$), CC ($M = 3.63$, $SD = .52$), and relatedness ($M = 4.00$, $SD = .93$) items had mean item content-representation ratings of either "good" or "very good" while AC ($M = 2.50$, $SD = 0.58$) was rated "fair".

Participants in phase 2 ($N = 80$) responded to items measuring demographic variables, perceptions of OC to Athletics Canada, perceived relatedness to other track and field officials, and a measure of intention (Yiu, Au & Tang, 2001) to continue officiating. Internal consistency reliability estimates (Cronbach's (1951) coefficient alpha) were as follows: (a) AC = .78, (b) CC = .85, (c) NC = .80 (d) perceived relatedness = .70 and, (e) intention = .92 in the present sample. Results suggest that the track and field officials felt only minimally committed to Athletics Canada (AC $M = 3.90$, $SD = 1.23$; NC $M = 2.47$, $SD = 1.25$; CC $M = 3.32$; $SD = 1.34$) and that their relationships with other track and field officials were strongly endorsed ($M = 5.86$, $SD = 0.74$). Bivariate correlations (Pearson r) indicated that perceived relatedness to other track and field officials demonstrated the strongest relationship with intention to continue officiating ($r = .346$, $p < .05$), while dimensions of OC were not significantly related to intention (all p 's $> .05$). Together

perceived relatedness ($\beta = .339, p = .004$), affective commitment ($\beta = -.153, p = .308$), normative commitment ($\beta = -.024, p = .864$) and continuance commitment ($\beta = .186, p = .287$) contribute to the prediction of intention to continued officiating ($R^2 = .139$). These relationships remained unaffected by the inclusion of demographic ($\beta_{\text{age}} = -.02; \beta_{\text{years with Athletics Canada}} = -.13$; both p 's $> .05$) or alternative commitment ($\beta_{\text{sport}} = -.19; \beta_{\text{role}} = .15; \beta_{\text{athletes}} = .20$; all p 's $> .05$) considerations. Three open-ended questions elicited qualitative responses regarding participants' reasons for officiating. Responses reflecting initial reasons for officiating formed these higher order themes: *convenience, helping reasons, extension of role, and intrinsic reasons*. Responses reflecting reasons for continuing to officiate formed these higher order themes: *track and field, to help, and personal benefits*. Responses reflecting changes that would influence continued involvement were: *political, organizational/structural, and personal*. These results corroborate the findings of previous investigations which state that the reasons underpinning volunteer motivations change over time (Cuskelly et al., 2002). Overall, the results of this study suggest that track and field officials feel minimal commitment to the organization of Athletics Canada but a stronger bond with their fellow officials. Moreover, the degree to which track and field officials feel meaningfully connected to one another appears to exert a positive influence on their intentions to continue officiating. As such, it is suggested that in order to promote continued involvement, Athletics Canada increases its focus on fostering environments promoting positive interactions among officials.

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Chapter 1

Introduction

Current estimates indicate that 47,414 Canadians volunteered for Canadian heritage institutions in 2003 (Athletics Canada is subsumed within this government branch; retrieved from Statistics Canada, 2005). Notwithstanding this observation, emerging evidence highlights a concern for officiating retention in light of dropout rates observed by such sport organizations as the Canadian Hockey Association (30% estimated drop out rate; Deacon, 2001) and the Dutch Volleyball Association (20% estimated drop out rate; VanYperen, 1998). The present study will investigate track and field officials who volunteer for Athletics Canada given that official retention appears to be of concern to this organization (Athletics Canada, 2002).

One variable thought to influence participation decisions is an official's intention to continue officiating. Behavioural intention, the cognitive representation of a person's readiness to perform a specific behaviour, is considered to be the immediate determinant of behaviour (Ajzen, 2002). Accordingly, behaviour is theorized to occur immediately following an intention to perform that behaviour. Two variables in particular, organizational commitment (Meyer & Allen, 1991) and perceived relatedness (Ryan, 1999) have been linked with behavioural intention in previous research (Yiu et al. 2001; Ryan, 1995) and may be relevant for understanding track and field officials' intention to continue with the sport.

The first variable mentioned, organizational commitment (*OC*), describes a psychological link between an employee and an organization (Meyer & Allen, 1991). Meyer and Allen's (1991) conceptual model of *OC* contains 3 dimensions of commitment: (a) affective commitment, (b) continuance commitment, and (c) normative

commitment. Affective commitment (AC) refers to an individual's emotional attachment to an organization (Meyer & Allen, 1991) and develops to the extent that their experiences within the organization meet their expectations and satisfy their needs (Meyer et al., 1993). Continuance commitment (CC) summarizes an individual's psychological state of "having to stay" with an organization as opposed to "wanting to stay" (Meyer & Allen, 1997) and develops as a result of transactions that occur over time between the individual and the organization (Meyer & Allen, 1991). Normative commitment (NC) refers to feelings of obligation to remain with the organization and can be summarized as an individual's state of moral obligation to stay with an organization (Meyer & Allen, 1997). NC develops in response to the social norm which states that it is important to remain loyal to one's employer, or in response to having received benefits from the organization which foster a sense of obligation to reciprocate (Meyer et al., 1993). Together these three dimensions of OC have demonstrated a link with the intention to continue employment with a specific organization (Meyer & Allen, 1993).

The second variable, perceived relatedness, refers to feeling meaningfully connected to others within one's social milieu (Ryan, 1995, 1999). Relatedness represents a basic psychological need forwarded by Self Determination Theory (SDT; Deci & Ryan, 1985; 2002) that is considered fundamental for optimal functioning and behavioural persistence in any domain. According to SDT (Deci & Ryan, 1985; 2002), social contexts that foster a sense of security and connection with others will promote a sense of relatedness which in turn results in positive behavioural and psychological consequences including persistence behaviour (Deci & Ryan, 2002).

The research base that has investigated these variables in paid work settings (Allen & Meyer, 1990; Cotton, & Tuttle, 1986; La Guardia, Deci, Ryan & Couchman,

2000; Steers, 1997) suggests a positive link exists between these variables and favourable work related behaviours, including the variable of interest to the present study, intention to continue. This research base however, has yet to extend examinations of these variables to track and field officials in Canada. In light of this gap, the goals of the present study were to explore the degree of, and relationships among, each of three dimensions of OC (Allen & Meyer, 1991), perceived relatedness (Deci & Ryan, 1985; 2002), and behavioural intention (Ajzen, 2002) within a volunteer track and field officiating context. Further, this investigation sought to uncover the additional reasons track and field officials have for their initial and current participation. In addition they were probed for suggestions as to changes that may entice them to continue officiating with Athletics Canada.

Chapter 2

Problem of Retention

The role of an official is to maintain an equal opportunity for all competitors (Frankl, 2005). More specifically, the responsibility of an official is to consistently administer the rules according to the manual developed by the organization governing a particular sport (Bunn, 1968). Keeping in mind these descriptions of an official's role, Furst (1993) conjectures that officials are an essential part of sport, necessary for the smooth functioning of competition. As such, recent elevated attrition rates of sports officials have become a concern for sport administrators globally ("Aggressive behavior," 2001; Deacon, 2001; "Poor sportsmanship driving away officials" 2001; "Recruiting new officials critical," 2000; VanYperen, 1998). Canadian data has reflected this problem as outlined by Deacon (2001) who reported that 30% of the Canadian Hockey Association's (CHA) registered officials discontinue their involvement annually. Similarly, American data has revealed in a nationwide survey conducted by the National Association of Sports Officials (NASO) that 85% of respondents indicated that officiating registrations were declining state wide compared with previous years ("Poor sportsmanship driving away officials," 2001).

Attrition is not only a concern in sport. Rather the Statistics Canada national survey of giving, volunteering, and participating for the year 2000 revealed that the nature of volunteering is changing in Canada overall (Statistics Canada, 2001). Relevant to the present study Statistics Canada (2001) reported that there are "an increasing number of hours being contributed by a declining number of individuals" (Statistics Canada, 2001). Moreover, a 13% decline in the number of volunteers has been witnessed since 1997 among individuals aged 15 years and older. Further, Statistics Canada (2001)

also reported a decline in the total number of volunteer hours contributed. Given that track and field officials are volunteers suggests that these trends could be reflected in the volunteer officiating context as well. It is reasonable then, to assume that this attrition will create problems related to the retention of track and field officials in the future.

Attrition has become a problem for administrators who must continually reinvest money in recruiting and training new officials (VanYperen, 1998). Statistics Canada (2004) reported that culture and recreation have emerged as the largest consumers of volunteer labour, as reflected in the financial consumption relative to other areas. Specifically, culture and recreation consumed \$3.6 billion worth of volunteer labour in 1997 (Statistics Canada, 2004). Given the high financial value placed on volunteerism in the culture and recreation sector in Canada, it would be prudent to investigate the attrition further.

Individual sport organizations and governing bodies have sought out solutions to the attrition problem, given the trend in heightened drop-out rates. The Dutch Volleyball Association initiated research into their referees because the 20% estimated attrition rate was perceived to be too high (VanYperen, 1998). Comparable attrition rates have translated into financial losses as reported by the CHA who estimated that for hockey in Canada, approximately \$500,000 is lost annually in training officials who eventually leave (Forbes, 2004). A comparable situation has been reported in the United States where sports contests have been cancelled due to a shortage of officials ("Conference seeks solutions to sports officials shortage," 2001). The president of NASO claimed that further declines in the number of officials who register and increases in the numbers of competitions will soon lead to a shortage of competent officials in the future. Given that officials are a necessity to organized sport, and that the cost of officials' attrition to sport

organizations is rising (Forbes, 2004), this topic warrants further investigation to understand why some people continue or terminate their involvement with sports officiating.

Behavioural Intention

One variable that has demonstrated some cross-disciplinary appeal in examining future behaviour is a person's intention (Ajzen, 2002). Intention as described by Ajzen (2002) immediately precedes a given behaviour and is indicative of a person's readiness to perform that behaviour. It should follow then, that when a person indicates his/her intention to perform a specific behaviour, the intention will result in action. There has been limited research conducted investigating sports officials' intentions, however, the available literature suggests that elevated levels of stress, burnout, and intention to quit are prevalent among this population (Dorsch & Paskevich, 1998; Rainey, 1995; Rainey, 1999; Taylor, Daniel, Leith & Burke, 1990).

Taylor et al. (1990) attempted to address the attrition problem in their examination of intentions to terminate officiating as a consequence of stress among soccer officials. These authors found a relationship between total stress, as measured by the Ontario Soccer Officials Survey (OSOS; Taylor & Daniel, 1987) and total burnout scores as measured by the Maslach Burnout Inventory (Maslach & Jackson, 1981). Further, Taylor et al. (1990) found a positive relationship between age, fear of failure, interpersonal conflict and role-culture conflict with total burnout. In this study it was discovered that these variables positively predicted total burnout, and that age and burnout together positively predicted intention to terminate among soccer officials (Taylor et al., 1990).

In subsequent investigations, Rainey (1995; 1999) noted that burnout positively predicted intention to terminate among baseball umpires and basketball referees (Rainey, 1999), although stress factors did not directly predict intention to terminate in either of these studies (Rainey, 1995; 1999). While burnout appears to be a consistent predictor of intention to terminate, it only accounted for 5% of the variance associated with baseball umpires' intentions to terminate (Rainey, 1995). It was suggested that burnout was negatively correlated with age, and together, they accounted for 8% of the variance in intention to terminate among basketball officials (Rainey, 1999). While these numbers are useful in describing the correlates of burnout and stress, they leave a considerable portion of the variance in intentions to terminate unaccounted for by the predictor variables examined.

In their report to the Canadian Hockey Association (CHA), Dorsch and Paskevich (1998) investigated burnout and intentions to terminate among Canadian hockey officials. Dorsch and Paskevich (1998) found that "the majority of officials who completed the questionnaire intend to resume their officiating career next year" (p.26) and that there were no differences in behavioural intention across the six certification levels. Multiple regression analysis showed that officials who intended to terminate their officiating careers were more prone to feeling stressed by abusive events, experienced more feelings of emotional exhaustion, were in higher certification levels, and felt lower amounts of stress due to mistakes in mechanics. Together, these variables accounted for 73% of the variance associated with the intention to terminate their officiating career.

Furst (1991) studied the factors that initially influenced women and men to enter and continue as a collegiate sport official. A sample of 165 officials from NCAA Division I football, women's volleyball, and men's and women's basketball responded to

the questionnaire which examined reasons for initial involvement, continuity, disinvolvement, and possible reinvolvement in a career based on Prus' (1984) Career Contingencies model. The Career Contingencies model (Prus, 1984) focuses on the process of involvement, specifically when and how individuals become involved in a career. Prus (1984) divided the model into three main subcategories: seekership, recruitment, and closure. Forty-seven percent of the officials in Furst's (1991) study reported some form of seekership in that they actively sought out their career based on their own interests. Thirty-five percent of officials were recruited, in that another official actively encouraged them to become an official. Closure, defined as involvement in a career to attain a goal not attainable by other means, was not frequently mentioned as a major reason why people entered officiating. However, approximately 20% of the sample listed money as an important reason for why they began officiating. Eighty-two percent of officials claimed that they continued to be involved in officiating for challenge, fitness, and competence reasons. Positive relationships were cited 8% of the time as reasons why they continued to officiate. Several of these officials indicated they continued because of the "development of great friendships outside the sphere of influence my career offers" (Furst, 1991, p. 4).

The quantity and scope of literature available on burnout, retention, and intentions to continue or quit as applied to volunteers is limited, especially as it relates to volunteer track and field officials. However, the relationships among stress, intention to quit, intention to continue, and satisfaction have been investigated in other volunteer settings. Yiu, Au, and Tang (2001) studied the prevalence of burnout, satisfaction, and the intention to continue service of 226 Chinese volunteers. These were formal members of a service organization, however not bound by contract, and not related to the recipients of

the service. Yiu et al. (2001) found that increased levels of satisfaction could predict intention to stay among a sample of volunteer YMCA workers. Similarly, in their investigation of intentions to continue, Clary et al. (1998) found that the six functions of volunteering (protective, values, career, social, understanding, and enhancement) positively predicted intention to continue among a sample of student volunteers. Searle, Mactavish, and Brayley (1993) found that age was a negative predictor of intention to continue in volunteering as a leisure pursuit.

Motivations to Volunteer

Volunteers are necessary to the successful running of sport events, whether it be a local event or an elite competition (Farrell, Johnston, & Twynam, 1998). Among the many reasons for their importance is the non-remuneration of their contribution. They allow administrators the ability to expand the quantity and diversity of services without exhausting the agency's budget (Cnaan & Goldberg-Glen, 1991). Researchers agree that understanding what drives individuals to volunteer in an organization is important for numerous reasons (Clary, et al., 1998; Cnaan & Goldberg-Glen, 1991). One such reason is that organizations may incorporate this knowledge into messages that may be used to promote the organization and recruit volunteers. Further, agencies could better benefit from volunteer labour by improved marketing efforts to appeal to potential volunteers. This knowledge would be valuable as Clary and Snyder (1991) have found in appealing to a volunteer's individual motives, the volunteer tends to be more effective in his or her role, and will be more satisfied with the experience. Assuming that volunteers give their time and effort in exchange for psychological gains, if one can discover the nature of these motives, they will be better able to retain those volunteers for future events (Green & Chalip, 1998). Motivation, however, can be difficult to assess as it is a general concept

that is constructed subconsciously (Stringas & Jackson, 2003). Nevertheless, Deci and Ryan (2000) assert that “motivation concerns energy, direction, persistence and equifinality—all aspects of activation and intention” (p.69).

In their attempt to tap into these motivating factors, Clary et al. (1998) employed the functional approach proposed by Katz (1960). This approach argues that, although ostensibly acts of volunteerism may appear similar, below the surface they may reflect very different underlying motivational functions (Clary et al., 1998). In Functional Theory, Katz (1960) states that volunteering helps to fulfill some function within the volunteer, such as gaining knowledge, expressing values, defending one’s ego, promoting utilitarianism, and/or socially adjusting. The Functional Theory posits that recruiting volunteers by appealing to their psychological functions will result in volunteer continuance to the extent that these functions continue to be served.

Clary et al. (1998) assessed older volunteers in a hospital using the Voluntary Functions Inventory (VFI) to identify which of the 6 functions of motivation were served by volunteering. Four months later these volunteers indicated the extent to which they received function specific benefits during their service. They also indicated the degree to which they found their service satisfying and rewarding [The functional approach proposes that continued participation focuses on the person-situation fit (Clary et al., 1998)]. The hypothesis was supported in that receiving functionally relevant benefits was more likely to be associated with volunteers’ satisfaction and fulfillment with their volunteer service than not receiving those benefits (Clary et al. 1998).

Explorations of volunteer motivations have been investigated in sport settings as well. Stringas and Jackson (2003) explored the motivations of sport volunteers at the Tallahassee Capital City Marathon. The study was designed to investigate the

demographics of the volunteers and to examine the primary motives influencing the initial decision to volunteer. In addition these researchers sought to explore the major dimensions of sport volunteerism and proposed a model to broaden the knowledge regarding volunteers' motivations in marathon events. Findings suggested that motives belonging to the egoistic factor, (e.g. "volunteering makes me feel better about myself") were the most often cited motives among those who had volunteered for the marathon. Motives from the material gains factor (e.g. "I wanted to gain practical experience") were often cited as well. However, these motives were directed toward volunteers' initial motives for volunteering, and may not reflect the reasons to continue to volunteer at that particular event (Stringas & Jackson, 2003).

Volunteer motivations have also been studied in human service agencies by Cnaan and Goldberg-Glenn (1991). Upon reviewing and analysing the content of motivation to volunteer (MTV) literature, these researchers developed an MTV scale from the 28 items most frequently mentioned as motivations underpinning the involvement of habitual volunteers ($N = 258$). Orthogonal factor analysis with varimax rotation revealed that 22 of the items loaded together on one factor (loading scores were between .31 and .65; $\alpha = .86$) and three much smaller factors were also identified. Given that this first factor accounted for 24.9 % of the overall variance associated with the number of hours per month devoted to volunteer work, it was decided that MTV is best expressed as a unidimensional construct, reflecting altruistic, egoistic, social, and material dimensions. It follows then, that volunteers are both altruistic and egoistic in their motivations to volunteer, and do not distinguish between types of motives, but act because of combinations of motives.

In order to investigate the attributes of satisfaction and motivation for volunteers at the Canadian Women's Curling Championship in 1996, Farrell, et al.(1998) modified Cnaan and Goldberg-Glenn's (1991) 28 item MTV scale to be more relevant to an elite sporting context in order to offer event organizers insight regarding how they might influence special event volunteers to return the following year. Using the Special Event Volunteer Motivation Scale (SEVMS), volunteer motivations were separated into four categories termed purposive (related to contributing to society), solidary (based on social interaction, group identification, and networking), external traditions (extrinsic motivations), and commitments (expectations from others). In contrast with Cnaan and Goldberg-Glenn's (1991) findings, Farrall et al. (1998) uncovered motivations for special event volunteers that differ from those of other volunteers. Cnaan and Goldberg-Glen (1991) found that people who regularly volunteered in social service agencies highly rated motivations such as "the opportunity to do something worthwhile" (altruistic), and "volunteering makes me feel better about myself" (egoistic). In contrast, Farrall et al. (1998) exposed a mixture of motivations for special event volunteers such as "I wanted to help make the event a success" (purposive) and "I wanted to interact with others" (solidary). These findings suggest that special event managers need to be prepared to address a variety of motivations unique to special event volunteers when directing their recruiting efforts (Farrell et al., 1998).

In a subsequent investigation Johnston, Twynam and Farrell (2000) examined the motivation and satisfaction of volunteers at the Scouts Canada Canadian Jamboree held in 1997 using the SEVMS. As a volunteer youth organization, Scouts Canada relies heavily on volunteers for the successful hosting of this quadrennial event. Solidary (social interaction, group identification, and networking incentives; $\alpha = 0.87$), purposive

(“a desire to do something useful and contribute to the community and the event” p. 293; $\alpha = 0.82$), commitments and external traditions (incentives linking external expectations and personal skills with commitment to volunteering) and external traditions (“family traditions and the use of free time that can be seen as external influences on an individual’s volunteer career” p. 293, $\alpha = 0.82$) emerged as salient predictors of the motivation to volunteer ($R^2 = .489$). Each motive for initially volunteering reflected a commitment to both the organization and to the special event.

Canadian research sought to develop an instrument that could measure recreation advisory board members’ ($N = 470$) needs reflecting the efficacy of social exchange theory between recreation board members and the recreation directors (Searle, 1989). Social exchange theory states that individuals will maintain a relationship as long as the rewards they receive are fair and continue to outweigh the costs (Searle, 1989). Participant responses to 16 items (ranked on a Likert-typed scale with 1 being low importance and 5 being high importance) were reflected in four dimensions of needs as they emerged from a factor analysis (possibility of growth ($M = 2.80$, $SD = .74$), responsibility ($M = 2.20$, $SD = .80$), contribution to the community ($M = 3.18$, $SD = .54$, and recognition $M = 2.29$, $SD = .65$). The four factors accounted for 59.4% of the variance associated with board members’ needs (Searle, 1989).

Following a more exploratory vein, Stergios and Carruthers (2003) investigated the motivations of older adults (ages 57-85 years) who volunteer for youth programs. Using qualitative interviews and field observations, these researchers found that the strongest motivators among this group were values, social, and enhancement.

Specifically, the volunteers reported wanting to feel connected to others and wanting to make a contribution to the youth.

Athletics Canada (2002) found similar results with their exploratory survey in which respondents (N = 113) stated that there was a need for younger officials. When asked why they continue to officiate, 80% of officials replied “camaraderie” while 60% answered “community service” and 63% percent said “personal growth.” Additional motivations included travel (34%), meals (4%), golf shirts (4%). “God only knows” was indicated by 30% of respondents while 38% selected “other” indicating that there continue to be motivations to volunteer for Athletics Canada that remain unexplained. These findings, in conjunction with those of previous research (Clary et al., 1998; Clary & Snyder, 1991; Cnaan & Goldberg-Glenn, 1991; Farrell et al., 1998; Green & Chalip, 1998; Johnston et al., 2000; Katz, 1960; Searle, 1989; Stergios & Carruthers, 2003; Stringas & Jackson, 2003) suggest that it would be prudent to explore other populations with respect to OC and perceived relatedness. Just as volunteers and paid employees differ along these lines, these studies offer evidence that different types of volunteers with respect to their motivations.

Commitment and Intention

In social psychology, commitment refers to those conditions which underpin an individual’s persistent course of action (Becker, 1960). Researchers studying volunteers have used commitment to indicate an individual’s willingness to work in a group whose goals and mission he or she values without compensation (Cuskelly, Harrington, & Stebbins, 2003). Previous social psychological research has examined commitment to sport (Scanlan, Carpenter, Schmidt, & Simons, 1993), commitment to a predefined role (Meyer, Allen, & Smith, 1993), and commitment to governing and administrative bodies

(Cunningham & Mahoney, 2004) with a variety of commitment models being used in these studies.

For example, to examine commitment to sport Scanlan and her colleagues (Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993a; Scanlan, Simons, Carpenter, Schmidt, & Keeler, 1993b; Carpenter, Scanlan, Simons, & Lobel, 1993) developed the Sport Commitment Model (SCM) to examine the motivation underlying athlete persistence in organized youth sports. In this model, sport commitment is defined as a psychological construct representing the athlete's state of attachment to a given activity, and reflects his or her desire and resolve to continue sport participation (Scanlan et al. 1993a). According to the original scale proposed by Scanlan et al., (1993) greater sport enjoyment, personal investments, involvement opportunities, lower involvement alternatives, and greater social constraints determine overall commitment to youth sport.

Sport Enjoyment was defined as “a positive affective response to the sport experience that reflects generalized feelings such as pleasure, liking, and fun.” (Scanlan, Carpenter et al., p. 6). *Personal investments* were “personal resources that are put into the activity which cannot be recovered if participation is discontinued” (Scanlan, Carpenter et al., 1993, p. 7). *Involvement opportunities* were “valued opportunities that are present only through continued involvement” (Scanlan, Carpenter et al., 1993, p. 8). *Involvement alternatives* were “the attractiveness of the most preferred alternative(s) to continued participation in the current endeavour” (Scanlan et al., 1993, p. 7). *Social constraints* were “social expectations or norms which create feelings of obligation to remain in the activity” (Scanlan, Carpenter et al., 1993a, p. 7).

Tests of the SCM and the components of SCM revealed that sport enjoyment and personal investments were the key predictors of commitment in youth sport settings

(Scanlan et al. 1993a). Together these variables predicted 58% of the variance associated with youth sport commitment (Scanlan et al. 1993a). In a subsequent investigation, Scanlan et al. (1993b) found that greater sport enjoyment, greater personal investments, and more involvement opportunities were positively related to greater commitment. However, contrary to their initial hypothesis, social constraints were negatively related to commitment. Carpenter and Scanlan (1998) later investigated commitment changes over time in the determinants of sport commitment. Changes in involvement opportunities over time were positively correlated with commitment (Carpenter & Scanlan, 1998). The results of this investigation provided evidence that changes in the determinants of commitment over time correspond with changes in commitment (Carpenter & Scanlan, 1998).

To examine commitment to a predefined role, Meyer, Allen, and Smith (1993) extended Meyer and Allen's (1991) 3-component model of organizational commitment to investigate affective, normative and continuance commitment to an occupation. Registered nurses who participated in this investigation had a mean age of 39.85 ($SD = 9.70$), and had been nurses for 15 years ($M = 15.39$, $SD = 8.78$). Correlations revealed that affective commitment ($r = -.35$, $p < .01$), normative commitment ($r = -.19$, $p < .01$), and continuance commitment ($r = -.05$, $p > .05$) were all negatively correlated with the intention to leave the occupation for this sample of registered nurses.

Relevant to the present study, a substantial amount of research exists which has examined commitment to an organization or administrative body, termed organizational commitment (OC). Cuskelly, Harrington and Stebbins (2003) have stated that "Organizational commitment may be inferred from either individual behaviour within an organisation, or personal attitude towards an organization" (p. 195). OC has been

described generally by Allen and Meyer (1996) as a psychological link between an employee and an organization which reduces the likelihood that an employee will voluntarily leave the organization. Among the many definitions of OC, the one commonality is that OC is considered to be a bond linking the individual to the organization, although the various definitions differ in how this bond is considered to have developed (Mathieu & Zajac, 1990).

When Etzioni (1961) first described the concept of OC there was emphasis placed on the notion of compliance to organizational goals. In their meta-analysis, Mathieu and Zajac (1990) consistently found that OC positively indicated an employee's intentions to continue employment with their current organization. Other researchers (Cotton & Tuttle, 1986; Meyer et al., 1993) have also found a negative association between OC and increased employee turnover. Specifically, Cotton and Tuttle (1986) conducted a meta-analysis and review of research investigating employee turnover. Thirteen studies that investigated the relationship of OC with turnover were uncovered. These revealed that OC was negatively correlated with employee turnover ($Z = 7.39, p < .01$). Further, Meyer et al. (1993) substantiated this finding, in that AC and NC were negatively correlated with turnover in their extension and modification of their model of OC (Meyer and Allen, 1991) in which they condensed the scale from 30 to 18 items (r 's $-.45$ and $-.34$ respectively, $p < .01$) while CC was unrelated ($r = -.02, p > .05$).

Becker and Billings (1993) have indicated that it is not sufficient to study commitment to an organization, but that the foci of commitment (the individuals and groups to whom an employee is attached) and the bases of commitment (underlying reasons for commitment) are important in gaining a more complete picture of the relationship between OC and turnover. The foci of commitment examined by Becker and

Billings (1993) were the organization, top management, the supervisor, and the work group. Bases of commitment examined were compliance (when attitudes and behaviours are adopted in order to obtain certain specific rewards or to avoid certain specific punishments), identification (when attitudes and behaviours are adopted in order to be associated with a satisfying self-defining relationship with another person or group), and internalization (when attitudes and behaviours are adopted because the content of the attitude or behaviour is congruent with the individual's value system). These authors (Becker & Billings, 1993) found that there are interpretable profiles of commitment that are differentially related to other attitudes and behaviours (including intent to quit) in predictable ways, although it was not known how or why these patterns of commitment developed (Becker & Billings, 1993). For example, the organization-related internalization variable correlated positively with overall satisfaction, local satisfaction, overall prosocial behaviour and local prosocial behaviour (r 's range from .12 - .44, $p < .05$) and negatively with intent to quit ($r = -.44$, $p < .05$). In contrast, work group-related internalization showed almost no relationship with intention to quit ($r = .08$, $p > .05$).

After clustering the foci and bases to create profiles of commitment, Becker and Billings (1993) analysed the profiles against organization relevant attitudes and behaviours to determine their relationships. The cluster termed "the committed" (attached to both local and global foci) was found to have the lowest scores for "intent to quit" followed by "globally committed" (attached to top management and the organization) and the "locally committed" (attached to their supervisor and work group). The "uncommitted" (not attached to local or global foci) scored the highest on "intent to quit", which suggests an inverse relationship between commitment and intention to quit working for an organization.

On the whole, OC research has largely centred on the work of two groups of researchers (Meyer & Allen, 1991; Mowday, Porter, & Steers, 1982). The first group used a three component model of OC to describe the concept (Meyer & Allen, 1991). The second group used the Organizational Commitment Questionnaire (OCQ) to measure OC as an attitudinal construct (Mowday et al., 1982). The definition of commitment forwarded by the latter group is subsumed within Meyer and Allen's (1991) multidimensional OC model in which it is termed affective commitment.

Meyer and Allen (1991) conceptualize OC as a multidimensional concept comprised of three distinct components termed *Affective*, *Continuance*, and *Normative* commitment. In this model, *Affective Commitment* (AC) refers to an individual's emotional attachment to an organization (Meyer & Allen, 1991). The stronger the AC, the more an individual identifies with, is involved in, and enjoys membership in the organization (Buck & Watson, 2002). Meyer, Stanley, Herscovitch, and Topolnysky (2002) discovered in their commitment meta-analysis that AC has been linked with organizational tenure (years with the organization) in 51 studies (the weighted average corrected correlation was $\rho = .16$, $SD = .1168$), with overall job satisfaction ($\rho = .65$, $SD = .1289$), and with work satisfaction, ($\rho = .62$, $SD = .0823$).

The second construct described by Meyer and Allen (1991) is *Continuance Commitment* (CC) which builds on the works of Becker (1960) and Hrebiniak and Alutto (1972) and their notion of side-bets. Becker (1960) reasoned that commitment, which will lead an individual to follow a consistent course of action, is achieved by making a side-bet. Drummond and Chell (2000) describe the making of side bets as a blending of extraneous interests with a specific course of action. Further, Becker (1960) posits that before commitment is given as the explanation for persistence in a particular behaviour,

there are three observations that must be made: “(1) Prior actions of the person staking some originally extraneous interest on his following a consistent line of activity; (2) a recognition by him of the involvement of this originally extraneous interest in his present activity; and (3) the resulting consistent line of activity” (Becker, 1960, p. 36).

OC develops by several means including generalized cultural expectations (e.g. changing jobs too often indicates an erratic and untrustworthy employee), impersonal bureaucratic arrangements (e.g. leaving a particular job may result in loss of pension), individual adjustment to social positions (e.g. conforming to the requirements for one social position results in becoming unfit for other positions he/she might have access to), and face-to-face interaction (e.g. if a person claims to be truthful, he/she will avoid being caught in a lie and is committed to telling the truth) (Becker, 1960). Drummond and Chell (2000) state that the aforementioned concepts can be considered as side bets which create the conditions for a psychological state of entrapment, or the feeling of having to stay with the organization.

Consistent with this reasoning, Matheiu and Zajac (1990) forward that individuals become bound to an organization as they realize they have invested in the organization and thus cannot afford to leave without some incurred cost. CC then develops from weighing the perceived cost of staying against the degree of personal investment in the organization (Meyer & Allen, 1991). CC summarizes an individual's psychological state of “having to stay” with an organization (Meyer & Allen, 1997). Meyer et al. (2002) found that this variable has been consistently linked with work relevant behaviours in previous studies. Organizational tenure (length of time with the organization) was related to CC in 39 studies ($\rho = .21$, $SD = .0978$), as were overall job satisfaction ($\rho = -.07$, $SD = .1050$), and work satisfaction ($\rho = -.11$, $SD = .0396$).

Finally, Meyer and Allen (1991) describe an individual's feelings of obligation to remain with the organization as their *Normative Commitment (NC)*. Normative commitment develops as the result of socialization experiences that emphasize the appropriateness of remaining loyal to one's employer (Meyer & Allen, 1991; Wiener, 1982). It can be summarized as an individual's moral obligation to stay with an organization (Meyer & Allen, 1997). Allen and Meyer (1996) have stated that the NC construct deserves more attention than it has received. Although AC and NC have several common correlates (e.g., they are negatively related to employee turnover, and positively related to performance variables; Meyer et al., 1993), factor analytic research has shown that NC is distinguishable from both AC and CC (Meyer & Allen, 1996). Unfortunately, few of the variables considered to be unique correlates of NC have been examined which has been partially explained by difficulties in collecting the relevant data (Meyer, et al., 1993). For example, antecedents of NC could include variables not typically examined in organizational research, such as an individual's early socialization experiences. The correlations between AC and NC ($r = .737, p < .05$; Meyer et al., 1993) may mean that it is impossible to feel a strong obligation to an organization without also having (or developing) positive emotional feelings for it. NC has correlated with other work relevant behaviours in a similar manner to AC, in that NC was correlated with overall job satisfaction ($\rho = .31, SD = .1269$) and organizational tenure ($\rho = .17, SD = .1332$). Work satisfaction was not included in the meta-analysis for this variable.

In Meyer et al's (2002) recent meta-analysis examining the influence of OC variables on various organization relevant variables, the three OC variables correlated negatively with turnover (AC, $\rho = -.17$, NC, $\rho = -.16$, CC, $\rho = -.10$; ρ = weighted average corrected calculation) and with overall withdrawal cognition (AC, $\rho = -.52$; NC, $\rho = -.28$;

CC, $\rho = -.13$; Meyer, et al., 2002). Previous research (Meyer et al., 1993) has shown the following relationships with age (AC, $r = .20$; NC, $r = .18$; CC, $r = .11$; all p 's $< .05$), years in the organization (AC, $r = .18$; NC, $r = .18$; CC, $r = .21$; all p 's $< .01$) and intention to leave the organization (AC $r = -.45$, $p < .01$; NC $r = -.34$, $p < .01$; CC $r = .02$, $p > .05$). According to these authors, AC is expected to be the most strongly and positively related to years in the organization, followed by NC. CC is expected to be unrelated or negatively related to desirable work behaviours (Meyer et al., 2002).

Matheiu and Zajac (1990) suggest that a greater number of studies need to be conducted with a wide variety of organizations to evaluate the validity of OC models. The only manner in which the relationships between OC and other organizational variables, such as employee (or volunteer) retention, can be adequately tested is to sample employees from work environments that differ in these areas. OC has been studied in various contexts including AIDS volunteer organizations (Penner & Finkelstein, 1998), NAVY officer training (Fairbrother, & Warn, 2003), and nursing (Meyer, et al., 1993); however, volunteering in sport organizations has not often been examined using Meyer and Allen's (1991) model of commitment. Even when sport organizations have been studied, coaches and administrators have often been the focus of this research (Chelladurai & Ogasawara, 2003; Cuskelly, 1995; Chang & Chelladurai, 2003), although other groups have been investigated with sport organizations as well (Cunningham & Mahoney, 2004).

Chelladurai and Ogasawara (2003) investigated discrepancies between the levels of OC felt by Japanese and American coaches. The results revealed that Japanese coaches perceived feeling higher levels of OC ($M = 4.26$, $SD = .82$) than their American counterparts (NCAA I $M = 4.09$, $SD = 1.06$; NCAA III $M = 3.98$, $SD = 1.06$). Cuskelly

(1995) investigated volunteer administrators and the extent to which factors associated with committee functioning predicted their OC to their respective amateur sport organizations. Regression analysis showed that committee functioning accounted for 42% of the variance associated with OC for this sample (Cuskelly, 1995). Chang and Chelladurai (2003) investigated the difference in job attitudes between the full and part time employees of Korean sport organizations. Full-time employees felt more AC ($M = 5.66$, $SD = 1.08$) and Organizational Citizenship Behaviour ($M = 5.72$, $SD = 1.31$) and less CC ($M = 2.87$, $SD = 1.36$) than did part time employees (M 's = 2.87, 2.85, 5.38; SD 's = 1.08, 1.09, .96) suggesting that increased contact time with the organization facilitates the development of AC and Organizational Citizenship Behaviour while decreasing CC.

Cunningham and Mahoney (2004) studied commitment to a major Division I university's athletic department. Specifically these authors used items reflecting affective commitment (Meyer & Allen, 1991), valence (beliefs regarding the desirability of training outcomes obtained from training) and training motivation of part-time employees ($N = 279$) in order to predict the self-efficacy of employees undergoing training to satisfy customer needs. These participants understood that working for the department in the following year was contingent upon undergoing the training session. OC ($\beta = .53$, $p < .01$) and valence ($\beta = .26$, $p < .01$) accounted for 45% of the variance associated with training motivation, and training motivation was positively related to post-training self efficacy ($\beta = .37$, $p < .001$) accounting for 13% of the variance (Cunningham & Mahoney, 2004).

The relevance of investigating OC was explored in Mowday (1998) in a reflection on past studies of OC. From an employee perspective, being committed to the one's

employer presented an opportunity for creating positive outcomes for the employee (e.g., increasing perceived self worth). From the perspective of organizations, it is believed that having committed employees is beneficial due to the potential for increased performance, reduced turnover and, decreased absenteeism (Meyer, et al., 2002). It has also been shown that OC is an important concept to foster in employees and volunteers (Cuskelly, et al., 2003). Allen and Meyer (1996) argue that one can achieve a better understanding of an employee's relationship with an organization when all three forms of commitment are considered together, since at any point in time one of the reasons underlying commitment may dominate. According to Meyer and Allen's (1991) model, employees can experience varying degrees of all three forms of commitment (Meyer, et al., 1993). The concept of OC defined in accordance with Meyer and Allen's (1991) conceptual model does not consider OC as a component of intention but a separate psychological construct. However, OC has consistently shown relationships with intention to terminate employment with an organization, as well as with other work relevant behaviours (Meyer et al., 1993).

Relatedness and Intention

It is assumed that the components of Meyer and Allen's (1991) model of OC exert a positive influence on track and field officials' intention to continue (Allen & Meyer, 1996). However, these components have only accounted for 21% of the variance associated with intention to leave a specific organization in previous literature (Meyer, et al., 1993). In addition, there may be track and field officials who experience no perceived commitment to Athletics Canada per se but feel other forces shaping their intentions to continue officiating. One plausible force that has demonstrated links with intention in previous studies is perceived relatedness, one of three basic psychological

needs warranting satisfaction in a given context according to Self-Determination Theory (SDT; Deci & Ryan, 2002). Perceived relatedness describes feeling meaningfully connected to others within a given social setting (Baumeister & Leary, 1995). According to SDT, enhanced feelings of relatedness energize the self to assimilate with the ambient norms and values operating within a given social milieu (Ryan, 1995). As such, feelings of meaningful connection can be important determinants of participation or termination decisions in contexts such as track and field officiating where one does not behave in isolation.

Investigations of relatedness have the potential to help explain motivational processes promoting persistence in volunteer behaviour (Deci & Ryan, 2002). Previous Australian studies as reported on by Green and Chalip (1998) have shown that sport volunteers differed from those who volunteered in non-sport organizations, in that they used their work in sport to enhance their social acceptance (Australian Council of Social Service [ACOSS], 1996). ACOSS (1996) reported that social networking and the development of friendships are important to sport volunteers, knowledge which could be used by sport organizations in their volunteer recruitment and retention efforts (Green & Chalip, 1998). In a Canadian study, Inglis (1994) probed the executive directors ($N = 31$) and volunteer board members ($N = 235$) of single sport organizations located in the Ontario Sport Centre in Toronto. Using self-report questionnaires, participants were asked to rate the degree of importance and fulfillment they felt as board members toward need statements which were grouped into five themes (growth, responsibility, contribution, recognition, and relations). Results indicated that there were differences in the importance variable across gender for growth as indicated by the Mann-Whitney U tests ($U = 5928.0, p < .05$) indicating that women and men perceived their opportunities

for growth differently. Also noteworthy, differences were recorded for importance across gender for the relations ($U = 6262.5$, $p = .06$) theme. The higher rating by women ($M = 137.18$, men $M = 119.64$) suggests that the women and men sampled value social connectedness that occurs in board meetings differently. Differences were also recorded across positions held in the organization for the importance variable on growth (directors $M = 160.98$, volunteers $M = 118.29$; $U = 2115.5$, $p < .01$), responsibility (directors $M = 180.38$, volunteers $M = 116.81$; $U = 1593$, $p < .01$), and recognition (directors $M = 173.62$, volunteers $M = 121.32$; $U = 1976.5$, $p < .01$), and for the fulfillment variable on responsibility (directors $M = 139.92$, volunteers $M = 110.05$; $U = 2177.5$, $p < .05$) further supporting the notion that individuals are motivated by a variety of different factors.

Kowal and Fortier (1999) examined the relationships between situational motivation and flow, and situational motivation determinants (including relatedness) and the experience of flow (as a state of optimal experience; Csikszentmihalyi, 1990). They found a positive ($r = .53$, $p < .01$) relationship between the overall measure of flow and perceived relatedness among Canadian masters level swimmers. Sarrazin, Vallerand, Guillet, Pelletier, and Cury (2002) studied female handball players ($N = 335$) between the ages of 13-15 years in order to investigate their motivation and drop out rates in sport. Their results revealed that those who felt increased relatedness dropped out less often than those who felt more isolated or disconnected from their team-mates. Handball players who discontinued participation perceived themselves as less related ($p < .01$) to their team ($M = 4.81$, $SD = 1.49$) than persistent players ($M = 5.56$, $SD = 1.32$). The less positive the athlete's perceptions of relatedness, the lower their levels of self-determined motivation, which leads to athletes developing intentions to drop out, and eventually to actually dropping out (Sarrazin et al. 2002).

When taken together, the results of these studies (Sarrazin et al., 2002; Kowal & Fortier, 1999) suggest that higher perceptions of relatedness are positively related to desirable outcomes such as flow (Kowal & Fortier, 1999), and favourable motivational structures (Sarrazin et al., 2002) and negatively related to undesirable outcomes such as the intention to drop out of sport and actual termination of sport involvement (Sarrazin et al. 2002). Moreover, when the data examining relatedness amongst athletes in sport (Kowal & Fortier, 1999; Sarazzin et al., 2002) is combined with the available literature examining relatedness in sport volunteers (ACOSS, 1996; Inglis, 1994; Searle, 1989), it suggests that feeling meaningfully connected in contexts characterized by volunteer activity is an important influence on retention or termination decisions.

Summary

Overall, the present review of literature offers support for the use of Meyer and Allen's (1991) OC and Deci and Ryan's (2002) perceived relatedness concepts in addressing the purposes of the present investigation. Three components of OC (AC, NC, CC) have shown ability to predict persistence related variables in previous literature including paid work settings (Cotton & Tuttle, 1986; Meyer & Allen, 1991; 1997) and sport organization administration (Chang & Chelladurai, 2003). Perceived relatedness has shown some utility in predicting continuance behaviours in previous paid work investigations (La Guardia et al., 2000) and in volunteer sport contexts (Sarazzin et al., 2002).

Chapter 3

The following definitions reflect the outcome of each construct discussed in this thesis.

Operational Definitions

Athletics Canada: The organizational governing body for track and field in Canada (Athletics Canada, 2005).

Behavioural Intention: The cognitive representation of a person's readiness to perform a behaviour (Ajzen, 2002).

Official: A person who ensures the consistent application of international rules that govern the sport of athletics (Athletics Canada, 2005).

Organizational Commitment (OC): A psychological link between an employee and an organization which reduces the likelihood that the employee will voluntarily leave the organization (Meyer et al., 1993).

Affective Commitment (AC): An individual's emotional attachment to an organization (Meyer & Allen, 1991).

Normative Commitment (NC): An individual's moral obligation to stay with an organization (Meyer & Allen, 1997).

Continuance Commitment (CC): An individual's psychological state of having to stay with an organization (Meyer & Allen, 1997).

Perceived Relatedness: A construct assessing the degree to which people feel a sense of belonging or meaningful connection in a given social context (Deci & Ryan, 2002).

Volunteer: One who exchanges his/her time, effort, and labour, not for financial gain, but for some sort of psychological gain (Green & Chalip, 1998).

Purpose

The *first* purpose of this study was to examine the degree of commitment to an organization (namely Athletics Canada), the degree of perceived relatedness experienced toward other track and field officials, and the strength of intentions to continue volunteering as a track and field official over the next two years. The *second* purpose of this study was to examine the relationships between dimensions of OC, perceived relatedness to other officials, and intention to continue officiating over the next two years. As such, this study represents a direct attempt to address Meyer et al.'s (1993) contention regarding the lack of systematic research using a multidimensional approach to commitment in a novel domain, namely track and field officiating. The period of two years was chosen for two reasons. First, there is evidence that attrition rates appear highest among first and second year officials in other sports, with an estimated loss of 45-50% annually in Canada (Forbes, 2004). Second, given that intentions change, they are notoriously poor predictors of long term participation in behavioural science research (Chatzisarantis & Biddle, 1998) thus it is suggested that intentions are measured as close in time to the intended action as possible. The *final* purpose of this study was to explore possible changes that may have occurred in reasons underpinning volunteer participation in track and field officiating, and factors that could encourage or dissuade future involvement in sport officiating.

Hypotheses

The hypotheses ($H_1 - H_4$) examined in the present study were drawn from theoretical arguments forwarded by Meyer and Allen (1991) and Deci and Ryan (2002), in conjunction with previous empirical research examining organizational commitment

(Meyer & Allen, 1991; 1997), and perceived relatedness (La Guardia, Deci, Ryan & Couchman, 2001).

H₁: Affective commitment and normative commitment will be positively intercorrelated and positively correlated with greater intention to continue officiating over the next two years.

H₂: Continuance commitment will demonstrate a negative correlation with affective commitment and a positive correlation with normative commitment and will be unrelated or negatively correlated with greater intention to continue officiating over the next two years.

H₃: Perceived relatedness will be positively correlated with intention to continue officiating over the next two years

H₄: Perceived relatedness will contribute uniquely to the prediction of intention to continue officiating over the next two years in track and field after controlling for the influence of OC dimensions reflecting commitment to Athletics Canada.

Chapter 4

Phase 1 - Item Content Relevance and Representation

The purpose of phase 1 was to evaluate the content validity of items measuring three components of OC (AC, NC, and CC), and Perceived Relatedness in track and field officials. Content validity refers to the extent to which an item or a set of items measure what they purport to measure and can be assessed by examining the relevance and representation of items for a given content domain (Dunn, Bouffard, & Rogers, 1999). Item content relevance describes how well the content of a test item represents the construct it is intended to measure, also called the content domain (Dunn et al, 1999). Item Content Representation discusses the degree to which a set of content relevant items captures the entire domain (or “conceptual bandwidth”) of the construct under investigation (Messick, 1989). Items developed by Meyer and Allen (1991), and La Guardia et al. (2000) to evaluate OC and perceived relatedness felt by paid employees were modified to relate more appropriately to the target population (e.g. unpaid track and field officials). To alter the OC items, statements were changed so they specified that Athletics Canada was the organization to which they were being asked to rate their commitment (e.g., “My organization deserves my loyalty” was modified to read “Athletics Canada deserves my loyalty.”). To alter the relatedness items, the term “work” was replaced with “officiate” (e.g., “People I work with are pretty friendly toward me.” was modified to read “People I officiate with are pretty friendly toward me.”).

An assessment of content validity was conducted to ensure the modified items continued to reflect the intended content domain in the target population (i.e., track and field officials) after making minor modifications to the original items. To address the

purposes of this study, data were collected from a sample of ten experts using mixed-method procedures advocated in both the scale construction and psychometric literatures (Dunn, et al., 1999; Fitzpatrick, 1983). The expert judges were enlisted to determine the degree of item content relevance and representation inherent in the modified OC and relatedness items. Quantitative and qualitative procedures were used to evaluate the item content relevance and representation of the item set for content validity using a panel of “expert” judges.

Method

Participants

Two groups ($N = 10$) comprised the panel of expert judges [coaches ($n = 5$), and athletes ($n = 5$)] in the sport of track and field. Both groups were selected because the individuals have “expert familiarity with the population for whom the test is intended” (Crocker & Algina, 1986, p. 82). At the time of this study, experts comprising group 1 were coaching one of three Ontario university track and field programs, were all male, and were all former competitive track and field athletes. Of the track and field athletes comprising group 2, 40% were female ($n = 2$), and 60% were male ($n = 3$), they were enrolled in one of three Ontario universities (4th year - 6th year), and were competing for a university or club team at the time of data collection.

Expert Rating Scale Measures

The procedures for quantifying the judge’s ratings of each item followed the steps outlined by Dunn et al. (1999) and recommended by Crocker and Algina (1986) for the development and evaluation of survey items. First, the conceptual definitions (also known as domain specifications; Dunn et al., 1999) of each target construct (referred to

as the keyed construct; see Table 1) were provided and the experts were asked to familiarize themselves with each domain.

Once familiar with the conceptual definitions, the experts evaluated the content relevance of each item by considering the degree of agreement between the item content and the domain specifications for AC, NC, CC and perceived relatedness respectively (see Appendix F). The following 5-point Likert rating scale was used to evaluate the content relevance of each item: “1” (Poor Match), “2” (Fair Match), “3” (Good Match), “4” (Very Good Match), and “5” (Excellent Match). For each statement included in the item pool (e.g., “The people I officiate with are pretty friendly towards me.”) the experts provided ratings to each of the four constructs (the 3 components of OC and perceived relatedness) in an attempt to “blind” the judges to the targeted item-domain matches and reduce the potential for rating bias (Dunn et al., 1999). Following the rating of each item against the four content domains, judges were provided with the chance to offer written comments about each item. The use of such a mixed method approach enhances the breadth of available information pertaining to the scale items that can be used to draw conclusions from the expert review process (Crocker & Algina, 1986; Fine & Elsbach, 2000). Given that the items considered for use in phase 2 of this investigation were modified slightly from their original format, the opportunity to rate and comment on each item was considered an important step in the ongoing process of construct validation pertaining to these items.

Content representation was evaluated after the expert judges had initially appraised the content relevance of the item pool. Experts responded to four questions to determine item content representation: (1) “How well do you feel all of the items represent the constructs of affective commitment, normative commitment, continuance

commitment, and perceived relatedness?"; (2) "Do you think the items are appropriate for use with people in officiating contexts in terms of the degree to which they represent the constructs of affective commitment, normative commitment, continuance commitment, or perceived relatedness?"; (3) "Are there any additional items that you feel should be included to represent affective commitment, normative commitment, continuance commitment, or perceived relatedness?"; and (4) "Are there any items in the initial item pool that you feel measure more than affective commitment, normative commitment, continuance commitment, or perceived relatedness?"

The first two questions were scored on the following Likert-type rating scale: (1) "Poor Representation", (2) "Fair Representation", (3) "Good Representation", (4) "Very Good Representation", and (5) "Excellent Representation". The third and fourth questions were dichotomously scored (1 = "Yes" and 2 = "No"). Both questions 3 and 4 were followed by an open-ended dialogue box that provided experts with an opportunity to comment on their evaluation of the content representation of these test items. According to Dunn et al. (1999) these 2 questions afforded judges the opportunity to explain whether they felt the construct was underrepresented for the target population (i.e., track and field officials) under investigation.

Procedures

All experts were contacted via e-mail (see Appendix A) to determine their interest in participating in this study. Those experts agreeing to participate (see Table 2) were sent a copy of the Item Content Review Form (ICRF; see Appendix F) including instructions for completing the content relevance and representation questions. Second, the experts numerically rated the degree of content relevance associated with each item using the item content review procedures outlined in the previous section. Third, the

experts were asked to provide written comments pertaining to each item in an effort to clarify their ratings of the items. Fourth, the experts numerically rated the degree to which the item set represented the constructs of affective commitment, normative commitment, continuance commitment, and perceived relatedness in track and field officiating contexts. Finally, the experts provided written comments pertaining to the degree to which the items adequately represented the domains of affective commitment, normative commitment, continuance commitment and perceived relatedness in track and field officiating contexts. All experts returned their assessment of the items within 5 months of the original contact date.

Data Collection

All data were collected during the 2005 Canadian Interuniversity Sport (CIS) indoor track and field season and National Association of Intercollegiate Athletics (NAIA) spring outdoor season (January - May). All experts choosing to participate in this study communicated directly with the principal investigator (Casey E. Gray) via e-mail and completed the ICRF electronically. ICRF's were emailed to the principal investigator, were printed off and separated from any identifiable information immediately upon receiving them. All numerical data were coded using SPSS Version 12.0. All written data were transcribed verbatim and saved as one rich text word processing file using the Microsoft Word software package.

Data Analysis

Data analysis proceeded in five stages. First, an initial screening of the experts' responses was conducted to identify discrepant judge's ratings or missing cases. Experts were considered to have provided discrepant evaluations of the items if their ratings deviated sufficiently from those of the other judges such that the "validity" of the

numerical procedures used to evaluate the item-domain matches would be adversely affected (Hambleton, 1980). Discrepant evaluations were determined by calculating the distance of each judge's rating for each item from the median rating (JDM). JDM values approximating zero were considered desirable since they indicate consistent agreement amongst the expert ratings. The comments made by deviant judges, identified on the basis of their observed JDM scores, were evaluated in an attempt to determine the source of the discrepancy in their ratings.

Second, descriptive statistics were calculated to quantify the degree of ambiguity in expert ratings and provide a numerical assessment of content validity in terms of item-content relevance. Third, the statistical procedures outlined by Aiken (1985) and advocated by Dunn et al. (1999) were employed to quantify the item-content matches. Aiken (1985) suggested that the content validation process could be improved by statistically assessing the item content relevance ratings provided by expert judges and so Aiken's (1985) item content validity (V) coefficient was calculated to assess item-content relevance. Aiken's item content validity coefficient (V) provides a statistical test of the fit of the judges' ratings for the domain specification each item was originally intended to measure (Aiken, 1985). V -coefficient values closer to 1 indicate greater congruence between the content of the item and the intended target domain and values closer to 0 indicate less congruence. The statistical significance of each V -coefficient was found by comparing the resultant values against a right-tailed binomial probability table provided in Aiken (1985). Fourth, following the item content relevance analysis, the evaluation of item content representation was conducted, which involved screening for discrepant experts using the JDM procedure, and calculation of descriptive statistics and Aiken's V -coefficients (Aiken, 1985; Dunn et al., 1999). Fifth, an inspection of the experts' written

feedback for both the relevance and representation questions was used to provide experts the opportunity to express any additional concerns with the items.

Results

Preliminary Data Analysis Screening for Discrepant Judges Ratings

Table 2 provides a summary of the response rates provided by expert judges drawn from each of the two groups used in this study. The overall response rate considering the initial number of experts approached to be involved in the study was 11.63%. Prior to conducting the statistical analyses concerning item content relevance, expert ratings were screened for discrepancies by examining the distance from the median for each judge's rating (JDM) on each item. Experts were considered to be aberrant judges if their JDM scores were clearly different when compared to the values provided by the other experts comprising their group. An inspection of the JDM scores per group revealed the following patterns: (1) 4 experts from group 1 had JDM values between 13 and 26 (1 expert's JDM = 43); (2) 5 experts from group two had JDM values between 16 and 23 (1 expert's JDM = 26). One expert from group one was deemed an aberrant judge on the basis of the observed JDM score. As no specific written comments accounted for this expert's discrepant ratings, the judge's data was removed prior to conducting the statistical evaluation of item content relevance. The data generated from the remaining nine experts were screened for missing values which were replaced by the series mean given that no systematic pattern was evident in the missing data which were treated as random variables.

Quantitative Content Relevance Ratings for Organizational Commitment and Relatedness Items

Calculations of the range (highest minus lowest rating plus 1) of ratings provided by each group of experts across the 18 OC and 8 perceived relatedness items were used to assess the item ambiguity associated with expert ratings. Range (R) values closer to 1 were considered desirable indicating that the ambiguity associated with the expert ratings across the set of items was minimal. An inspection of the R -values (see Table 3) indicated that 11 of the 26 OC and relatedness items had ambiguous ratings (R values ≥ 4). A closer inspection of the data revealed that 19.2% of ambiguous item ratings were attributable to group 1, and 34.6% were attributable to group 2 (there was 11.5% agreement on ambiguous ratings). Collectively, these data raise concerns regarding the clarity expressed by expert ratings provided on 11 of the 26 OC and relatedness items.

The mean content-relevance ratings of each item per keyed domain for each group of experts and for the overall set of expert ratings are presented in Table 4. As can be seen, 80.77% of the mean-item content relevance ratings for group 1, 84.62% for group 2, and 88.46% for the total sample had values of 3.0 or higher, indicating that of the 78 total ratings, 88.46% ranged from 3 (“good match”) to 5 (“excellent match”).

These initial descriptive ratings do not provide a statistical evaluation of the degree of item content relevance associated with the 26-items proposed for use in phase 2 of this investigation. Dunn et al. (1999) recommended conducting a statistical evaluation of items using Aiken’s (1985) item content validity coefficient (V). Aiken’s V coefficients were calculated per item across each group of judges. The results of this analysis (see Table 5) indicated that 14 V -coefficients from group 1 and 16 V -coefficients from group 2 were statistically significant ($p < .05$) suggesting that over half of the 26

items comprising the scales were relevant to the content of their keyed domain. It should be noted from the data presented in Table 5 that 84.62% V-coefficients were greater than or equal to 0.50 in the present sample.

Quantitative Content Representation Ratings for Organizational Commitment and Relatedness Items

An examination of the experts JDM values for content representation was undertaken to identify discrepant raters using the procedures previously described for content relevance. The results of this analysis prompted the removal of 1 judge who failed to respond to the content representation form (ICRF) and was removed from further consideration leaving 8 judges. The following JDM values were observed: (1) Group 1's JDM values ranged from 2.50 to 4.0; (2) Group 2's JDM values ranged from 3.25 to 4.25; Overall, none of the JDM values for the total sample fell between 0 and 2 supporting the decision to discard only the expert who failed to respond to this portion of the ICRF, in addition to the expert removed in the item content relevance stage of this analysis.

Consistent with the procedures evaluating item content relevance, item ambiguity inherent in the expert ratings of each item was assessed using *R*-values. An inspection of the data (see Table 6) indicated minimal ambiguity in terms of the experts' ratings of content representation (all *R*-values ≤ 2), with the exception of group 2's rating for AC which was 3. An inspection of the percentage of experts in each group providing *R*-values less than 2 in response to the content representation questions for each construct revealed there were 50% for the total group.

The mean content-representation ratings for the items are presented in Table 6. An examination of the descriptive statistics indicates that content-representation scores

were relatively high both in the total sample as well as in each group of expert judges. Overall 87.5% of the item content representation ratings exceeded 3 in this sample. This suggests preliminary support for the representation of the content associated with NC, CC, and perceived relatedness in track and field officiating by the items. However, content-representation scores were not as promising for affective commitment as expressed by group 1 ($M = 2.50$, $SD = 0.58$). An inspection of Aiken's V -coefficients (see Table 7) indicated that only 2 of 8 values were statistically significant ($p < .05$). Perhaps more useful is that only 1 value falls below the theoretical midpoint of V -coefficient range from 0-1. Taken together with the descriptive statistics this suggests that according to the two groups of judges sampled, the item set as a whole is representative of the content of the constructs as outlined by Meyer and Allen (1991) and Deci and Ryan (2002).

Overall Representation of Organizational Commitment and Relatedness items

In order to elicit the overall impression of the items in the item pool used to measure AC, NC, and CC, and perceived relatedness in the context of track and field officiating, experts were asked to answer two additional questions. When asked how well they felt all of the items included in the initial item pool represent each of the constructs, experts responded most favourably to NC (good, 25%; very good, 62.5%; excellent 12.5%), CC (good, 37.5%; very good 62.5%), and perceived relatedness (good, 37.5%; very good, 25%; excellent, 37.5%). Expert ratings of affective commitment items suggested that judges felt the items were not as representative of the construct domain as the others were, but were still encouraging (fair, 37.5; good, 50%; excellent, 12.5%).

Question two asked "Do you think the items are appropriate for use with people in officiating contexts in terms of the degree to which they represent the constructs of AC,

NC, CC, or perceived relatedness?” Expert responses to these questions were largely encouraging for AC (somewhat, 50%; yes, 37.5%; yes, absolutely, 12.5%), NC (yes, 75%; yes, absolutely, 25%), and relatedness (somewhat, 25%; yes, 50%; yes, absolutely, 25%). Expert ratings for CC were largely positive with the exception of one aberrant expert (not at all, 12.5%; yes, 75%; yes, absolutely, 12.5%).

Analysis of the third content representation question (“Are there any additional items that you feel should be included to represent affective, normative, and continuance commitment, or perceived relatedness?”) revealed that the majority of experts in the total sample 62.5% indicated no additional items were necessary to enhance the representation of OC and perceived relatedness constructs in the items set (12.5% non-response rate to this question, $N = 8$). When prompted 50% of experts responded that there are items in the item pool that they feel measure more than the target constructs they were intended to (12.5% non-response rate to this question, $N = 8$).

Written feedback was provided by 4 of the 10 experts expressing minor concerns with the content representation of the organizational commitment and relatedness items. Twelve percent of the comments suggested the judges found some degree of overlap between CC and normative commitment items (sample quote: “I find that there isn’t much difference between normative and continuance commitment, or at least it’s hard to perceive.”); twelve percent felt there was overlap between relatedness and affective commitment (sample quote: “this sounds more like it captures relatedness, but may still have an affective component”); four percent perceived an overlap between relatedness and normative commitment (sample quote: “There is a component of both. A relatedness expressed through [sic] the obligation to the “people in it” and a normative component represented by the “obligation” to remain with AC.”); and four percent of comments

suggested that there might be some degree of overlap among all four items (sample quote: “This could actually work for all of them about equally I think. It could have personal meaning for any of the things you are looking at.”)

Summary

The purpose of phase 1 was to determine if the questions modified from instruments developed by Meyer et al. (1993) and La Guardia et al. (2000) have a degree of content validity for measuring OC and perceived relatedness in track and field officials. More specifically, phase one evaluated the content relevance and representation of the OC and perceived relatedness items using expert rating procedures advocated by measurement development experts in the process of instrument construction and evaluation (Crocker & Algina, 1986; Dunn et al., 1999; Fitzpatrick, 1983). An inspection of the quantitative data derived from the expert review process indicated that the OC and perceived relatedness items had sufficient content validity to proceed. The majority of judge’s ratings indicated a good to excellent match between the modified item and the keyed domain. In addition, judge’s ratings indicated that the items are representative of the focal constructs of interest within the context of track and field officiating.

The present findings, in conjunction with previous studies where the scales have been used extensively suggest the modified items exhibit both content relevance and content representation. Previous research by Allen and Meyer (1996) provided support for the latent dimensionality of scores derived from similar items in occupational settings, the internal consistency reliability of item scores for each dimension of the commitment model and supplementary construct validity evidence based on correlational evidence with external criteria. Similarly, La Guardia et al. (2000) have supported the construct validity of similar perceived relatedness items in occupational settings by linking scores

on a latent variable comprised of these items with other need satisfaction indices drawn from Self Determination Theory (Deci & Ryan, 1985; 2002). While the items in this study were slightly modified to apply more specifically to the population of interest, the previous studies combined with the evidence in this study on the whole offer a strong argument for the psychometric credibility of scores derived from these items. As such, and given that no compelling evidence was presented in terms of modifying or abandoning these items, the decision was made not to modify the items from the format presented in the ICRF during phase 2 of this investigation.

Chapter 5

Phase 2 – Organizational Commitment, Perceived Relatedness and Behavioural Intention

This phase of the investigation was conducted to investigate the relationship between dimensions of commitment, relatedness, and intentions to continue officiating in the context of track and field. Specifically, the main purposes of phase 2 were to investigate the relationships among these variables, as well as, to discover if OC and perceived relatedness would predict officials' intentions to continue officiating over the next two years. Intention to continue was chosen as the target criterion variable in this study given that Ajzen and Fishbein (1980) have argued that this construct is the proximal determinant of volitional behaviour.

Participants

The track and field officials recruited to participate in this study ($N = 80$) were certified by Athletics Canada's National Officials Certification Program (NOCP) and were all "active" and registered with their respective provincial officials committee at the time of data collection. According to the National Officials Committee (NOC) upgrading criteria (NOC, 2004), an active official should officiate at least eight event credits per year to maintain active status (one event credit is received for up to four hours worked at an event). *Level I* officials are generalists and have 6 event credits and have attended a brief introductory clinic (NOC, 2004) taken a one-on-one seminar with an instructor during competition. In addition they have passed a take home examination. Officials certified at *Level II* and higher have worked at a prescribed number of meets and in capacities related to their specific discipline. *Level III* officials are specialists and have provincial qualifications; *Level IV* officials have national qualifications; and *Level V* have international qualifications (Ontario Track & Field Association, 2005). Track and field

officials registered with Athletics Canada were contacted to take part in this study via post, e-mail, in an official's meet package or were approached in person by the PI, the head official, or the provincial chair. All participants were volunteer (i.e., not paid a salary) track and field officials, certified to officiate at levels I-V in at least one discipline. Each official was active for at least one season prior to the investigation. A comprehensive demographic profile of the officials participating in this study is presented in Table 10.

Research Design and Sampling Procedures

A non-probability sampling approach using convenience and snowball sampling procedures was used to enhance representation of the study sample to the target population. Multiple methods of participant recruitment were employed in this phase of the investigation to maximize sample representation of the target population. First, a participant recruitment advertisement was posted in the spring 2005 National Officials Committee newsletter posted on the Athletics Canada website (See Appendix C). The contact information of the principal investigator was provided in addition to a brief study description and a request for participants. Second, approximately 100 officials, including the chairs of the National Officials' Committee and of the provincial subsidiaries, whose e-mail addresses were obtained from either the National Officials' Committee portion of the Athletics Canada website, or from a mailing list obtained from a high ranked track and field official, were e-mailed the same recruitment poster as posted in the aforementioned newsletter. Third, 100 officials from Ontario, Saskatchewan, and the east coast whose mailing addresses were available were sent the questionnaire package containing a) a brief explanation of the study purpose, b) an informed consent letter, c) a questionnaire, and d) a pre-stamped return envelope. Fourth, the chair-person of one

province acted as a liaison between the PI and the participants because that chair felt it would better maintain the privacy of officials in that province. Fifth, three head officials were contacted to distribute 55 questionnaire packages to volunteers officiating at three track and field meets hosted by Canadian Universities. One head official was approached in person, and two were approached via e-mail and received the packages by post. Sixth, snowball sampling was employed with minimal success in an attempt to reach the goal number of participants. Seventh, in a final effort to reach the target sample size, 47 questionnaire packages were inserted into the officials' meet packages for the 2005 Pan-Am Junior Track and Field Championships held at the University of Windsor. All data were collected during between January and August of 2005.

This study was non-experimental in nature and used a cross-sectional approach to sample respondents (Pedhazur & Schmelkin, 1991). Although a single data collection method was employed, the survey contained 2 types of questions to address the study purposes (a) items using fixed response scales, and (b) items using open-ended response formats in order to allow participants the opportunity to provide data that was relevant to explaining their involvement in track and field officiating. The complete questionnaire is presented in Appendix H.

Measures

Demographic Questions. Participant age, gender, education, gross annual family income, employment type, and level of officiating certification in officials' major discipline were provided in a demographic section of the questionnaire package. These variables were either drawn from previous psychological investigations (Meyer et al., 2002) or were included because it was thought that they would be of relevance to the present study in terms of describing the nature of the sample under study. Appended to

this section, participants were asked to rate their feelings of commitment to each of three foci (the athletes who participate in track and field, commitment to the role of being a track and field official, and commitment to the sport of track and field). They were instructed to indicate how true each statement was to them on a Likert scale (1 being not true at all; 7 being very true) given their individual experiences as a track and field official. As completed questionnaires were received, the participants' province of residence was recorded. In such cases where the questionnaire was received via post, the post office stamp was used to determine residual origin.

Organizational Commitment. A set of items ($N = 18$) reflecting commitment to Athletics Canada were compiled in a questionnaire based on the work of Meyer et al. (1993). The items (see Appendix H) represent slight modifications for the three components that comprise Meyer and Allen's (1991) organizational commitment model. The OC items were modified by inserting the words "Athletics Canada" into each question in order to focus participant responses on the degree of commitment to the governing organizational body of track and field (Athletics Canada). The items are designed to capture three facets of organizational commitment proposed by Meyer and Allen (1991) referred to as normative (NC), affective (AC) and continuance (CC) facets of commitment. AC reflects the resolve to continue officiating due to positive feelings toward Athletics Canada as the organization (6 items; sample item: "I would be happy to spend the rest of my career with Athletics Canada"). NC represents a desire to remain with Athletics Canada due to perceived responsibility to the organization or a sense of obligation (6 items; sample item: "I would feel guilty if I left Athletics Canada now"). CC reflects the degree to which officials will continue to officiate to prevent incurring potential losses resulting from leaving Athletics Canada (6 items; sample item: "If I had

not already put so much of myself into Athletics Canada I might consider working elsewhere”). A stem (“The following questions concern your feelings of commitment to Athletics Canada. Please indicate how true each of the following statements is for you given your experiences as a track and field official”) was included to emphasize interest in examining commitment to Athletics Canada specifically, rather than to another officiating or sport specific organization. Participants were asked to respond to each item on a 7-point Likert scale anchored at the extremes by 1 (Not true at all) and 7 (Very true).

Perceived Relatedness. Perceived relatedness to other officials was measured using items ($N = 8$) drawn from the Basic Psychological Need Satisfaction Scale (La Guardia et al., 2001). The *perceived relatedness* subscale examines the degree of connection and sense of camaraderie experienced by the track and field officials for their fellow volunteers (8 items; sample item: “I really like the people I officiate with”). A stem was included to target relationships with other officials in this context as the focal point for participant responses (“The following questions concern your feelings about the people you officiate with at track and field meets. Please indicate how true each of the following statements is for you given your experiences with other track and field officials.”). Participants were asked to respond to each item using a 7-point Likert scale anchored at the extremes by 1 (Not true at all) and 7 (Very true).

Intention to Continue. *Behavioural intention* was measured using eight items modified from an item pool reported by Yiu et al. (2001). *Behavioural Intention* is a cognitive representation of a person’s readiness to perform a given behaviour and is considered to be the immediate determinant of action (Ajzen & Fishbein, 1985). The first set of 4 items concerned participants’ *intentions* to officiate over the next two years. A stem (“The following questions concern your plans to continue officiating track and field

in the future. Please indicate how true each of the following statements is for you given your experiences as a track and field official”) was used to focus participant responses on their anticipated involvement in officiating track and field over the next two years (sample item: “I will continue to officiate track and field for the next 6 months”).

Participants responded to each item on a five point Likert scale anchored at the extremes by 1 (Strongly disagree) and 5 (Strongly agree). In the second set of four items, the *likelihood* of continuing to officiate track and field meets over the next two years was assessed. A stem (“The following questions concern the *likelihood* that you will continue officiating track and field. Please indicate your agreement with each of the following statements given your experience as a track and field official”) indicated interest in measuring the likelihood of continuing as a track and field official for the following two years. Participants responded to four questions using a series of bipolar adjective response foils, anchored on a seven point scale by -3 (Extremely unlikely) and 3 (Extremely likely). The participant responses were converted to Z-scores and aggregated in a manner consistent with Yiu et al. (2001) whereby item pairs were created on the basis of time designations and then aggregated to form an overall intention score (i.e., after transformation to standardized scores, the intention and likelihood items for each time period were summed to form 4 item pairs which were then averaged into a total intention score in the same manner as Yiu et al. [2001]).

Open-ended Questions. A series of open ended questions ($N = 3$) were posed to provide additional insight into the dynamics influencing volunteer track and field officials to participate in the sport. Given the limitations associated with inferring cause-effect relationships in non-experimental design, cross-sectional studies (Trochim, 2001), these questions were included as a compliment to the quantitative data. The *first* question

(“Explain how and why you initially became involved in officiating track and field.”) was asked to provide participants with the opportunity to reflect upon the factors that first motivated them to become track and field officials. The *second* question (“Why are you currently volunteering to officiate track and field?”) allowed officials to describe who or what facilitated their involvement in track and field officiating at the time of data collection. The *third* question (“What changes would encourage you to continue volunteering as a track and field official?”) provided officials the opportunity to highlight factors that could influence officials’ motivation to continue that were not captured with previous questions. Furthermore, this final question allowed participants to provide insight into the dynamics underpinning officiating retention that potentially extend beyond the domains of perceived relatedness and commitment to the organization.

Data Analysis Procedures

Upon receiving responses, quantitative and qualitative data were analysed in sequential order. The analysis of the quantitative data proceeded in four stages. First, preliminary analysis included checking for missing values, evaluating statistical assumptions, and assessing the internal consistency reliability (Cronbach’s coefficient and Cronbach’s α , 1951) of item responses to both perceived relatedness and OC questions prior to conducting the main analysis. Second, descriptive statistics were calculated for all study variables. Third, correlations (Pearson r) were computed between OC, perceived relatedness, and intention scores to examine the magnitude and direction of the bivariate relationships between these variables. Finally, a series of hierarchical multiple linear regression analyses (HMRA) were computed to examine the salient predictors of track and field officials’ intentions to continue over the next two years.

Two HMRA's were computed using the behavioural intention scores as the criterion measure and scores on the OC, perceived relatedness, and salient demographic variables drawn from previous literature (Meyer et al., 2002) as predictor variables. The first HMRA was conducted to examine the influence of OC and perceived relatedness on intentions and thereby represented a direct test and extension of Meyer and Allen's (1991) model to include perceived relatedness. The second HMRA was conducted to determine the extent to which the relationships observed in the first HMRA remained robust after including additional covariates. The covariates included demographic considerations (age and number of years officiating with Athletics Canada) and conceptual considerations in terms of alternative foci of commitment (to the athletes, sport, and role of being a track and field official).

Data analysis of responses to open-ended questions followed a series of guidelines adapted from qualitative experts (Miles & Huberman, 1994; Patton, 1990; Strauss & Corbin, 1990) that have been successfully applied in previous research within the physical activity (Weiss, Smith & Theeboom, 1996) and sport (Farrell, Crocker, McDonough, & Sedgwick, 2004) domains. First, responses to open-ended questions were transcribed verbatim. Second, the researcher read through transcribed data to extract words, phrases or paragraphs that represented salient examples of factors influencing volunteer officiating within each of the 3 open-ended questions posed to respondents. These pieces of raw extracted data were referred to as "meaning units" (Miles & Huberman, 1994). The researcher selected which meaning units to include as the basic units of analysis. Third, meaning units with similar connotations were combined into groups which represented *lower order themes* and were labelled as such in order to highlight their underlying meaning. Finally, the grouping process was repeated

with the lower order themes so that a greater degree of abstraction was obtained. These were labelled *higher order themes*.

Results

Preliminary Analyses

A preliminary analysis of the data was conducted to ensure that the assumptions of correlation analysis and multiple linear regression were tenable in the present data set. Initial examination of the data indicated that no more than 11.25% of the values were missing on any given variable. Given that no systematic pattern of non-response was evident those missing cases were replaced with the series mean. Histograms of the OC, perceived relatedness, and intention variables showed that participant responses approximated a normal distribution which was substantiated by the skewness and kurtosis values presented in Table 11 (skewness values range from -1.83 to 0.71; kurtosis values range from -2.17 to 2.73). Scatterplots demonstrated a plausible linear relationship between intention and the predictor variables suggesting that the assumptions of normality and homoscedasticity were tenable in the present data. The assumption of independence amongst predictor variables was not met (CC was correlated with AC and NC), however, this was expected based on previous research (Meyer et al. 1993). Five outliers were identified as cases with excessively large standardized residual values (≥ 3.0 in each instance) and were removed from further analysis leaving an effective sample size of 75 cases for this phase of the investigation. Considering the removal of these cases, the subject:variable ratio for the regression analysis was insufficient on the basis of Green's (1991) global recommendations (expressed formulaically as $N \geq 50 + 8p$ where N = sample size and p is the number of predictor variables in the equation assuming $\alpha = .80$) for both the first (desired $N = 82$) and second (desired $N = 122$) HMRA's.

Nevertheless, considerable evidence presented by Maxwell (2000) has questioned such generic rules of thumb as applied to establishing the credibility of target sample sizes in regression applications. Multivariate analyses of variance revealed no meaningful differences between genders on organizational commitment variables (Wilks Lambda = .967; $F(3, 71) = 0.806$, partial eta squared = .033) or exploratory commitment variables (Wilks Lambda = 0.977; $F(3, 71) = 0.539$; partial eta squared = .023). Independent samples t-tests indicated no meaningful differences between male and female track and field officials in terms of years with Athletics Canada ($t(73) = -0.163$, $p = .871$, partial eta squared = .001), participant age ($t(73) = -0.107$, $p = .915$, partial eta squared = .001), or perceived relatedness to other track and field officials ($t(73) = -2.548$, $p = 0.013$, partial eta squared = .082). Consequently, no gender specific subsample analyses were conducted in phase 2. Internal consistency reliability estimates for the three OC subscale scores, perceived relatedness scores, and the behavioural intention scores were assessed using Cronbach's (1951) coefficient alpha (see Table 11) and ranged from .70 to .92 in the present sample.

Descriptive Statistics for Study Variables

Descriptive statistics were calculated for the three dimensions of OC, perceived relatedness, and behavioural intentions (see Table 11). An examination of the descriptive data for dimensions of commitment indicates that this sample of track and field officials represented slightly higher NC and AC than CC in relation to Athletics Canada. Notwithstanding this observation, scores for both CC and NC fell below the theoretical midpoint of the scale of responses for these variables while AC was slightly higher than the midpoint. Officials' scores for relatedness were more positive as indicated by a mean of 5.90, $SD = 0.74$. In contrast to commitment to Athletics Canada, this sample of track

and field officials reported perceived relatedness scores that approximated the higher end of the scale's theoretical range and showed considerably less variability compared with scores on commitment dimensions. Z-scores for officials' intention responses were aggregated and revealed a mean response of -0.01, $SD = 6.90$. Further examination of officials' intention scores indicated that 60.0% scored above the 75th percentile suggesting the majority of officials had very strong intentions to continue with the sport for at least the next two years. In contrast, less than 26.7% of officials' intention scores fell below the 25th percentile for this variable.

Bivariate Correlations between Demographic Variables, Dimensions of Commitment, Behavioural Intention and Perceived Relatedness

Pearson correlation (r) coefficients were computed between scores on commitment dimensions, perceived relatedness, intention to continue officiating, and select demographic variables. These variables (age and number of years officiating with Athletics Canada) were selected because previous commitment literature has linked them with both dimensions of commitment (Meyer et al., 1993) and intention (Yiu et al., 2001). Moreover, alternative foci of commitment were examined in relation to study variables to explore the possibility that the source of commitment may be an important consideration to examine beyond the target organization of Athletics Canada.

An examination of the data presented in Table 12 reveals several patterns of bivariate relationships. First, commitment to the sport of track and field, commitment to the athletes who compete in track and field, and commitment to the role of track and field official were all moderately correlated with each other with r 's ranging from .38 to .64 (all p 's < .01). Second, years officiating with Athletics Canada was correlated with commitment to the sport of track and field ($r = .25, p < .05$), the athletes who compete in

track and field events ($r = .24, p < .05$) and with age ($r = .53, p < .05$). Years officiating with Athletics Canada was also positively (albeit weakly) correlated with perceptions of relatedness to other officials, although this statistic only approached conventionally accepted levels of statistical significance ($p < .08$) in the present sample's data. Age was also correlated with AC and CC (r 's = .37; .27, all p 's $< .05$). NC was correlated with the athletes who compete in track and field events ($r = .24, p < .05$), and the role of being a track and field official ($r = .29, p < .01$). AC was positively correlated with age ($r = .37, p < .01$) and the sport of track and field ($r = .24, p < .05$). Perceived relatedness was not associated with dimensions of commitment at conventionally acceptable levels of statistical significance ($p < .05$) although a positive relationship approached threshold values with NC scores ($r = .20, p < .09$). Perceived relatedness scores were positively associated with greater commitment to the sport of track and field ($r = .32, p < .01$), the athletes competing in the sport ($r = .29, p < .01$), and the role of being a track and field official ($r = .39, p < .01$).

Correlations between Dimensions of Organizational Commitment and Perceived Relatedness and Intention to Continue.

Pearson correlations calculated for scores on the OC dimensions (AC, NC, CC), perceived relatedness and intention to continue are presented in Table 12. Results revealed that for the present sample of track and field officials, CC was significantly correlated with both AC ($r = .62, p < .01$), and NC ($r = .53, p < .01$) and that perceived relatedness was the only variable correlated with the criterion variable ($r = .35, p < .01$). Interestingly, the present data indicated no meaningful pattern of relationships between dimensions of OC and intentions to continue officiating over the next two years.

Theoretical Multiple Regression Analyses Predicting Behavioural Intention from Organizational Commitment, Perceived Relatedness and Demographic Variables

Two separate HMRA's were computed to examine the predictive influences contributing to track and field officials' intentions to continue over the next two years. In the first regression analysis, dimensions of OC and perceived relatedness served as the predictor set while scores on behavioural intention served as the criterion variable. In the second regression analysis, demographic considerations and alternative commitment foci were added to the equation to determine their predictive salience in this sample of officials for understanding intentions to continue.

In this first HMRA, OC variables were entered on step 1 representing a direct empirical test of Meyer et al.'s (1993) OC model unaffected by the presence of extraneous variables that can confound relationships between predictor and criterion variables in applications of multiple regression (Pedhazur & Schmelkin, 1991). Perceived relatedness was entered on step two to determine if the influence attributed to satisfying this psychological need in this sample of track and field officials exerted an effect on intentions to continue beyond the contributions of OC variables. The results of this analysis revealed two interesting findings (see Table 13). First, dimensions of OC failed to exert a significant effect on officials' intention scores (see model 1 in Table 13) accounting for only 2.9% of the criterion variance. Second, an inspection of the data from the full predictive model including perceived relatedness with commitment dimensions indicated model two accounted for 14.0% of the intention variance with the change in predictive capacity between model 1 and model 2 being statistically significant ($p < .01$). Unique variance calculations computed according to the recommendations of Hair, Anderson, Tutham and Black (1998) by squaring the part correlation coefficient

indicated that perceived relatedness accounted for 12.25% unique variance in the full model.

In the second HMRA, an additional set of selected demographic and commitment variables were entered in a third step after replicating the model tested in the first HMRA. An inspection of the results of this analysis (See table 14) suggest that the inclusion of age, number of years officiating with Athletics Canada, and three alternative commitment foci do not add anything meaningful ($p > .05$ for significance of F -change) beyond the influence of the variables included in model 2. Moreover, an examination of the observed β coefficients indicates that perceived relatedness has an influence on track and field officials' intentions to continue that is robust to the inclusion of variables entered into the HMRA in model 3. Post-hoc calculations using the procedures advocated by Hair et al. (1998) indicated that perceived relatedness accounts for 9.10% unique variance in the final model.

Qualitative Analysis of responses to open-ended questions

Following preparation of the data (as outlined in the data analysis section), participant responses to the three open-ended questions were examined by the principle investigator. Results are presented in clusters as they naturally presented themselves within the data, as determined by the principle investigator. In keeping with Farrell et al. (2004), the results of the analysis of meaning units are followed by quotations that contribute detail and assist in data interpretation.

Question #1: "Explain how and why you became involved in officiating track and field." Four higher order themes emerged from the analysis and are presented in Table 15. These were: *convenience, helping reasons, extension of role, and intrinsic reasons*. The following lower order themes comprised these general groupings: (a) *convenience*

(“*child/sibling involved*”, “*time commitments*”, and “*training was available*”); (b) *helping reasons* (“*community service/volunteer*”, “*improve quality of meets*”, and “*to help*”); (c) *extension of role* (“*coached*”, and “*physical education teacher*”) (d) *intrinsic reasons* (“*social reasons*”, “*interest in officiation*”, “*stay involved*”, “and “*enjoy track and field*”).

Convenience

Participants discussed how a variety of situational factors made it easier or more likely for participants to volunteer their time to officiate track and field. Some officials discussed being supportive parents of athletes who travelled to track and field meets to watch their children or siblings from the stands, and their involvement stemmed from being there (*child/ sibling involved*). One participant wrote “One of my daughters was a good middle distance runner and it meant that she was competing at the beginning and end of each competition” (M43). A second official stated “My daughter was an 800m runner. I was watching in the stands when her coach asked me to help out with hand timing” (F44)”. Participants discussed further *convenience* reasons such as *time commitments*. One participant wrote “I retired from an executive position and I finally had some flexibility with my time” (F79). This theme also captured a time when a participant was experiencing a change in his or her lifestyle. For example, “Coaching was great until I had a family. Then I turned to administration and officiating” (F48). A second official discussed a change in career which made it necessary to change his involvement in track and field: “When my career changed and involved weekly travel, and home on weekend[s] – I gave up coaching and began officiating” (M63).

Participants who discussed that *training was available* were grouped together under *convenience* because they indicated in their responses that through a mentor, or an officiating clinic, their training was taken care of for them. For example, a participant

wrote “In our area [there] was a retired person who had great knowledge at the international level. He came out to help. He invited me to go with him to higher level meets. I did. He showed me what to do I just continued moving up the ranks of officiating” (M80).

Helping reasons

Four respondents discussed becoming track and field officials to fulfill an interest in becoming active in *community service/volunteering*. One participant wrote “I decided to volunteer and chose a sport I enjoyed in my youth.” (F60). Contained within this section were responses that also indicated a perceived need for officials at the time. One participant wrote, “As a coach there were a couple of times that I had to officiate in order to have a needed competition.” (M53). *Improve quality of meets* was a reason expressed mainly by physical education teachers and coaches, as was the case with this participant who stated “As a high school coach I saw poor officiating and determined to do something about it. [I] realized I could do a better job than some on those in official positions” (M37). Embedded within a majority of responses was an expressed interest *to help*, either, the athletes, the officials, or the administrators. In his response, “This was a way to give these young people the opportunity to compete at a high level” (M1) one participant endorsed an interest in helping athletes through his involvement in officiating. Another participant wrote “Watching my kids compete. Since I was there I might as well help” (M15).

Extension of role

Officials who cited that their introduction to track and field officiating came as a result of their employment as a *teacher*, or of their role as a track and field *coach* were grouped into this category based on their MU’s provided in response to question one.

One participant wrote “as a track and field coach I had to be able to officiate” (F16).

“Another participant commented, “I became involved as an extension of my coaching duties as a JR/SR Highschool teacher” (M49).

Intrinsic reasons

Five participants reported becoming involved in track and field officiating to fulfill what appeared to be *social reasons* for their participation in the sport. While social reasons may not be considered an intrinsic or internal reason to participate in certain areas of study, in the present investigation where there is a focus on relatedness as a basic psychological need, social reasons are considered intrinsic motivators. One participant described his involvement as “a way to enjoy being involved with the sport and friends in it” (M78). Others described an interest in different aspects of being a track and field official including the rules and regulations of the sport. These were collectively termed *interest in officiation*. One participant wrote: “Being a Phys. Ed teacher wanted to learn more about the rules of each discipline” (F45). Another participant wrote, “I find that officiating is a good retirement pastime...” (M21). Of the participants who stated *enjoy track and field* reasons for initial involvement, many stated their enjoyment concisely as one participant did, “track and field is exciting” (M6) or as another participant said “I love the event” (M5). A final group of responses were grouped under the lower order theme *stay involved* and described former athletes and coaches interested in maintaining ties to the sport after their participation in another capacity had come to an end. One participant wrote “I was a competitor from school days and periodically thereafter. When I could no longer participate, (I did masters track at age 40) I wanted to remain as close as possible.” (M66).

Question #2: “Why are you currently volunteering to officiate track and field?”

Three higher order themes emerged from the analysis of the lower order themes associated with this question and were labelled *track and field*, *to help*, and *personal benefits* (See Table 16). The lower order themes comprising these higher order themes were as follows: (a) *track and field* (“*stay involved with track and field*”, “*atmosphere/ environment*”, “*athlete development*”, and “*enjoy track and field*”); (b) *to help* (“*to provide quality meets*”, “*to teach/encourage new officials*”, “*feel needed*”, “*to volunteer/ community service*”, “*feel obligated*”, “*encouraged/ asked*”, “*give back*”, and “*available*”); (c) *personal benefits* (“*interact with young people/ athletes*”, “*social*”, “*satisfaction*”, “*opportunities*”, “*power/ authority*”, and “*enjoyment*”).

Track and field

Participants discussed an interest in a variety of positive aspects of track and field as explanations for why they continue to volunteer as track and field officials. Responses grouped in the category, *stay involved with track and field*, indicated an interest in maintaining ties with the sport they had competed in or coached in the past. One participant wrote “To keep in touch and enjoy being part of the sport” (M66).

Atmosphere/ environment responses were those that described the context of track and field meets in a positive way: “It is a good area in which to volunteer because you are outside and working with others who are dedicated to the sport” (F64). Twenty-one officials responding to this question simply felt positive feelings for track and field, for the excitement of competitions and for a variety of other reasons and were termed *enjoyment of track and field*. A typical response in this category was given by a respondent who wrote, “I enjoy the sport” (M28).

To Help

Given that track and field officiating is a volunteer endeavour, a number of respondents provided comments related to helping different groups of people which emerged from the data analysis. On a global level, some participants were interested in improving the track and field meets and were grouped under the label, *to provide quality meets*. An example of a response grouped in this higher order theme is, “Because I believe the athletes (especially the young ones) deserve good officiating when they compete” (M34). A more specific set of responses were given by officials who had interest in passing on their knowledge and enthusiasm for officiating to a new generation of officials. These responses were grouped together under *teach/ encourage new officials*. One respondent wrote, “I enjoy working with my fellow officials and assisting new people on the officiating team to learn more about throwing events and hopefully continue to come out and become a registered official” (M47). While it is not clear whether all of the officials who volunteer for Athletics Canada enjoy what they do, some responded that they continue to volunteer because they *feel needed*. One participant confessed, “Currently I volunteer to officiate because of the need for officials, qualified officials” (F60). Others officiate as a form of public service and have been termed, *to volunteer/ community service*. One participant wrote, “One of the few sports where officials do not get paid – I like to volunteer (M72). Some officials stated that they continue to volunteer because they are continually encouraged to continue or requested to officiate meets as this participant was, “a couple of close friends (fellow officials)...encouraged me to continue by becoming an official” (M1). These responses were termed *was encouraged/ asked*. Still others cited being retired athletes themselves and wished to *give back* to the sport that from which they perceived having received so many positive experiences. One respondent epitomized this lower order theme when she

stated “still paying back for a lot of good years” (F14). A final category surfaced in this lower order theme was termed *available*. One official commented on her ability to officiate because, as she put it, “I am retired now” (F16).

Personal Benefits

Responses that were clustered into this category were grouped based on positive feelings or benefits the participant derived from his or her participation in track and field officiating. Officials indicated wanting to *interact with young people/ athletes*: “after all these years [I] still enjoy being involved with our young people” (M8). The most often cited response was termed *social*. Participant responses clustered in this category described the friendships created through their time as officials as did this participant, “I have always enjoyed the camaraderie that is prevalent among officials” (F40). Responses that were grouped under *satisfaction* were generally related to taking pride in the role he or she plays, or the quality of the work done, as this participant stated: “[I] believe we have one of the strongest groups in the country – both in terms of numbers and ability. I take pride in that achievement” (F44). For at least one other respondent, satisfaction involved recognition of their efforts as an official being appreciated by those involved in the sport. One official wrote, “The best reward for me as an official is for the competitors to come over after the completion of the event and say “thank you” with a handshake” (M47). *Opportunities* described those reasons related to having the chance to travel to work at meets, or to become a higher level official and potentially having an opportunity to work at world class track and field meets: “[enjoy] the opportunities to advance + to travel” (F38). A surprising lower order theme surfaced that was termed *power/ authority*. It is not surprising that officials may feel this is a motivator for their continued involvement, however given the social undesirability of the term, this researcher did not expect it to

surface: “there is a feel of authority” (M5). The most common theme that emerged accounting for continued involvement was *enjoyment*. Some participants indicated enjoying their work as an official as this official did, “I am currently volunteering to officiate because I enjoy doing the tasks” (F36), while others stated their enjoyment more simply as this participant did: “Because I enjoy it” (M73).

Question #3: “What changes would encourage you to continue volunteering as a track and field official?” Three higher order themes emerged from the analysis of lower order themes associated with this question (see Table 17) and were labelled *political*, *organizational/structural*, and *personal*. The lower order themes comprising each higher order theme retained in the analysis of responses to this question were as follows: (a) *Political* (“*financial support*”, “*remove politics*”, and “*equality of meet assignments*”); (b) *Organizational/structural* (“*recruit new officials*”, “*upgrade criteria*”, “*schedule*”, “*standardize & enforce rules/roles*”, “*communication*”, and “*treatment of officials*”); and (c) *Personal* (“*recognition*”, “*less officious*”, “*more opportunities*”).

Political

Officials whose responses were labelled as *financial support* referred to covering the costs of travel to meets, personal payment for their work as officials, and support from government for the sport. One respondent wrote, “more financial commitment by all levels of government” (M20). Some officials discussed aspects of officiating and of track and field they felt had become too political and described the negative presence of an “old boys club”. These responses were termed *remove politics* and included such statements as, “the politics at the provincial level, but more especially at the national level *need* to change. Athletics Canada does little, if any thing for us + N.O.C. has become an ‘old boys club’” (F49). Some participants suggested that issues related to the

equality of meet assignments had become a problem in that some officials appeared only to work the “big meets” while those without connections continued to work all of the small ones in an attempt to be selected to the more prestigious meets. One official wrote, “[It would be] better if open selections to high level meets” (M80).

Organizational/ Structural

Participant responses discussed issues relating to the way track and field meets are organized and carried out as changes that would encourage them to continue officiating. Thirteen participants indicated the need to *recruit new officials* into track and field: “would like to see more young persons involved with officiating, since a number of our older officials are ready to retire” (M8). Related to this theme, a second concern appears from the comments made by some officials that the diminishing numbers of officials are taking their toll on the present officiating pool. One participant wrote, “Every meet must be attended by a full team of officials, not just a few dedicated ones who get overworked” (F36). In addition to having a sufficient number of officials to run a meet, some officials indicated that track and field meets often run too long and that the *schedule* of events was an issue they would like to see resolved. “The schedule must be reasonable. Some of us have a day job on Monday!” (M62). On a more broad scale, participants discussed an interest in seeing the rules standardized and the role played by officials clearly laid out and accessible for anyone who wants to see them. Responses that fit this description were grouped as, *standardize and enforce rules and roles*. One participant suggested, “A website with officiating guidelines etc. text or written materials should be current and available” (M76). Officials indicated their interest in seeing changes made with respect to the method of upgrading from one level of certification to the next. These responses were labelled as *upgrade criteria*: “If it was easier to move level to level” (F11) which

also included training of officials as one respondent indicated, “Greater training to encourage development” (M15). A second official wrote, “A simpler more non political method of upgrading – upgrading based on experience and not who you know” (M31). The penultimate higher order theme classified within the general grouping of organizational/structural was *communication*: “Better communication from Athletics Canada to all officials” (M29). For the amount of their own time they volunteer that is spent in unfavourable weather conditions as indicated by one participant, officials still perceive being treated poorly by a variety of groups in track and field, namely the governing bodies. Responses fitting this description were termed *treatment of officials*. One participant wrote, “There has seldom been a time when officials have been treated on a par with coaches, athletes, and administration when considerations are made regarding accommodation, transportation, and food” (F40).

Personal

While the majority of officials who responded to this question indicated that they were involved primarily to benefit others, some also felt that their own interests could be better met while continuing to benefit the athletes. It was stated by some officials that they felt unappreciated by Athletics Canada, the athletes, coaches, and administrators. Responses that fit this description were grouped under the heading *recognition*. One participant described his concerns, “Most of the time we, as officials are taken for granted, and that is unfortunate as without two groups of people, athletes and officials, there would be no track and field meets” (M47). It was not only outside groups who officials targeted, rather, some officials felt that there were officials they would like to see become *less officious*. One participant stated just that: “I would like to see more officials become less “officious” and remember that they’re there to serve the athletes”

(M34). Finally, officials discussed an interest in having *more opportunities* to travel, to advance, and to work at “big meets”. One participant wrote, “I would like to have the opportunity to travel to more meets outside the province/country” (M62).

Summary

The results of this study suggested that perceived relatedness was the only predictor variable significantly related to the intention to continue officiating track and field ($r = .35, p < .01$). Two HMRA's were computed for study variables. In the first HMRA OC variables entered in model 1 did not significantly predict the intention to continue ($R^2 = .029$). Perceived relatedness was added to the equation in model 2, increasing the ability to predict the criterion variable to 14% ($p < .01$) and contributing 12.25% unique variance to the prediction. The second HMRA was conducted to determine if the foci of commitment and demographic considerations that were correlated with the criterion variable would be able to predict intention in the present study. These variables did not add a meaningful contribution to the model, while, perceived relatedness held up to the addition of five new variables to the equation accounting for 9.10% unique variance in intention to continue ($p < .01$). This attests to the robustness of this predictor variable for the present sample of track and field officials.

Chapter 6

Discussion and Conclusions

The overall purpose of the present study was to examine the factors contributing to volunteer track and field officials' intentions to continue officiating over a two year period. This investigation drew constructs from frameworks provided by Meyer and Allen's (1991) OC model and Deci and Ryan's (2002) Self-Determination Theory since both approaches have demonstrated some utility for understanding participant intention in various domains (Sarazzin et al. 2002; Meyer et al., 1993). More specifically, this study examined the importance of commitment to Athletics Canada as a target organization and participants' perceived relatedness to other track and field officials in terms of their relationships with intention to continue officiating over the next two years. The hypotheses examined within this study built upon conceptual arguments (Meyer & Allen, 1991; Deci & Ryan, 2002), as well as on previous empirical research examining OC (Meyer, et al., 1993) and perceived relatedness (La Guardia et al., 2000). The overall purpose of this study was addressed in two separate phases. Phase one assessed the content validity of the items adapted from Meyer, Allen and Smith's (1993) OC scale and La Guardia et al.'s (2000) perceived relatedness subscale. Phase two examined the utility of OC and perceived relatedness as predictors of intention to continue over a two year period, and explored additional reasons for investment in officiating using three open-ended questions.

Summary of Results

The results of phase one provided preliminary evidence of content validity associated with the modified OC and perceived relatedness items used in phase two. Expert judges (track and field coaches and athletes) provided evidence supporting the

relevance and representation of the proposed items to the target domains of AC, NC, CC and perceived relatedness. Phase two augmented the findings of phase one by providing additional construct validity evidence for scores on the OC and perceived relatedness items in a sample of current track and field officials. Further, the results of phase two supported the reliability (internal consistency) of scores on the OC and perceived relatedness items, and offered evidence of convergent/ divergent validity amongst predictor variables including evidence of predictive validity in the present sample for perceived relatedness scores. Perhaps of greater interest was that the dimensions of OC failed to account for a sizeable portion of the behavioural intention variance ($R^2 = .03$) while perceived relatedness to other track and field officials accounted for the majority of variance (> 9.0% unique variance) in the HMRA. These relationships remained robust in the second HMRA that included the influence of demographic variables and additional commitment variables differing in focus from OC constructs. Collectively, these findings offer initial support for the construct validity of OC and perceived relatedness scores in a novel sample and suggest feeling meaningfully connected to other track and field officials is more important than commitment to Athletics Canada, the sport of track and field, the role of being an official, or to the athletes for predicting intentions to continue officiating.

Qualitative results supported these data and further built upon them, offering additional insight into the reasons track and field officials first began to officiate, continue to officiate, and changes that would encourage their continued involvement. Participant responses to question one were grouped into 4 higher order themes which described their entry into officiating as influenced by convenience, helping reasons, extension of role, and intrinsic reasons. The second question produced participant

responses describing their current involvement as being motivated by track and field reasons, to help, and personal benefits. Third, participants indicated that political, organizational/ structural and personal changes would encourage their continued involvement in officiating in the future.

Construct Validity of Organizational Commitment and Perceived Relatedness Items

The results of both phase one and two of this investigation provide evidence informing the construct validity of scores derived from both the OC and perceived relatedness items used in this investigation. Expert rating procedures recommended for the evaluation of survey items in psychological research provided initial support for the relevance and representation of the items modified from previous studies (La Guardia et al., 2000; Meyer et al., 1993) for use with track and field officials. Aiken's V coefficients were calculated for expert ratings. Fourteen V 's from group one and 16 V 's from group two were statistically significant suggesting that over half of the items were relevant to the content of their keyed domain. Based on the 52 total ratings provided by the expert judges ($N = 9$), 82% ranged from "good match" to "excellent match" indicating that the items are representative of the focal constructs of interest within the context of track and field officiating. Qualitative data indicated that judges perceived some degree of overlap among the OC items. This however was expected given that in previous research OC dimensions were intercorrelated (Meyer et al., 1993) and raises no construct validity concerns for OC items. Furthermore, the open-ended responses provided by the expert judges in phase one of this investigation offered no evidence of potential wording problems or interpretational issues associated with either the modified OC or perceived relatedness items. Collectively, these data provided initial support for the content validity

of both the OC and perceived relatedness items and suggested the modifications imposed as a result of this study's focus on track and field officials did not impair the content relevance or representation of the items.

Phase two of this investigation consisted of using the OC and perceived relatedness scores to predict the intention of track and field officials to continue their involvement with Athletics Canada over the next two years. Building upon the results of phase one, an examination of the reliability estimates (Cronbach's α ; Cronbach, 1951) presented in Table 11 indicated no apparent concerns pertaining to the internal consistency of AC, NC, CC, or perceived relatedness scores in this sample of track and field officials. These data suggest that scores on these items co-vary in a coherent manner as proposed by Meyer et al. (1993) and La Guardia et al. (2000). Further evidence attesting to the construct validity of AC, NC, CC scores is presented in the matrix of correlations (See Table 12). The present study found a strong correlation between NC and CC scores similar to Meyer et al's (1993) study although the relationship found in the present study appears to be much stronger than previously reported ($r = .528, p < .01$). Meyer et al's (1993) study suggested that the correlation between these two variables may be partially due to common antecedents shared by these OC dimensions.

While the aforementioned data provided support for the construct validity of OC scores, discrepancies with previous literature were evident in the present study. First, this study found a positive correlation between AC and CC scores ($r = .62, p < .01$) which is in contrast to at least one previous study by Meyer et al. (1993) who reported a negative ($r = -.062, p > .05$) albeit small correlation between scores on these variables. Second, the present study found no evidence of a relationship between NC and AC ($r = .11, p >$

.05) scores while previous research suggests a strong relationship exists between these variables (Meyer et al., 1993; $r = .74, p < .05$). One plausible explanation for the present findings is the focus of commitment to Athletics Canada functions differently compared with commitment to the organizations examined in previous studies (Cotton & Tuttle, 1986; Meyer et al., 1993). Following from Becker's (1960) concept of side-bets for example, an official could feel pressure to continue volunteering for Athletics Canada as a result of pressure in the form of generalized cultural expectations. It is possible that track and field officials do not feel that leaving Athletics Canada would be associated with the failure to abide by cultural expectations. Rather leaving the remaining officials one more volunteer short is incentive to continue. An alternative explanation is that OC scores in this track and field sample lack construct validity in accordance with the model developed by Meyer and Allen (1991). Given that construct validation is an ongoing process (Messick, 1995) future research would do well to consider examining the interrelationships amongst OC scores in other samples to determine the construct validity of these scores in relation to the OC model proposed by Meyer and Allen (1991).

Perceived relatedness was unrelated to AC and NC, however, was correlated to CC in phase two of the present study. Side bets theory (Becker, 1960) may provide a reasonable account of this observed relationship as well. It is possible that officials indicated that they would continue to officiate for Athletics Canada despite not feeling affectively or normatively committed to the organization, but because they valued the relationships with their work group (officiating team) and felt that the cost of losing these relationships was too high. These data lend further credence to the construct validity of scores derived from OC constructs by demonstrating divergence between conceptually

unrelated variables (namely connections to other officials via relatedness versus affective and normative forms of commitment to the governing organization of Athletics Canada).

Commitment and Officiating

Officials' degree of commitment in the form of AC, NC, and CC was variable in the present sample. Descriptive statistics for OC dimensions suggested that for the most part the present sample of track and field officials were not strongly committed to Athletics Canada. An implication concerns the degree to which the governing organization can effect change in official retention. It seems unlikely that officials will respond to promotional efforts to retain their involvement coming directly from Athletics Canada if they feel minimally committed to the organization. Responses to open ended questions however, suggest that although officials may not be committed to Athletics Canada per se, this organization may still be able to encourage officials' continued involvement in officiating track and field in the future. This is indicated by responses to question three for which 6.72% of the total meaning units specified that changes controllable by Athletics Canada would encourage their continued involvement. If Athletics Canada wishes to promote continued involvement they should not attempt to foster commitment, rather they should attempt to resolve the participants' organizational issues based on the present findings.

Alternatively, it is possible that officials feel more strongly committed to their provincial organization given that it seems plausible there is more direct contact between them. However, it was the purpose of the present study to examine officials' commitment to Athletics Canada. As a result, future studies may want to consider investigating track and field officials' commitment to other organizational levels.

The present study found that the criterion variable intention to continue over the next two years was marginally correlated with dimensions of OC (AC $r = -.008$; NC $r = .125$; CC $r = .127$; all p 's $> .10$). These findings concerning AC and NC are in stark contrast with previous research (Meyer et al., 2002; Steers, 1997; Meyer et al., 1993; Mathieu & Zajac, 1990; Cotton & Tuttle, 1986) that found these variables to be related to the intention to continue. Reports concerning a relationship between CC and intention however, have been inconsistent. In their meta-analysis, Meyer et al. (2002) found that AC was linked with organizational tenure in 51 studies [$\rho = .16$, $SD = .12$ ($\rho =$ weighted average corrected correlation)] as were NC ($\rho = .17$, $SD = .13$), and CC ($\rho = .21$, $SD = .10$). Further, the three OC variables correlated negatively with turnover (AC, $\rho = -.17$, NC, $\rho = -.16$, CC, $\rho = -.10$) and with overall withdrawal cognition (AC, $\rho = -.52$; NC, $\rho = -.28$; CC, $\rho = -.13$; Meyer, et al., 2002). Overall, the present analysis of bivariate correlations only partially supported hypothesis one. AC and NC were in fact positively (although not significantly correlated according to conventional standards; $p > .05$) intercorrelated, but did correlate positively with greater intention to continue officiating over the next two years. The predicted relationships expressed in hypothesis two were also only partially supported in the present study. Contrary to predictions, CC was positively correlated with AC, and CC was slightly positively correlated with greater intention to continue officiating over the next two years although these relationships were not significant (i.e., p 's $> .05$). However, the prediction that CC and NC would be positively related was supported by the data in the present study.

In testing the ability of OC dimensions to predict intention to continue officiating the HMRA revealed that dimensions of OC were not able to significantly predict the intention to continue officiating ($R^2 = .03$), thus refuting the OC relevant predictions

made in hypothesis four. These findings were in contrast with previous research in which AC, NC, and CC predicted turnover intention ($\Delta R^2 = .21$, β 's = $-.39$, $p < .01$; $-.10$, $p < .05$; $-.03$, $p > .05$; Meyer et al., 1993). The qualitative data show that while officials appear not to officiate because of commitment to Athletics Canada, the motivations behind their initial involvement appear to reflect feelings of NC, although to some other entity. Four percent of meaning units describing participants' reasons for first entering into officiating were expressive of participants' feelings of paying back what they have received. For example, one official indicated: "I enjoyed the years of official's time for me when I was an athlete and decided that I would give 10 years back to the sport as an official" (F75). The foci of these MU's however (see Table 15), were not Athletics Canada, but the sport of track and field, the officials who volunteer at track and field meets, and to the community in general, further supporting the notion that commitment functions differently in the present context than has been indicated in paid work settings.

Perceived Relatedness and Officiating

While the main purpose of the present study was to gain insight into the relationships between OC dimensions on track and field officials' intentions to continue officiating, perceived relatedness was added to the investigation due to the link demonstrated with persistence behaviour in previous literature (Sarrazin et al., 2002). Hypothesis three stated that perceived relatedness would be positively correlated with intention to continue officiating over the next two years. Bivariate correlations between relevant study variables supported this hypothesis ($r = .35$, $p < .01$) as expected based on Sarazzin et al.'s (2002) investigation. Further, when examining the matrix of correlations it is apparent that perceived relatedness was the only predictor variable associated with intention to continue officiating over the next two years.

As reflected in hypothesis four, perceived relatedness was expected to contribute uniquely to the prediction of intention to continue officiating in track and field over the next two years after controlling for the influence of OC dimensions reflecting commitment to Athletics Canada. The results of the present study supported this hypothesis in that the inclusion of perceived relatedness at step two of the HMRA accounted for an additional 11% of the variance associated with the criterion variable. Although a direct test of the perceived relatedness-intention link in track and field officials has not been previously examined, other studies have addressed similar variables in both quantitative and qualitative investigations with respect to other populations. Most recently, Stergios and Carruthers (2003) interviewed elderly volunteers and found that major reasons for their involvement were a desire to feel connected to others and to make a contribution to the youth. Prior to this, Sarrazin et al. (2002) studied female handball players ($N = 335$) and concluded that higher perceptions of relatedness were negatively related to the intention to drop out of sport and to actual termination of sport involvement. Furst (1991) found that positive relationships were cited for why collegiate sport officials intended to continue 8% of the time. These results taken together with the results of the present study suggest that feeling meaningfully connected with others is an important impetus to volunteer. Further, perceived relatedness forms a strong bond with the intention to continue for a variety of sport related groups and deserves greater attention in future research.

On the basis of the regression analysis reported in Tables 13 and 14, it appears that having a meaningful connection to other officials is an important process underpinning future intentions to continue officiating. Moreover, although other variables showed some ability to account for variance associated with intentions to

continue, the regression analyses clearly demonstrated that perceived relatedness was the only significant predictor of intentions in this sample of track and field officials. These findings are in support of the tenets of SDT, which suggest that relatedness is an important psychological need that predicts behavioural investment and enhanced psychological health (Deci & Ryan, 2002). Given that at model three of the regression five more variables were added and perceived relatedness retained its predictive relationship attests to the robust influence of this variable in predicting intentions to continue.

These quantitative results clearly show that the track and field officials sampled here perceived meaningful connections with the officials they work with, and that these perceptions significantly predicted their intentions to continue officiating over the next two years. This was supported by the qualitative data where 12% of the meaning units describing participants' reasons for continuing to officiate were related to their relationships with the officials they work with in this context. For example, one official indicated: "I enjoy the people I work with and value their friendship" (F75). However, the results of the qualitative analysis suggest that important connections were not limited to those with other track and field officials as a further 14% of meaning units indicated that participants' relationships with the athletes, coaches and people in general were important influences behind their continued involvement in officiating. For example, one participant wrote "I enjoy the sport and the people I work with and I enjoy interacting with the athletes as well" (F41). The perceived relatedness construct describes meaningful connections within a given social setting (Deci & Ryan, 2002). Upon reading participant responses to question two it is clear that other officials are not the only target of relatedness integral to Athletics Canada's track and field officials. As a result,

broadening the focus of perceived relatedness to incorporate other groups (e.g., athletes) should enhance our understanding of the motivational dynamics attributable to perceived relatedness in sport settings with respect to continuance intentions in track and field officials.

Exploratory variables and intention

In addition to examining relationships among the main study variables, correlations were calculated for intention and three exploratory commitment variables given Becker and Billings' (1993) contention that an individual may be committed to multiple foci. Thus, commitment to the athletes, commitment to the role, and commitment to the sport of track and field were included to determine if the psychological process of commitment with a different focus was a salient correlate of intention. Inspection of the correlation matrix provided in Table 11 indicates that commitment to the role of being a track and field official was more strongly associated with intention to continue ($r = .27, p < .05$) than any OC or exploratory commitment variables which could be of interest to the present study. Given that participants indicated they did not feel particularly committed to Athletics Canada, it is possible that the focus of their commitment was not in fact the organization, but instead, a different focus entirely. Becker and Billings (1993) describe the foci of commitment as the individuals and groups to whom an employee is attached. Given the descriptive statistics gathered in phase two it appears that track and field officials working with Athletics Canada are committed to the role of being an official, supporting the suggestion that carefully specifying the focus of commitment is critical when conducting commitment research (Becker & Billings, 1993). Consequently, an alternative explanation for the small relationship between OC dimensions and intention to continue appears to be that

commitment in track and field officials is important but the focus of that commitment is not best directed at Athletics Canada.

Previous investigations into OC and behavioural intention have found significant relationships between intention and age (Searle et al., 1993) and organizational tenure (Mathieu & Zajac, 1990). These variables were included in the present study to determine if they could enhance the prediction of intention to continue beyond the main study variables. According to their results, Meyer et al. (1993) suggested that AC should be most correlated with years in the organization, followed by NC and CC, which Meyer et al. (1993) suggested would be unrelated or negatively related to years with the organization. As expected by Meyer et al. (1993) the present study found a strong correlation between AC and years with Athletics Canada ($r = .37, p < .01$). In contrast with Meyer et al.'s (1993) expectations however, CC was the second most strongly related to years with Athletics Canada ($r = .27$), followed by NC ($r = .10$). Together the 3 foci of commitment, age, and years with the organization added to the variance explained by OC dimensions and perceived relatedness in the intention to continue officiating over the next two years ($R^2 = .20$), although, the contribution was not statistically significant. The findings here concerning the relationship with age and intention, together with the relationship between these variables in previous research suggest that they are associated, yet the direction and magnitude of this relationship varies per context and population.

Summary of Results

Numerous potential explanations can arise to explain why some of the hypotheses were not supported by the data in this study. First, there may have been difficulties with the measurement of the criterion variable given that it was modified from its original

form as surveyed by Yiu et al. (2001). Two of the four temporal points (five and 10 years) used by Yiu et al. (2001) were decreased substantially to account for the contention that a measure of intention becomes less useful as a predictor variable if the intention changes before the behaviour is observed (Chatzisarantis & Biddle, 1998). Further, research suggests that over time intentions are less likely to predict behaviour because intention is more likely to change (Chatzisarantis & Biddle, 1998). Thus it was determined to follow Ajzen and Fishbein's (1980) recommendations that the intention must be assessed just prior to the behaviour and cover a short time frame into the future.

While the design of this study did not incorporate an assessment of behaviour amongst track and field officials, it is possible that the nature of the intention items was not best suited to this behavioural domain (Pedhazur & Schmelkin, 1991). Phase one of this study did not evaluate the content validity of the intention items. Moreover, while phase two provides evidence of high internal consistency, this does not offer much insight into the construct validity of intention scores as measured in the present investigation. Consequently, the present findings should be interpreted cautiously prior to replication with other measures of intention using different temporal frames.

A second potential reason why this study is unable to predict intention from commitment variables is related to statistical power (Cohen, 1992). Beta, an estimate of the effect of one variable on another (Trochim, 2001), was small for OC dimensions in the present investigation (AC, $\beta = -.12$; NC, $\beta = .04$; CC, $\beta = -.18$). According to Cohen (1992), the larger the effect size expressed by a predictor variable, the easier it is to detect an effect on the criterion variable, if in fact an effect exists. In cases where the effect size is small, as is the case with the present study, a larger sample size is needed to detect an effect if it exists (Cohen, 1992). With respect to the present study, and given the small

beta coefficients, the sample size ($N = 75$) was insufficient to see an effect on the criterion variable with respect to the OC dimensions. According to Green's (1991) global recommendations concerning the subject:variable ratio for the regression analysis (assuming $\alpha = .80$) the desired sample size would be increased for both the first (desired $N = 82$), and the second (desired $N = 122$) HMRA's.

Third, it is possible that the participants in fact did not feel committed to Athletics Canada, but were committed to some other entity. Becker and Billings (1993) found that employees felt committed to a variety of foci within the work context and that these foci were differently related to their intentions to terminate employment with that organization. Based on their responses to exploratory close-ended response questions, track and field officials' commitment to the role of being a track and field official was correlated with the intention to continue officiating over the next two years ($r = .27$). Further, this variable along with commitment to the sport of track and field, commitment to the athletes, age, and number of years officiating with Athletics Canada, as well as perceived relatedness and OC dimensions accounted for 20% of the variance associated with the intention to continue officiating track and field over the next two years. Together, these findings suggest that track and field officials are neither affectively nor normatively committed to Athletics Canada, nor do they feel CC. Rather, it is their commitment to the role of being a track and field official that may have more influence over their continued involvement.

Fourth, a possible explanation for why officials persist (whereas OC appears not to be linked and relatedness is only minimally related to intention) could lie in Schmidt and Hunter's (1997) suggestion that it is difficult to change the beliefs and practices of a lifetime. Many of the officials sampled were of retirement age ($M = 56.83$, $SD = 11.83$)

and had been officials for many years ($M = 18.8$, $SD = 12.22$). It could be that officiating has become a part of their normal schedule and they are resistant to change, regardless of how they feel toward the organization or to each other. As such, both OC and perceived relatedness could be more important to an official early in their career. Thus, future research exploring the importance of these psychological processes on investment behaviour with recently recruited track and field officials appears worthwhile.

Finally, it is plausible that the reason track and field officials did not feel strongly committed to Athletics Canada can be found in the nature of the relationship between this sample and the target organization. Given that this instrument (Meyer et al., 1993) was developed for use in an employer-employee context, the volunteer nature of track and field officiating may render this scale less appropriate as a measure of commitment to an organization in the present investigation. Future studies may wish to examine this contention more carefully using other measures of commitment.

Qualitative Responses to Open-Ended Questions

Qualitative responses to open ended questions were analyzed using guidelines for content analysis adapted from qualitative experts (Miles & Huberman, 1994; Patton, 1990; Strauss & Corbin, 1990). Responses to question one, which asked participants to describe their initial reasons for volunteering to officiate track and field, revealed that participants initiated volunteering as track and field officials for four general reasons: *convenience* ($MU = 31$), *helping reasons* ($MU = 31$), *extension of role* ($MU = 20$), and *intrinsic reasons* ($MU = 34$). Responses to question two showed that officials in the present sample of track and field officials continued to officiate for three categories of reasons: *track and field* ($MU = 41$) specific reasons, *to help* ($MU = 30$), and for the *personal benefits* ($MU = 85$) associated with participation. Question three elicited

suggestions for changes that would influence respondents to continue officiating in the future. These changes were grouped in the following three higher order themes: *political* ($MU = 23$), *organizational/structural* ($MU = 42$), and *personal* ($MU = 18$).

The first open-ended question requested participants to explain how and why they initially became involved in officiating track and field. Participant responses were grouped thematically and labelled appropriately. Three of the four emergent themes (*track and field*, *to help*, and *convenience*) were clearly cited more often than the fourth (*extension of role*) theme, suggesting that the purely circumstantial reason was less important than the more volitional reasons for volunteering to officiate for this sample. When focusing on the lower order themes it is apparent that participants in the present study did not initiate their participation in volunteer track and field officiating because they felt committed to Athletics Canada.

The second open-ended question directed participants to indicate their current reasons for volunteering to officiate track and field. Responses varied and were grouped thematically as deemed appropriate by the principal investigator. The higher order theme *personal benefits* emerged here as the most frequently cited set of reasons for continuing to officiate track and field (48.57%), followed by reasons specific to *track and field* (23.42%), and *to help* (17.15%). Consistent with the findings of question one, track and field officials did not cite reasons relevant to OC for their continued involvement in track and field officiating. Interestingly the qualitative responses are also consistent with the quantitative data pertaining to endorsement of OC, strengthening the argument that officials do not volunteer to officiate track and field due to commitment towards Athletics Canada. When specifically probed to indicate their perceptions of their own commitment using Meyer et al.'s (1993) questionnaire, officials' responses showed that

the present sample were uncommitted to Athletics Canada (AC $M = 3.90$, $SD = 1.28$; NC $M = 3.31$, $SD = 1.32$; CC $M = 2.46$, $SD = 1.24$).

Relevant to the present study, a pattern of responses emerged from the first question indicating social reasons for why they first became track and field officials. However, *personal benefits*, specifically *social* reasons became more saliently endorsed reasons for currently volunteering as a track and field official. Participants in the present study also indicated that their *interactions with young people and athletes* influenced their decision to continue officiating track and field. Furst's (1991) study of sport officials revealed that positive relationships were cited as reasons for continuing to officiate 8% of the time. In a previous internal investigation, Athletics Canada (2002) found that 80% of respondent track and field officials ($N = 113$) indicated camaraderie as a reason for continuing to officiate. Stergios and Carruthers (2003) found that elderly people reported wanting to feel connected to others and wanted to make a contribution to youth as their major reasons for continuing to volunteer with young people. Given the similarities in age of the participants in the present study (Male, $M = 56.96$, $SD = 13.00$; Female, $M = 56.52$, $SD = 12.48$) and those in Stergios and Carruthers (over age 65), it is possible that elderly volunteers in any setting will value the opportunity to make a contribution to young people as well as to socialize.

These findings build upon the results of the quantitative portion of the present study relating to officials' perceptions of relatedness to other officials. Unique variance calculations (Hair et al., 1998) indicated that perceived relatedness accounted for 12.25% of the variance associated with track and field officials' intentions to continue officiating for the next two years. It may be that Furst (1991) found that positive relationships were less important to participants than were found by Stergios and Carruthers (2003), and in

the present study because Furst's (1991) participants were being paid for their services while the track and field officials investigated here and the sample used by Stergios and Carruthers (2003) were unpaid volunteers. Financial remuneration could potentially have influenced officials' perceived relatedness and warrants further investigation. This change from volunteer to paid employee could also have effected a change in the OC dimensions as reported by track and field officials and could in turn influence the effect of OC dimensions on intention. Paying track and field officials to continue could have resulted in increasing their reported CC based on feeling that leaving Athletics Canada would result in financial loss. Both questions one and two in the present study elicited responses from officials relating wanting *to help* in some form as a reason for beginning or continuing to officiate. Farrell et al. (1998) uncovered similar reasons for volunteering in their investigation of volunteers at an elite sport competition. However, Farrell et al. found that "I wanted to help make the event a success" was the most often cited reason to volunteer, whereas the present study found that *to provide quality meets* was one reason among a variety of helping reasons to officiate track and field. The differences in the reasons underpinning these two groups of sport volunteers' involvement may be a result of the calibre of the event. The track and field officials sampled for the present study were certified to officiate at levels I through V, and thus incorporated officials who volunteered at local competitions and those who volunteered at elite international competitions. It may be that the diversity of the sample contributed to equally diverse reasons for volunteering, whereas the volunteers investigated by Farrell et al. (1998) were more homogenous in their motives.

The final open-response question inquired as to whether there were any changes that would encourage participants to continue volunteering to officiate track and field.

This question was geared toward investigating the main purposes of the present study, whereas the previous two questions set the context for question three. Responses were grouped into general thematic categories among which issues pertinent to *organizational/structural* setting emerged as the most frequently cited higher order theme (31.08%) followed by *political* (20.04%), and *personal* (15.12%). Judging from the pattern of findings reported by this sample of officials, it appears that although organization relevant variables were not important reasons for track and field officials initially becoming involved or currently motivating their involvement in officiating, they were perceived as important to a large degree for encouraging their continued involvement with Athletics Canada in the future.

Strengths of this Investigation

There were a number of strengths relevant to the present investigation. The first strong point concerns the mixed-method approach embraced by this study given that two separate phases were conducted employing quantitative and qualitative methods in each phase. Phase one was conducted to evaluate the content validity of the OC and perceived relatedness scales while phase two evaluated the construct validity of instruments. Taken together, the results of these two phases provide evidence that the modified OC and perceived relatedness scales are appropriate for use with track and field officials.

A second strength was the novelty of the population under investigation. Previous studies have not examined track and field officials affiliated with Athletics Canada. As a result, this study offers new information concerning track and field officials with respect to their perceptions of OC to Athletics Canada, relatedness to each other, and their intentions to continue officiating in the future.

Finally, the mixed methodology approach used is considered a strong point of this study for a few reasons. First, Trochim (2001) states that cause-effect relationships cannot be inferred from cross-sectional studies. Responses to the open-response questions in phase 2 of this study allowed officials the opportunity to describe their involvement motivations in greater depth. Thus a more detailed picture of track and field officials' past behaviours was described, which has consistently been the best predictor of future behaviour in previous research (Chatziserantis & Biddle, 1998). Second, Creswell (2003) reported that the biases inherent in one method could neutralize or cancel the biases of other methods. Accordingly, including both qualitative and quantitative procedures in the present study enabled the present study to gain a more comprehensive analysis of track and field officials' motivations.

Limitations of this Investigation

Despite the informative nature of this study, a number of limitations should be acknowledged and future directions advanced to further our understanding of track and field officials' intention to continue with the sport.

The first limitation of the present study concerns the sample sizes employed in both phase one and phase two of this investigation. The data examining item content validity during phase one of this study was based on responses from fewer than ten expert judges. According to Lynn (1986) a minimum of five judges is statistically ideal as it "provides a sufficient level of control for chance agreement" (p.383) among the judges. Given that only 5 judges from each group responded to the ICRF's (an 11.63% response rate) and that the responses given from two of these judges were not consistent with the other raters, the effective sample size in phase one of this study failed to meet the threshold value recommended by Lynn (1988). As such, it is plausible that the remaining

judges were more likely to have agreed by chance alone. It was decided to remove the aberrant judges despite the recommendations concerning sample size forwarded by Lynn (1986). As a result, the small response rate increased the possibility that judges were not representative of the entire expert population. Dunn et al. (1999) recognize, however, that the sample size will be largely dictated by the availability of experts willing to participate which on the basis of the response rates presented in Table 2 was clearly an issue in phase one of this study. A plausible explanation for the low response rates in group two (athletes) concerns the method of participant recruitment. All athletes of one track and field program at a large Ontario University were contacted and invited to participate. This approach may have generated a reduced sense of personal responsibility on behalf of the athletes to participate and future researchers interested in employing similar content validation methods should be mindful of this issue during participant recruitment.

Sample size was also a limitation associated with the data collected in phase two of this investigation. The effective sample size ($N = 75$) fell short of the target sample size established from an a priori statistical power analysis assuming a given level of power ($\alpha = .80$) and a medium effect size ($R^2 = .15$). An examination of the data from Model 1 (Table 13) however indicates that OC variables only exerted a small effect on behavioural intention as measured by Yiu et al's (1995) items in this sample of track and field officials ($R^2 = .03$). Given the observed effect size in the effective sample used in this study, a post hoc power analysis indicated that a much larger sample ($N = 360$; $\alpha = .05$; $\beta = .80$) would be required to reject the null hypothesis that OC variables have no relationship to intentions. Keeping these data in mind, the results of this study should be interpreted cautiously before replication with samples that have satisfactory statistical

power on the basis of size are conducted (Cohen, 1992). Stated differently, it would be premature to conclude on the basis of this study that OC dimensions targeting Athletics Canada have no influence on the intentions of volunteer track and field officials to continue their involvement with the sport.

A second limitation concerning the inability to generalize the findings of the present study to the larger population of Athletics Canada officials relates to non-responders. A number of third parties were relied upon to distribute questionnaires to track and field officials, and ultimately the number of officials who actually received these questionnaires is unknown. As a result we cannot differentiate between those who failed to respond to the questionnaire and those who failed to receive it, thus further limiting the generalizability of the present findings. Nevertheless, the notion that responders and non-responders differ along important dimensions is tenable yet is difficult to counteract using non-probability approaches to sample recruitment. Future studies may wish to try and cross-validate the present findings preferably using probability based sampling procedures to determine the validity of the findings reported in this investigation.

The third limitation of the present investigation concerns the composition of the samples providing data in phases one and two respectively (Pedhazur & Schmelkin, 1991). In phase one track and field coaches and athletes were selected for their domain familiarity with the population of interest (Dunn et al., 1999). Dunn et al. (1999) note the importance of including experts with different backgrounds and experiences in samples evaluating item content validity given that they can provide very different assessments of item content. Consequently, it may have strengthened the analysis to have included groups from sport psychology and current track and field officials in the panel of experts.

More specifically, sport psychologists with academic expertise in commitment and basic psychological needs would likely have provided a greater insight into the theoretical merit of the items. In addition, given their positions within academia, these experts would have better understood the need to develop psychometrically sound instruments (Lynn, 1986) and perhaps could have offered more scale item construction related criticisms. Including a sample of track and field officials as expert judges would have provided direct insight as to how the questions would have been perceived by the target population.

In conjunction with phase one, the results of phase two were based on a non-probability sampling procedure generated using purposive and snowball techniques. Non-probability sampling procedures do not produce data that adequately represents a predefined target population of interest (Pedhazur & Schmelkin, 1991) and therefore these data should be interpreted cautiously. The extent to which the results of phase two in this investigation are generalizable to all track and field officials working for Athletics Canada remains speculative at best. Future research in this area would do well to (a) more clearly identify the members of the target population (i.e., composition of the population of Athletics Canada certified track and field officials) and (b) use probability based models to sample from the target population. Such research endeavours would extend the results of phase two of this investigation by determining if commitment to Athletics Canada really has no bearing on the intention of track and field officials to continue volunteering within the sport using a representative sample of officials.

There were a number of limitations inherent within phase 2 of the present study. The first of these limitations concerns the non-experimental nature of the study design and the single time point for data collection. Collecting the data at one time only

precluded the researchers from examining relationships among the predictor and criterion variables as they change over time that may provide insight into causality (Pedhazur & Schmelkin, 1991). Ideally, future studies would examine the OC, perceptions of relatedness, and intentions to continue through the collection of data from the same group of officials over time to ascertain the degree to which the relationships reported in the present study remain stable. Moreover, adopting either a true or quasi-experimental approach to designing future studies may provide stronger evidence for the causal influences on intention to continue officiating that remain speculative based on the design used in phase two of this investigation. On the basis of the present study, however, it would seem relatedness forms a better target for experimental intervention than commitment to Athletics Canada.

The second limitation of phase two concerns the measurement of behavioural intention as the criterion variable. Participants were asked to rate both their intentions to continue officiating with Athletics Canada as well as the likelihood that they would continue to officiate with Athletics Canada using a scale adapted from the work of Yiu et al. (1999). The key measurement problem here involves the observed ceiling effects associated with the scores on the criterion variable that are likely a function of the item wording. A large portion of the sample scored above the 75th percentile on this criterion variable. One explanation could be that the track and field officials sampled intended to continue their involvement with the sport for more than a two year period. Previous research suggests that attrition rates are highest in the first and second years as an official (Forbes, 2004), however it is apparent from the average number of years with Athletics Canada (see Table 10) that the officials in the present sample have already surpassed their first two years officiating, and may intend to continue for longer than two years into the

future. Given that a program of prediction rests on the construct validity of the scores on the criterion measure (Pedhazur & Schmelkin, 1991), future research may wish to consider either (a) examining a longer time frame for the intention items or (b) using different items for the measurement of intention to continue officiating to ensure full representation of the content domain specified by Ajzen (2002).

A final limitation concerns the inclusion (and omission) of predictor variables in the HMRA. While all dimensions of commitment from the OC model were included, only perceived relatedness was added from SDT's *Basic Psychological Needs* subcomponent (Deci & Ryan, 2002). SDT contends that perceived competence and autonomy also represent important psychological needs warranting satisfaction for human development and motivation (Deci & Ryan, 2002) and an emerging body of literature supports the importance of satisfying these needs in conjunction with relatedness (see Deci & Ryan, 2002, for a review). Previous exploratory research (Furst, 1991) investigating the behavioural intentions of paid sport officials found that 82% of participants indicated that they continued to officiate for challenge, fitness and competence reasons. Although paid officials were the focus of this study, these results support the contention that competence is an important motivator to persist, and may have added to the variance predicted in the present study (Furst, 1991). The regression equations used in this study assume that the models have been "specified" correctly which suggests all relevant predictor variables have been included and irrelevant variables excluded (Pedhazur & Schmelkin, 1991). Given the nature of this study, it seems that this assumption of multiple regression is likely not tenable based on the exclusion of two important need satisfaction constructs articulated within Self-Determination Theory (Deci & Ryan, 2002). Given the results of phase two of this

investigation, future studies may wish to examine the importance of satisfying competence and autonomy needs in terms of their role in understanding behavioural intentions in track and field officials.

Practical Applications

Researchers agree that understanding what motivates people to volunteer in an organization is important for a variety of reasons (Clary, et al., 1998; Cnaan & Goldberg-Glen, 1991). One such reason is that it may be possible to incorporate information that would appeal to potential volunteers into messages used to promote the organization based on the knowledge of what motivates their participation. Athletics Canada could benefit from volunteer labour by better designing marketing efforts to appeal to potential volunteers. Being able to appeal to the particular motives of volunteers would be useful in attracting and retaining volunteer officials because as Clary and Snyder (1991) have found, appealing to a volunteer's individual motives, the volunteer tends to be more effective in his or her role, and will be more satisfied with the experience. Green and Chalip (1998) have stated that volunteers give their time and effort in exchange for psychological gains and if one can discover what motivates these investments, they will be better able to retain those volunteers for future events.

Meyer et al. (2002) suggest that different dimensions of commitment relate to work related variables, such as turnover, in different ways. As the results of this study demonstrated NC and CC demonstrate a positive (albeit small) relationship with intention to continue (Table 12). In previous literature CC has demonstrated a negative relationship or no relationship with intention to continue (Meyer et al., 1993). It was the recommendation of Meyer et al. (1993) that organizations who wish to foster OC to

decrease employee turnover within their companies should be conscious as to the type of commitment they are cultivating.

The findings of the present investigation concerning intentions to continue officiating could be used to assist athletic administrators in fostering a desire to continue, thus improving the ability to retain officials. Evidence that track and field officials do not feel committed to Athletics Canada could have been considered a problem with attracting new officials and convincing current officials to continue. However, the results indicate that this lack of organizational commitment does not strongly influence their intentions to continue officiating thus suggesting that other avenues for affecting the intentions to continue should be explored. Given that perceived relatedness demonstrated a stronger relationship with intentions to continue in this sample, fostering relationships among officials, and providing opportunities for more positive social interactions should positively relate to the intentions to continue officiating in track and field. Markland (2005) suggests that individuals will feel self-determined to the extent that they perceive their situation and the difficulties they are facing are understood by significant others relevant to the behaviour, and that these others are interested in them and their well-being. Thus, in order to promote relatedness among volunteer track and field officials, Athletics Canada (or the relevant provincial branch) should attend more closely to officials and communicate that officials are valued members of the organization whose difficulties are understood.

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Table 1

Constitutive Definitions for Organizational Commitment and Relatedness Constructs

Dimension of Keyed Constructs	Domain specifications for Organizational Commitment and Relatedness
Continuance Commitment	These items are intended to capture whether the participant perceives that he/she cannot afford to terminate officiating with Athletics Canada
Normative Commitment	These items are intended to capture whether the participant perceives that he/she is morally obligated to continue officiating with Athletics Canada
Affective Commitment	These items are intended to capture whether the participant perceives that he/she likes officiating with Athletics Canada
Relatedness	These items are intended to capture whether the participant perceives he/she is meaningfully connected with other track and field officials while he/she is officiating track and field.

Note. These domain specifications were derived on the basis of conceptual arguments forwarded by Meyer & Allen (1996) regarding the nature of commitment and by Deci and Ryan (1985; 2002) concerning the constitution of relatedness with others from the perspective of Self-Determination Theory.

Table 2

<i>Expert Response Rates per Group</i>		
Variable	Group 1	Group 2
Number of Experts Approached	14	72
Number of Experts Returning Rating Forms	5	5
Response Rate	35.7%	6.9%
Usable Expert Rating Forms	4	5
Final Sample of Experts per Group	4	5
<i>Note.</i> Group 1 = Coaches; Group 2 = Athletes. Participants were approached in both groups until a minimal threshold sample size ($n = 5$) was achieved (Dunn et al., 1999)		

Table 3

R-Ratings Assessing Item Ambiguity amongst Judges Ratings across Organizational Commitment and Perceived Relatedness Items

		Judges											
		Group 1				Group 2				Total Sample			
Item	Content Domain	[a]	[n]	[c]	[r]	[a]	[n]	[c]	[r]	[a]	[n]	[c]	[r]
1.	COM1[a]	1	4	4	4	3	3	1	3	3	4	4	4
2.	COM2[a]	3	1	3	3	0	2	3	1	3	2	3	3
3.	COM3[a]	3	3	2	2	3	4	1	3	3	4	2	3
4.	COM4[a]	3	3	1	2	4	3	3	0	4	3	3	2
5.	COM5[a]	4	0	0	4	3	1	0	4	4	1	0	4
6.	COM6[a]	1	3	3	3	4	4	2	4	4	4	3	4
7.	COM7[c]	3	0	1	3	1	2	1	1	3	2	2	3
8.	COM8[c]	1	4	4	0	2	2	4	0	2	4	4	0
9.	COM9[c]	4	4	1	4	0	2	1	1	4	4	1	4
10.	COM10[c]	4	4	1	4	2	3	1	0	4	4	1	4
11.	COM11[c]	3	1	3	3	0	4	4	2	3	4	4	3
12.	COM12[c]	4	4	1	4	1	0	1	0	4	4	1	4
13.	COM13[n]	3	1	3	3	2	4	3	0	3	4	3	3
14.	COM14[n]	3	0	3	3	0	0	3	1	3	1	3	3
15.	COM15[n]	1	3	3	1	2	4	4	1	2	4	4	1
16.	COM16[n]	3	1	4	3	3	1	3	0	3	1	4	3
17.	COM17[n]	4	1	4	4	0	1	2	3	4	1	4	4
18.	COM18[n]	3	4	4	2	4	2	2	4	4	4	4	4
19.	REL1[r]	4	4	4	0	3	0	0	1	4	4	4	1
20.	REL2[r]	4	4	4	0	3	0	0	1	4	4	4	1
21.	REL3[r]	1	0	0	4	3	4	0	4	3	4	0	4
22.	REL4[r]	3	3	3	1	3	2	1	1	3	3	3	1
23.	REL5[r]	3	2	3	1	3	0	0	1	3	2	3	1
24.	REL6[r]	3	3	3	2	2	1	1	4	3	3	3	4
25.	REL7[r]	1	1	0	4	2	1	1	4	2	1	1	4
26.	REL8[r]	3	3	3	1	3	0	0	2	3	3	3	2

Note. COM = commitment to Athletics Canada items. REL = perceived relatedness items. Designate keyed domains: [a] = affective commitment; [c] = continuance commitment; [n] = normative commitment; [r] = perceived relatedness.

Table 4

Mean Item Content-Relevance Ratings for Domain Specifications That Each Item was Originally Intended to Measure

Item	Content Domain	Judges					
		Group 1		Group 2		Total Sample	
		M	SD	M	SD	M	SD
1.	COM1[a]	4.20	0.84	4.00	1.22	4.10	0.99
2.	COM2[a]	2.00	1.22	1.00	0.00	1.50	0.97
3.	COM3[a]	2.60	1.14	2.00	1.41	2.30	1.25
4.	COM4[a]	2.60	1.14	2.80	1.79	2.70	1.42
5.	COM5[a]	3.80	1.64	2.20	1.30	3.00	1.63
6.	COM6[a]	3.20	0.84	3.00	1.58	3.10	1.20
7.	COM7[c]	3.20	1.30	4.20	0.45	3.70	1.06
8.	COM8[c]	3.00	1.90	3.00	1.58	3.00	1.63
9.	COM9[c]	4.40	0.55	4.60	0.55	4.50	0.53
10.	COM10[c]	4.00	1.73	4.80	0.45	4.40	1.26
11.	COM11[c]	2.40	1.34	3.60	1.67	3.00	1.56
12.	COM12[c]	4.00	1.73	4.40	0.55	4.20	1.23
13.	COM13[n]	4.40	0.89	4.00	1.73	4.20	1.32
14.	COM14[n]	3.40	1.34	5.00	0.00	4.20	1.23
15.	COM15[n]	3.20	1.64	3.80	1.64	3.50	1.58
16.	COM16[n]	3.80	1.64	4.60	0.55	4.20	1.23
17.	COM17[n]	4.40	0.89	4.60	0.55	4.50	0.71
18.	COM18[n]	2.80	1.79	4.60	0.89	3.70	1.64
19.	REL1[r]	4.80	0.45	4.80	0.45	4.80	0.42
20.	REL2[r]	3.20	2.05	4.60	0.55	4.80	0.42
21.	REL3[r]	4.00	0.71	4.00	1.73	4.00	1.25
22.	REL4[r]	4.40	0.55	4.80	0.45	4.60	0.52
23.	REL5[r]	4.40	0.89	4.40	0.55	4.40	0.70
24.	REL6[r]	4.00	0.71	4.00	1.73	4.00	1.25
25.	REL7[r]	3.60	1.67	3.20	2.05	3.40	1.78
26.	REL8[r]	4.80	0.45	4.60	0.89	4.70	0.67

Note. Group 1 = Coaches; Group 2 = Athletes. Ratings were done on a 5 point Likert scale ranging from 1 = "Poor Match" to 5 = "Excellent Match".

^a COM = commitment to Athletics Canada items. REL = perceived relatedness items. Designate keyed domains: [a] = affective commitment; [c] = continuance commitment; [n] = normative commitment; [r] = perceived relatedness. ^b The statistical significance of each V coefficient was obtained by using the right-tailed binomial probability table provided in Aiken (1985). V-coefficients $\geq .75$ were statistically significant at $p < .05$.

Table 5

Aiken's V-Coefficients for Judges' Ratings on the Keyed Domain for Each Organizational Commitment and Relatedness Item

Item ^a	Content Domain	Judges ^b	
		Group 1	Group 2
1.	COM1[a]	0.88	0.75
2.	COM2[a]	0.25	0.00
3.	COM3[a]	0.38	0.25
4.	COM4[a]	0.38	0.45
5.	COM5[a]	0.63	0.30
6.	COM6[a]	0.63	0.50
7.	COM7[c]	0.69	0.80
8.	COM8[c]	0.63	0.50
9.	COM9[c]	0.88	0.90
10.	COM10[c]	0.94	0.95
11.	COM11[c]	0.44	0.65
12.	COM12[c]	0.94	0.85
13.	COM13[n]	0.94	0.75
14.	COM14[n]	0.75	1.00
15.	COM15[n]	0.69	0.70
16.	COM16[n]	0.88	0.90
17.	COM17[n]	0.94	0.90
18.	COM18[n]	0.56	0.90
19.	REL19[r]	1.00	0.95
20.	REL20[r]	1.00	0.90
21.	REL21[r]	0.50	0.50
22.	REL22[r]	0.88	0.95
23.	REL23[r]	0.94	0.85
24.	REL24[r]	0.75	0.75
25.	REL25[r]	0.69	0.55
26.	REL26[r]	0.94	0.90

Note. ^a COM = commitment to Athletics Canada items. REL = perceived relatedness items. Designate keyed domains: [a] = affective commitment; [c] = continuance commitment; [n] = normative commitment; [r] = perceived relatedness. ^b The statistical significance of each V coefficient was obtained by using the right-tailed binomial probability table provided in Aiken (1985). V-coefficients $\geq .75$ were statistically significant at $p < .05$.

Table 6

Mean Item Content-Representation Ratings and R-Values for Organizational Commitment and Relatedness Items

Content Domain	Judges								
	Group 1			Group 2			Total Sample		
	<i>M</i>	<i>SD</i>	<i>R</i>	<i>M</i>	<i>SD</i>	<i>R</i>	<i>M</i>	<i>SD</i>	<i>R</i>
Affective Commitment	2.50	0.58	1.00	3.25	1.26	3.00	2.87	0.99	3.00
Normative Commitment	4.00	0.82	2.00	3.75	0.50	1.00	3.88	0.64	2.00
Continuance Commitment	3.50	0.58	1.00	3.75	0.50	1.00	3.63	0.52	1.00
Relatedness	3.75	0.96	2.00	4.25	0.96	2.00	4.00	0.93	2.00

Note. Ratings were done on a 5 point Likert scale ranging from (1) = "Poor Representation" to (5) = "Excellent Representation". R = Range (highest minus lowest plus 1) evaluating item ambiguity evident amongst organizational commitment and relatedness items on the basis of expert ratings.

Table 7

Aiken's Validity Coefficients for Judges' Ratings of Content-Representation for OC and Relatedness Items

Content Domain	Judges	
	Group 1	Group 2
Affective Commitment	0.38	0.56
Normative Commitment	0.75	0.69
Continuance Commitment	0.63	0.69
Relatedness	0.69	0.81

Note. The statistical significance of each *V* coefficient was obtained by using the right tailed binomial probability table provided in Aiken (1985). *V* coefficients $\geq .70$ were statistically significant at $p < .05$ Aiken (1985) only provides approximate probability values for *V* coefficients.

Table 8

Expert Appraisal of Content Representation Evident in Organizational Commitment and Relatedness Items

Item	Group 1	Group 2	Total Sample
Yes	0	2	2
No	4	3	7
Missing	1	0	1

Note. Ratings were done on a dichotomously scored question that read “Are there additional items that you feel should be included to represent the constructs?”

Table 9

*Transcribed Qualitative Content Relevance and Representation Comments for
Organizational Commitment and Relatedness Items*

Judge	ICRF #	Comment
F-KP	1	Stating “as much” twice in one sentence is a bit confusing. Perhaps a better phrasing is: “Right now, staying with AC is as much a matter of necessity as it is a matter of desire.” It sounds more like a continuance statement, but you might also capture an obligation (perhaps not necessarily a ‘moral’ one) to stay with AC
	2	Again, it seems there is a bit of overlap between normative and continuance statements. By a ‘moral obligation’ are you referring to an obligation arising from social pressures etc. I’m a bit confused. It could be “hard” to leave AC because of either a moral obligation and because you can’t afford to.
	5	This sounds more clearly like you can’t afford to leave
	7	the relatedness items are pretty straightforward.
	11	what is meant by available alternatives. E.g. available alternative occupations/pastimes/work opportunities/volunteer opportunities. It sorta sounds like an unfinished statement.
	13	this sounds more like it captures relatedness, but may still have an affective component.
	16	there is a sense of obligation to continue to participate in this

		statement,
		whether it is a moral/normative one I am not so sure...
18		Does being emotionally attached mean that you 'like it
19		I'm not sure that items 18 and 19 represent whether a person 'likes' officiating for AC. "Belonging" might capture relatedness to a degree – you achieve a sense of belonging to an organization of people, right? Or is it the organization as it stands, independent of the people who belong to it. Is this possible??
21		There is a component of both. A relatedness expressed through the obligation to the "people in it" and a normative component represented by the "obligation" to remain with AC.
F-SN	10	The way I first read it, I think I'd focus on the "necessity" more than the "I want to do this" part, but if someone considers this question carefully, they might start to think more about why they might want to stay or what (the "desire" bit), and think about why they like it or whatever. I dunno, probably getting too in depth here. If I need to explain it more, just ask
	5	What kinds of options? Other career options?
	9	Maybe they've had bad experiences (i.e. don't like it very much) so they feel they owe Athletics Canada nothing.
	11	Again, alternatives to working? This is kind of a confusing question because it is so wordy.
	20	Hopefully they'll tell you why.

25	This could actually work for all of them about equally I think. It could have personal meaning for any of the things you are looking at.
CRF1	I think they are all well represented, but especially the "I like it" one (Affective commitment) has a great deal of crossover. I think that a lot of the items seem to relate well to both of the affective and relatedness, or the normative and continuance, so I'm not sure how you'll tease them apart. Maybe make the questions a tad more directed, not quite so open? I dunno. Good luck to ya, though.
CRF2	Yep, they're all fairly appropriate, but I voiced my concerns up there.
CRF3	Maybe something about if they feel like they're good at their job? That could contribute to their "liking" it. I can't remember if you actually had one in there that asked just that. Sorry if you do

M-SB	17	I feel this is a relatedness question, yet to assess relatedness might be very different than being liked... as someone may view officiating as a formal, professional role rather than a friendship role... so liked might not be as important or as apparent as something like feeling respected.
	22	Comments: again... like vs. something like respect
CRF3		Nothing I can think of
CRF4		As rated... each question has some aspect that seemed to be better assessors of the qualities that received better scores

M-DK	5	I find that there isn't much difference between normative and continuance commitment, or at least it's hard to perceive.
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CRF3 I'd suggest a few questions with respect to "why" these officials are involved in the first place. For example: former athlete, child in the sport, retired and want to stay active, like the outdoors etc.

Note. CRF = content relevance form. Each expert judge was assigned a random identification code listed in the first column to retain their anonymity during data presentation.

Table 10

Demographic composition of phase 2 sample by gender

Variable	Male (n = 54; M, SD)	Female (n = 26; M, SD)
Age (years)	56.96 (13.00)	56.52 (10.10)
Years with ATC	18.74 (12.21)	18.93 (12.48)
Commitment to sport	6.15 (1.39)	6.42 (1.14)
Commitment to athletes	6.19 (1.21)	6.38 (1.20)
Commitment to role	5.83 (1.51)	6.35 (1.06)
Education		
-some grade school	1.90%	7.70%
-completed high school	11.50%	7.70%
-some post secondary	19.20%	42.30%
-some graduate school	21.20%	7.70%
-completed graduate school	46.20%	34.60%
Income		
-<\$20,000-\$39,000	10.00%	8.00%
-\$40,000-\$79,000	44.00%	64.00%
-\$80,000-\$100,000<	46.00%	28.00%
Main discipline officiated		
-jumps	24.50%	30.70%
-throws	13.20%	7.70%
-finish line	17.00%	11.40%
-referee/umpire	11.30%	30.70%
-starters assistant	5.70%	7.70%
-starter	17.00%	7.70%
-combined events	3.80%	3.80%
-technical manager	1.90%	-
-meet director	1.90%	-
-sprints/hurdles	3.80%	-
Certification level		
I	11.30%	3.80%
II	5.70%	23.10%
III	32.10%	23.10%
IV	15.10%	7.70%
V	35.80%	42.30%
Province		
-Ontario	65.3%	66.7%
-Quebec	7.7%	-
-BC	7.6%	9.5%
-East Coast	7.6%	-
-Saskatchewan	5.8%	4.8%
-Alberta	3.8%	14.3%
-Manitoba	1.9%	4.8%

Note. N = 80. ATC = Athletics Canada. Percentages of officials by province represent the segment of the final sample represented by each province not the percentage of officials within the province officiating track and field.

Table 11

Descriptive statistics for organizational commitment, perceived relatedness, and behavioural intention.

Variable	Mean	SD	Skewness	Kurtosis	Coefficient α
Affective Commitment	3.90	1.28	0.08	-0.22	0.78
Normative Commitment	3.31	1.32	0.60	-0.79	0.80
Continuance Commitment	2.46	1.24	0.71	-0.08	0.85
Relatedness	5.90	0.74	-0.53	-0.12	0.70
Intention	-0.01	6.90	-1.83	2.73	0.92

Note. $N = 75$. SD = standard deviation. α = Cronbach's (1951) coefficient of internal consistency.

1 Table 12

2 *Bivariate correlations between dimensions of organizational commitment, perceived relatedness, intention to continue and*
3 *demographic considerations*

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Age	-									
2. Years with Athletics Canada	.53	-								
3. Affective Commitment	.37	.13	-							
4. Normative Commitment	.10	.03	.11	-						
5. Continuance Commitment	.27	.12	.62	.53	-					
6. Perceived Relatedness	.20	.22	.10	.20	.14	-				
7. Commitment to Sport	.01	.25	.24	.16	.14	.32	-			
8. Commitment to Role	.03	.03	.17	.29	.22	.39	.43	-		
9. Commitment to Athletes	.04	.24	.13	.24	.15	.29	.64	.38	-	
10. Behavioural Intention	-.04	-.06	-.01	.13	.13	.35	.07	.27	.19	-

4 *Note.* $N = 75$. All r 's reported greater than |.22| significant (two-tailed) at $p < .05$. All r 's reported greater than |.35| significant

5 (two-tailed) at $p < .01$.

Table 13

HMRA predicting Intentions from Commitment Dimensions and Perceived Relatedness.

Predictor variables	<i>F</i>	<i>df</i>	<i>p</i>	ΔF	Sig Δ	<i>R</i> ²	β	<i>t</i>	<i>p</i>
Model 1									
Affective Commitment							-0.12	-0.79	0.43
Normative Commitment							0.04	0.30	0.77
Continuance Commitment	0.72	3, 71	0.55	0.72	0.55	0.03	0.18	0.99	0.33
Model 2									
Affective Commitment							-0.15	-1.03	0.31
Normative Commitment							-0.02	-0.17	0.86
Continuance Commitment							0.19	1.07	0.29
Perceived relatedness	2.83	4, 70	0.03	8.93	0.01	0.14	0.34	2.98	0.01

Note. *N* = 75. *df* = degrees of freedom. *p* = probability value. ΔF = change in F-test. *B* = standardized Beta coefficients.

Table 14

HMRA predicting behavioural intentions to continue officiating from Dimensions of commitment, perceived relatedness, and demographics.

Predictor variables	F	df	p	ΔF	Sig Δ	R ²	β	t	p
Model 1									
Affective Commitment							-.12	-0.79	.43
Normative Commitment							.05	0.32	.75
Continuance Commitment	0.71	3, 70	.55	0.71	.55	.03	.18	0.96	.34
Model 2									
Affective Commitment							-.16	-1.04	.31
Normative Commitment							-.02	-0.17	.87
Continuance Commitment							.18	1.04	.30
Perceived Relatedness	3.09	4, 69	.02	9.97	.01	.15	.36	3.16	.01
Model 3									
Affective Commitment							-.13	-0.79	.43
Normative Commitment							-.08	-0.52	.61
Continuance Commitment							.17	0.99	.33
Perceived Relatedness							.34	2.71	.01
Age							-.02	-0.12	.91
Years with Athletics Canada							-.13	-0.91	.36
Commitment to sport							-.19	-1.18	.24
Commitment to role							.15	1.13	.26
Commitment to athletes	1.91	9, 64	.07	0.97	.44	.21	.20	1.29	.19

Note. F = omnibus F-statistic. df = degrees of freedom. p = probability value / level. ΔF = change in F-values sequentially

across models tested in HMRA.

Table 15

Number of Meaning Units (MU) and Frequency of Participants Identifying Specific Thematic Subcategories From Questionnaires (question #1)

Categories/ Sub-categories	Male (n = 50)	Female (n = 27)	MU (n = 164)	Frequency MU / MU total
<i>Convenience</i>				
Child/sibling involved	15	9	24	14.63
Time Commitments	2	3	5	3.05
Training was available	2	0	2	1.22
<i>Helping Reasons</i>				
Community service/volunteer	3	1	4	2.44
Improve quality of meets	7	2	9	5.49
To help	12	6	18	10.98
<i>Extension of Role</i>				
Coached	12	4	16	9.76
Physical Education Teacher	3	1	4	2.44
<i>Intrinsic Reasons</i>				
Social reasons	4	1	5	3.05
Interest in Officiation	6	0	6	3.66
Stay involved	7	4	11	6.71
Enjoy track and field	10	2	12	7.32

Note. MU = meaning unit. Frequency is the number of respondents citing the MU/all

MU's provided by this sample of respondents. Question 1 stated: "Explain how and why you initially became involved in officiating track and field?"

Table 16

Number of Meaning Units (MU) and Frequency of Participants Identifying Specific Thematic Subcategories from Questionnaires (question #2)

Categories/ Sub categories	Male (n = 38)	Female (n = 22)	Total MU (n =175)	Frequency MU/ MU total
<i>Track and Field</i>				
Stay involved with track and field	2	0	2	1.14
Atmosphere/environment	2	1	3	1.71
Athlete development	6	9	15	8.57
Enjoy track and field	13	8	21	12.00
<i>To Help</i>				
To provide quality meets	3	0	2	1.14
Teach/encourage new officials	2	3	5	2.86
Feel needed	2	2	4	2.29
To volunteer/community service	3	1	4	2.29
Feel obligated	2	0	2	1.14
Encouraged/asked	2	1	3	1.71
Give back	1	3	4	2.29
Available	2	4	6	3.43
<i>Personal Benefits</i>				
Interact with young people/athletes	9	4	13	7.43
Social	17	15	32	18.29
Satisfaction	6	2	8	4.57
Opportunities	4	3	7	4.00
Power/authority	2	1	3	1.71
Enjoyment (general)	14	8	22	12.57

Note. MU = Meaning Unit. Frequency was calculated by dividing the number of

respondents citing a particular meaning unit by the total number of MU's provided by the participants providing a response to question two. Question two stated: "Why are you currently volunteering to officiate track and field?"

Table 17

Number of Meaning Units (MU) and Frequency of Participants Identifying Specific Thematic Subcategories From Questionnaires (question #3)

Categories/ Sub-categories	Male	Female	MU	Frequency
	(n = 31)	(n = 20)	(n =84)	MU/ Total MUs
<i>Political</i>				
Financial Support	6	6	12	10.80
Remove/politics	3	5	8	6.72
Equality of meet assignments	2	1	3	2.52
<i>Organizational/structural</i>				
Recruit new officials	8	2	13	10.92
Upgrade criteria	2	3	4	3.36
Schedule	3	2	6	5.04
Standardize & enforce rules/ roles	3	2	5	4.20
Communication	4	0	4	3.36
Treatment of officials	4	1	5	4.20
<i>Personal</i>				
Recognition	4	3	7	5.88
Less officious	2	0	2	1.68
More opportunities	4	5	9	7.56

Note. MU = Meaning Unit. Frequency was calculated by dividing the number of respondents citing a particular MU by the total number of MU's provided by participants responding to question three. Question three stated: "What changes would encourage you to continue volunteering as a track and field official?"

Appendix A - Expert recruitment letter (phase 1)

Track and field experts are being sought to evaluate a questionnaire about Track and Field Officials reasons for continuing their involvement with the sport in their officiating capacity. The study is being conducted by Casey Gray in partial fulfillment of her requirements for a graduate degree in the Faculty of Applied Health Sciences. The purpose of this study is to determine whether the questionnaires to be used will be useful in this context. Participation is voluntary and would require the completion of a questionnaire that will take approximately 20-30 minutes of your time. Eligible participants include all track and field coaches and athletes at the senior level. All of the information provided will remain confidential which means that we will not be sharing your personal information with any other person or party in such a manner that you could be identified as a consequence of participating in this project. For more information, or to participate in the study contact: Casey Gray (905) 688-5550x.4481 caseygray@hotmail.com or Dr. Philip M. Wilson (905) 688-5550x.4997 phwilson@brocku.ca both with the Department of Physical Education & Recreation at Brock University. For information concerning the rights of research participants, please contact Heather Becker (905)688-5550x.3035; hbecker@brocku.ca. This study has received ethics clearance by the Brock University Human Research Ethics Board (REB File # 04-099).

Appendix B - Verbal Script
Test administration instructions (phase 2)

“Good morning/afternoon/evening. My name is Casey and I am a graduate student in the Department of Physical Education & Kinesiology in the Faculty of Applied Health Sciences. I am collecting information about track and field officials’ feelings about why they continue to officiate. The purpose of this study is to understand how officials’ commitment to Athletics Canada and their relationships with other officials might be related to why they continue to officiate. I believe this will help build a greater knowledge base around the reasons why some officials first became involved in officiating, as well as why they continue, where others quit. I ask that if you choose to participate, you complete a questionnaire that will take approximately 30 minutes of your time. Your participation is voluntary and all of the information that you provide will remain confidential which means that we will not be sharing your personal information with any other person or party in such a manner that you could be identified as a consequence of participating in this project. If you choose to participate, please return the signed informed consent form before completing any questionnaires used for this study and the information letter is for you to keep. Place the completed questionnaire in the envelope provided and return the sealed envelope to me. Remember that this is a voluntary activity and you are free to not participate or withdraw at any point in time simply by informing me of your decision. If you have any questions please ask. Thank you for your help with this project.”

Appendix C – Participant Recruitment (phase 2)



OFFICIALS SOUGHT TO PARTICIPATE IN RESEARCH STUDY

Purpose

To study organizational commitment and feelings of camaraderie among Athletics Canada's track and field officials

Requirements

Participants must be certified at levels I-V by the National Officiating Certification Program

Involves a total time commitment of 20-30 minutes

For more information, interested officials should contact:

Casey Gray	(905) 688-5550x.4481	caseygray@hotmail.com
Dr. Philip M. Wilson	(905) 688-5550x.4997	phwilson@brocku.ca

Department of Physical Education and Kinesiology
Faculty of Applied Health Sciences
Brock University

For information concerning the rights of research subjects, please contact:

Heather Becker (905)688-5550x.3035 **hbecker@brocku.ca**

This study has received ethics clearance by the Brock University Human Research Ethics Board (REB File # 04-099).



OFFICIALS SOUGHT TO PARTICIPATE IN RESEARCH STUDY

Participants are being sought for a study of Track and Field Officials reasons for continuing their involvement with the sport in their officiating capacity. The study is being conducted by Casey Gray in partial fulfillment of her requirements for a graduate degree in the Faculty of Applied Health Sciences. The purpose of this study is to understand how officials' commitment to Athletics Canada and their relationships with other officials might be related to why they continue to officiate. The information collected in this study will help build a greater knowledge base around the reasons why some officials first became involved in officiating, as well as why they continue, where others quit. Participation is voluntary and would require the completion of a questionnaire that will take approximately 20-30 minutes of your time. Eligible participants include all track and field officials certified at levels I-V by the National Officiating Certification Program. All of the information provided will remain confidential which means that we will not be sharing your personal information with any other person or party in such a manner that you could be identified as a consequence of participating in this project. For more information, or to participate in the study, interested officials should contact: Casey Gray (905) 688-5550x.4481 caseygray@hotmail.com or Dr. Philip M. Wilson (905) 688-5550x.4997 phwilson@brocku.ca both with the Department of Physical Education & Recreation at Brock University. For information concerning the rights of research participants, please contact Heather Becker (905) 688-5550x.3035; hbecker@brocku.ca. This study has received ethics clearance by the Brock University Human Research Ethics Board (REB File # 04-099).

Appendix D - Letter of Information (phase 2)
Brock University, Faculty of Applied Health Sciences

Dear participant,

You are being asked to participate in a study entitled, Influences on the Intention to Continue Officiating in Track and Field, which is assessing the type of organizational commitment, degree of relatedness and behavioural intention of track and field officials registered with Athletics Canada. This study will be carried out through the Department of Physical Education and Kinesiology at Brock University by Master's Candidate, Casey Gray. During the course of this research you will be asked to fill out one questionnaire that should take approximately 30 minutes. The questionnaire is designed to explore your commitment to Athletics Canada, your relationships with other track and field officials, and your intention to continue officiating.

It is hoped that this study will give new information as to why officials continue to their involvement with Athletics Canada. This information may be useful in recruiting new officials into track and field and Athletics Canada.

Participation in this study is strictly voluntary. Your anonymity as a participant in this study will be maintained at all times. The information contained in the "Informed Consent Form" will remain confidential between the participant and the researcher.

Your involvement in this research will be a one-time commitment and you will not receive any compensation for participation. As a participant you have the right to discontinue your involvement at any time. If you have any concerns or complaints regarding your involvement in this research, please contact Casey Gray, at (905) 688-5550 ext. 4481 or via e-mail – cg03fi@badger.ac.BrockU.ca or Philip Wilson, Ph.D., at (905) 688-5550, ext. 4997, or via e-mail – phwilson@brocku.ca.

The results of this study may be shared with Athletics Canada, but your individual responses would never be given alone or with any identifiable information. Your responses would be combined with that of several other officials before the results of the study would be shared.

This study has been approved by the Brock University Research Ethics Board (#). Should you have any questions and/or concerns regarding your participation in this research project, feel free to contact the Research Ethics Officer at (905) 688-5550 ext. 3035.

Please read and sign the attached "Informed Consent Form". Thank you for participating in this research project. If you would like a copy of the results of this study upon its completion, please contact the researcher noted above.

Appendix E – INFORMED CONSENT FORM (phase 1)
BROCK UNIVERSITY
DEPT. OF PHYSICAL EDUCATION AND KINESIOLOGY

You are being asked to participate in a pilot study being conducted by the Department of Physical Education and Kinesiology at Brock University entitled: Influences on the intention to continue officiating in track and field. This study will explore the reliability and representation of a questionnaire to be distributed to Athletics Canada track and field officials. If you are willing to participate, the study will require the completion of a questionnaire on one occasion. Your involvement will take approximately 30 minutes.

Please do not write your name on the questionnaire, as this study is completely anonymous and confidential. The information obtained is only for the use of the researchers listed below.

Participation in this project is completely voluntary. If you do not wish to participate, or choose to withdraw from the study, you may do so at any time without repercussion. In addition, you have the right to decline to answer any question(s) at any time during the study. There are no known risks associated with completing the questionnaire. The information provided by participants will be retained in confidence, seen only by the principal investigator and the faculty advisor. Once collected, only the principal investigator and faculty advisor will have access to the data, which will be stored in a locked cabinet in the faculty advisors office for a period of 2 years following publication, at which time, the data will be destroyed. If you have any questions or concerns, please feel free to contact the numbers below. Results of this study will be available through the researchers listed below by April 30, 2005. Please contact us if you wish to have a personal copy of the results

This study has been approved by the Brock University Research Ethics Board (File #). Should you have any questions and/or concerns regarding your participation in this research project, feel free to contact the Research Ethics Officer at (905) 688-5550 ext. 3035, or reb@brocku.ca.

Thank you for your cooperation.

Having read and understood the above, I agree to participate in this study.

Print Participant Name _____

Participant's Signature _____ Date _____

Casey Gray

Graduate Student

Department of Physical Education and Kinesiology

(905) 688-5550 ext. 4481 or cg03fi@badger.ac.brocku.ca

Philip Wilson, Ph.D.

Assistant Professor

(905) 688-5550 ext. 4997 or phwilson@brocku.ca

NOTE: The participant should retain one copy of this for their records.

Appendix F - INFORMED CONSENT FORM (phase 2)
Brock University, Faculty of Applied Health Sciences

Title of Study: Influences on the intention to continue officiating in track and field
Principle Researcher: Casey Gray, Department of Physical Education and Kinesiology

You are being asked to participate in a study being conducted by the Department of Physical Education and Kinesiology at Brock University. This study will explore the type of organizational commitment, degree of relatedness and behavioural intention among track and field officials registered with Athletics Canada. If you are willing to participate, the study will require the completion of a questionnaire on one occasion. Your involvement will take approximately 30 minutes.

Please do not write your name on the questionnaire, as this study is completely anonymous and confidential. The information obtained is only for the use of the researchers listed below. By signing this form, you are agreeing that your results may be used for scientific purposes, including publication in scientific and sport specific journals, so long as your privacy is maintained. The collective results may also be provided to your sport's administrative body, but your privacy would be ensured.

Participation in this project is completely voluntary. If you do not wish to participate, or choose to withdraw from the study, you may do so at any time without repercussion. In addition, you have the right to decline to answer any question(s) at any time during the study. There may be risks associated with completing the questionnaires surrounding participant concerns about confidentiality during this study. There may also be risks surrounding the disclosure of personal or sensitive information which may make some participants feel uncomfortable. However, the information provided by participants will be retained in confidence, seen only by the principal investigator and the faculty advisor. Once collected, only the principal investigator and faculty advisor will have access to the data, which will be stored in a locked cabinet in the faculty advisors office for a period of 2 years following publication, at which time, the data will be destroyed. If you have any questions or concerns, please feel free to contact the numbers below. Results of this study will be available through the researchers listed below by April 30, 2005. Please contact us if you wish to have a personal copy of the results

This study has been approved by the Brock University Research Ethics Board (File #). Should you have any questions and/or concerns regarding your participation in this research project, feel free to contact the Research Ethics Officer at (905) 688-5550 ext. 3035, or reb@brocku.ca.

Thank you for your cooperation.

Having read and understood the above, I agree to participate in this study.

Print Participant Name _____

Participant's Signature _____ Date _____

Casey Gray
Graduate Student
Department of Physical Education and Kinesiology
(905) 688-5550 ext. 4481 or cg03fi@badger.ac.brocku.ca

Philip Wilson, Ph.D.
Assistant Professor
(905) 688-5550 ext. 4997 or phwilson@brocku.ca

NOTE: The participant should retain one copy of this for their records.

Appendix G - Item Content Review Form (ICRF)

The following items have been designed to measure commitment to an organization, in this case, Athletics Canada. The items have also been designed to measure those events that make track and field officials feel connected to one another. The overall purpose of these items is to provide a measure of track and field officials' commitment to Athletics Canada, and of their perceived relatedness with respect to other track and field officials. The items were modified from La Guardia et al's Psychological Need Satisfaction Scale (2000), and Meyer and Allen's organizational commitment questionnaire (1996). Every attempt has been made to ensure that these items are understandable and reflect appropriate wording. Each item is worded to reflect higher degrees of organizational commitment, and perceived relatedness.

You are being asked to review these items to determine their a) relevance, b) representation, and c) understanding before the questions are administered to a sample of track and field officials. We are asking you to evaluate the items because you have expertise in the sport of track and field.

If you have any questions, please feel free to ask them.

Thank you for your participation.

Casey Gray

Directions for experts completing the ICRF

Please rate the degree to which you feel *each item matches* the content descriptions (see below) defining each organizational commitment, and perceived relatedness. Also, feel free to make any additional comments in the space provided about the relevance of the item to track and field officials or the meaning interpreted from the wording of each item. These comments will be used to refine and improve the item pool.

When you have rated all the items and provided any additional comments you feel necessary, please place the ICRF and the informed consent form separately in the envelopes provided and return them to the researcher.

Description of Content Areas

Affective Commitment: These items are intended to capture whether the participant perceives that they like officiating with Athletics Canada.

Normative Commitment: These items are intended to capture whether the participant perceives that they feel morally obligated to continue officiating with Athletics Canada.

Continuance Commitment: These items are intended to capture whether the participant perceives that they cannot afford to terminate officiating with Athletics Canada.

Relatedness: These items are intended to capture whether the participant perceives they are meaningfully connected with other track and field officials while they are officiating track and field.

Description of rating scale anchors:

Please indicate the degree to which you feel each item listed below matches each of the four content areas defined above on the scale provided. Please feel free to add any additional comments where necessary.

Example

The following box contains an example of how to complete the ICRF.

Item 12: People I officiate with are pretty friendly toward me.					
Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Comments:					

Participants in the next phase of this study will be given the following instructions that include an operational definition of track and field officiating from which to base their responses to each survey item:

Instructions

The following questions pertain to your thoughts and feelings about track and field officiating. **Officiating refers to ensuring the consistent application of international rules that govern the sport of athletics (Athletics Canada, 2003).** Please keep this “definition” of officiating in mind as you respond to the following questions. There are no right or wrong answers to these questions and it is YOUR experiences that we are particularly interested in.

Participants will respond to each item on a 5-point Likert scale anchored at the extremes by (1) poor match and (6) excellent match.

Item 1: Right now, staying with Athletics Canada is as much a matter of necessity as much as desire.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 2: It would be very hard for me to leave Athletics Canada right now, even if I wanted to.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 3: I get along with the people I officiate with.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 4: People I officiate with care about me

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 5: I feel that I have too few options to consider leaving Athletics Canada

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 6: I pretty much keep to myself when I officiate

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 7: There are not many people I officiate with that I am close to

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 8: Athletics Canada deserves my loyalty

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 9: I do not feel any obligation to remain with Athletics Canada

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 10: I would be happy to spend the rest of my career with Athletics Canada

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 11: One of the few negative consequences of leaving Athletics Canada would be the scarcity of available alternatives

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 12: People I officiate with are pretty friendly toward me.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 13: I do not feel like a part of the family at Athletics Canada.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 14: Too much of my life would be disrupted if I decided I wanted to leave Athletics Canada right now.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 15: I really feel as if Athletics Canada's problems are my own

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 16: If I had not already put so much of myself into Athletics Canada, I might consider working elsewhere

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 17: The people that I officiate with do not seem to like me much

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 18: I do not feel emotionally attached to Athletics Canada

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 19: I do not feel a strong sense of “belonging” to Athletics Canada.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 20: Even if it were to my advantage I do not feel it would be right to leave Athletics Canada now.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 21: I would not leave Athletics Canada right now because I have a sense of obligation to the people in it.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 22: I really like the people I officiate with.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 23: I would feel guilty if I left Athletics Canada now.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 24: I consider the people I officiate with to be my friends.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 25: Athletics Canada has a great deal of personal meaning for me.

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Item 26: I owe a great deal to Athletics Canada

Content area	Poor Match	Fair Match	Good Match	Very Good Match	Excellent Match
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Content Relevance Form (CRF)

I would now like to get your **OVERALL** impression of the items that have been included in the initial item pool to measure affective commitment, normative commitment, continuance commitment, and perceived relatedness within the context of track and field officiating.

1. How well do you feel all of the items included in the initial item pool represent the constructs of affective commitment, normative commitment, continuance commitment, or perceived relatedness?

	Poor Representation	Fair Representation	Good Representation	Very Good Representation	Excellent Representation
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Do you think the items are appropriate for use with people in officiating contexts in terms of the degree to which they represent the constructs of affective commitment, normative commitment, continuance commitment, or perceived relatedness?

	Not at All	Not really	Somewhat	Yes	Yes, absolutely
Affective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Normative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continuance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relatedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Are there any additional items that you feel should be included to represent affective, normative, and continuance commitment, or perceived relatedness?

Yes ☐ No ☐

If yes, please indicate what these items are in the space provided:

4. Are there any items in the initial item pool that you feel measure more than affective commitment, normative commitment, continuance commitment, or perceived relatedness?

Yes

☐

No

☐

If yes, please indicate what these items are and why you feel this way in the space provided:

Appendix H - Feedback Letter (phase 2)

Date

Dear Participant

Thank-you for your participation in the research project “Influences on the intention to continue officiating in track and field”. As you are aware, this research project is being conducted my Master’s Candidate, Casey Gray in the Faculty of Applied Health Sciences at Brock University. The purpose of this study is to explore relationships among your overall commitment to Athletics Canada, feelings of connectedness to other track and field officials, and your intention to continue officiating track and field in the future.

Your participation has been essential to our understanding of the reasons track and field officials continue to officiate. We hope that our findings will give us new information that could be used to better retain and recruit new track and field officials in the future.

Feedback about the use of the data collected will be available in [date], from Casey Gray, in the Faculty of Applied Health Sciences at Brock University. A written explanation will be provided for you upon your request (Contact Casey and leave your name and address). If you have any concerns or questions about this research project, please do not hesitate to call me at (905) 688-5550 extension 4481, or by e-mail @ cg03fi@badger.ac.brocku.ca. Thank-you again for your participation!

Sincerely

Casey Gray
MA Candidate,
Faculty of Applied Health Sciences

Appendix I - Questionnaire (Phase 2)

INFLUENCES ON TRACK & FIELD OFFICIALS INTENTIONS TO CONTINUE OFFICIATING



Department of Physical Education & Kinesiology
Faculty of Applied Health Sciences
Brock University

Ms. Casey E. Gray, Master of Arts Candidate, Brock University
Philip M. Wilson, Ph.D., Assistant Professor, Brock University

Section 1: Demographic Information: (check one)

Age (years)		
Gender	Male	<input type="checkbox"/>
	Female	<input type="checkbox"/>
Education	Some grade school	<input type="checkbox"/>
	Some high school	<input type="checkbox"/>
	Completed high school	<input type="checkbox"/>
	Some university/ college	<input type="checkbox"/>
	Some graduate school	<input type="checkbox"/>
	Completed graduate school	<input type="checkbox"/>
Gross annual family income	<\$20,000	<input type="checkbox"/>
	\$20,000-\$39,999	<input type="checkbox"/>
	\$40,000-\$59,999	<input type="checkbox"/>
	\$60,000-\$79,999	<input type="checkbox"/>
	\$80,000-\$99,999	<input type="checkbox"/>
	Over \$100,000	<input type="checkbox"/>
Employment status	Homemaker	<input type="checkbox"/>
	Full-time paid	<input type="checkbox"/>
	Part-time paid	<input type="checkbox"/>
	Retired	<input type="checkbox"/>
	Temporarily unemployed	<input type="checkbox"/>
	Other	<input type="checkbox"/>
At what level are you certified in your main officiating discipline?	I	<input type="checkbox"/>
	II	<input type="checkbox"/>
	III	<input type="checkbox"/>
	IV	<input type="checkbox"/>
	V	<input type="checkbox"/>
Years officiating with Athletics Canada		

To what extent are you committed to each of the following:

	Not true at all	Somewhat true						Very true
The sport of track and field	1	2	3	4	5	6	7	
The role of being a track and field official	1	2	3	4	5	6	7	
The athletes who compete in track and field events	1	2	3	4	5	6	7	

Section 2: The following questions concern your *feelings of commitment to Athletics Canada*. Please indicate how true each of the following statements is for you given your experiences as a track and field official (circle one).

	Not true at all			Somewhat true			Very true
I would be happy to spend the rest of my career with Athletics Canada.	1	2	3	4	5	6	7
I really feel as if Athletics Canada's problems are my own.	1	2	3	4	5	6	7
I do not feel a strong sense of "belonging" to Athletics Canada.	1	2	3	4	5	6	7
I do not feel emotionally attached to Athletics Canada.	1	2	3	4	5	6	7
I do not feel like part of the family at Athletics Canada.	1	2	3	4	5	6	7
Athletics Canada has a great deal of personal meaning for me.	1	2	3	4	5	6	7
Right now, staying with Athletics Canada is a matter of necessity as much as desire.	1	2	3	4	5	6	7
It would be very hard for me to leave Athletics Canada right now, even if I wanted to.	1	2	3	4	5	6	7
Too much of my life would be disrupted if I decided I wanted to leave Athletics Canada now.	1	2	3	4	5	6	7
I feel that I have too few options to consider leaving Athletics Canada.	1	2	3	4	5	6	7
If I had not already put so much of myself into Athletics Canada, I might consider working elsewhere.	1	2	3	4	5	6	7
One of the few negative consequences of leaving Athletics Canada would be the scarcity of available alternatives.	1	2	3	4	5	6	7
I do not feel any obligation to remain with Athletics Canada.	1	2	3	4	5	6	7
Even if it were to my advantage I do not feel it would be right to leave Athletics Canada now.	1	2	3	4	5	6	7
I would feel guilty if I left Athletics Canada now.	1	2	3	4	5	6	7
Athletics Canada deserves my loyalty.	1	2	3	4	5	6	7
I would not leave Athletics Canada right now because I have a sense of obligation to the people in it.	1	2	3	4	5	6	7
I owe a great deal to Athletics Canada.	1	2	3	4	5	6	7

Section 3: The following questions concern your *feelings about other people you have officiated with at track and field meets*. Please indicate how true each of the following statements is for you given your experiences with other track and field officials (circle one).

	Not true at all				Somew hat true			Very true
I really like the people I officiate with.	1	2	3	4	5	6	7	
I get along with the people I officiate with.	1	2	3	4	5	6	7	
I pretty much keep to myself when I officiate.	1	2	3	4	5	6	7	
I consider the people I officiate with to be my friends.	1	2	3	4	5	6	7	
People I officiate with care about me.	1	2	3	4	5	6	7	
There are not many people I officiate with that I am close to.	1	2	3	4	5	6	7	
The people I officiate with do not seem to like me much.	1	2	3	4	5	6	7	
People I officiate with are pretty friendly towards me.	1	2	3	4	5	6	7	

Section 4: The following questions concern your *intention* to continue officiating track and field. Please indicate how true each of the following statements is for you given your experiences as a track and field official (circle one for each question).

	Strongly Disagree				Strong ly Agree
I will continue to officiate track and field for .5 years.	1	2	3	4	5
I will continue to officiate track and field for 1 year.	1	2	3	4	5
I will continue to officiate track and field for 1.5 years.	1	2	3	4	5
I will continue to officiate track and field for 2 years.	1	2	3	4	5

Section 5: The following questions concern the *likelihood* that you will continue officiating track and field for a specified time period. Please indicate the likelihood of each statement as it pertains to you given your experience as a track and field official.

	Extremely Unlikely				Extremely Likely			
I will continue to officiate track and field for .5 years.	-3	-2	-1	0	1	2	3	
I will continue to officiate track and field for 1 year.	-3	-2	-1	0	1	2	3	
I will continue to officiate track and field for 1.5 years.	-3	-2	-1	0	1	2	3	
I will continue to officiate track and field for 2 years.	-3	-2	-1	0	1	2	3	

Explain how and why you initially became involved in officiating track and field?

Why are you currently volunteering to officiate track and field?

What changes would encourage you to continue volunteering as a track and field official

Appendix J - Meaning Units table 1

ID	M	F	Quote
1	X		<p>I coached track and field at the high school level for over 30 years</p> <p>I enjoy watching athletes compete</p> <p>this was a way to continue to give these young people the opportunity to compete at a high level.</p>
2	X		I joined the OTFA in order to become a bigger part of phototiming in the province and maybe the country some day.
3	X		I was asked by an official to volunteer for a disabled meet.
4	X		<p>Enjoy the sport,</p> <p>wanted to be involved.</p> <p>Children participated,</p> <p>wanted to assist in the local club.</p>
5	X		<p>I love the event</p> <p>[k]new that being an athlete could not last forever.</p> <p>Wanted to know the rules</p>
6	X		<p>TRACK AND FIELD IS EXCITING</p> <p>MY DAUGHTER HAS BEEN GIVEN SO MUCH BY TRACK</p> <p>I WANT TO GIVE IT BACK.</p>
9		X	Shortage of volunteers needed.
10		X	<p>-former athlete</p> <p>-coaching now</p>
11		X	<p>-necessity if results are to be considered valid</p> <p>[former coach/official & head official] encouraged me to come out & get involved.</p>

- 12 X My children were competing
I decided to get qualified and officiate.
- 13 X I became involved due to the involvement of others around me.
- 14 X children were involved at club and high school level.
Helped out.
- 15 X Watching my kids compete.
Since I was there I might as well help.
- 16 X as a track and field coach I had to be able to officiate.
- 17 X -enjoyed the sport
- 18 X I was asked by my former track & field coach to come out and try to
Photo-time
- 20 X my daughter was an athlete. We followed her career...
...became interested in helping out
- 21 X I FIND THAT OFFICIATING IS A GOOD RETIREMENT
PASSTIME.

WHICH ALLOWS ME TO INTERACT WITH YOUNGER PEOPLE

& TO GIVE SOMETHING BACK TO THE COMMUNITY.
- 22 X was asked to start a meet as a starter
23 X COACHING ATHLETES –

HAD FEELING SOME EVENTS COULD BE ORGANIZED BETTER

IN PART, TO INSURE ATHLETES TREATED FAIRLY
- 24 X I start when I was an athlete
- 27 X athlete from 7 to 20 years

coach from 16 to 26 years
official from 26 to now
- 28 X I was an athlete in the 1970's then coach in the 1970's-80's.

Moved into officiating in preparation to assist at the 1994 Commonwealth Games in Victoria. I was asked to consider officiating in 1993.

29 X I belonged to a club that ran the 1967 Ontario B.M.J.'s and help as part of the throws crew.

30 X 1/ to assist while my son participated.

2/ To develop my officiating skills.

3/ to participate in Canada Games (kamloops) and then other opportunities.

4/ friends.

31 X through track and field, cross country coaching at the high school level as a teacher

32 X Initially it was to help out and through participation it lead to meeting others (coaches) in the same boat. Some of these coaches run meets and I officiate for them to help out

33 X I am exathlete;

I love the sport and

I like to stay among the athletes

and help them in any possible way

34 X I initially became involved in officiating track and field shortly after my young son (then 8 years old) joined the Prince George Track and Field Club in 1996.

the President/ Head Coach of the club told me that I would make a good coach as well as a good official

35 X I have been involved in track + field since I was 15 years old as a competitor, coach + official. I competed through university (Queen's Track)

I have coached my children's school teams + community Track team (Victoria T+F)

I strongly believe in the benefits of T+F as the basis of all sports.

36 X [a coach and I] became friends in Florida. Upon return he asked me if I wanted to go on their next trip which was to Sudbury in the Spring. I

went and was asked if I could help time races. I did and enjoyed it. I was asked to return and continued.

- 37 X In grade 10 an official at my event encouraged us to officiate when we stopped competing.
- As a high school coach I saw poor officiating and determined to do something about it. Realized I could do a better job than some on those in official positions
- 38 X My young children joined a track club in the late '60's.
- My husband was teaching + coaching high school track + I was helping him (mid '60's + on).
- I enjoyed the sport,
- had competed in high school,
- 39 X I became involved when my son was competing.
- After a few years away from it I again became involved when they needed help for the B.C. Games in Victoria in 1988
- 40 X I assisted my father, who was a chief timer, at meets when I was sixteen years old and continued to be involved from then on.
- 41 X As a parent of a new athletes, I wanted to get involved
- 42 X Our daughter ran middle distance.
- We would take her to the track meets to watch the meets. Because of being at the track all day decided to help out + officiate and I have never regretted it
- 43 X One of my daughters was a good middle distance runner and it meant that she was competing at the beginning and end of each competition.
- I was to hyper to just sit in the stands and asked what I could do...
- ...to help
- 44 X My daughter was an 800m runner.
- I was watching in the stands when her coach asked me to help out with hand timing.
- The chief made me feel welcome and encouraged me to continue.

- 45 X -asked by a friend who needed help at running his club's meet.
- Being a phys. Ed teacher wanted to learn more about the rules of each discipline
- 46 X Track and field was always my favourite and my best sport.
I have always wanted to become an Official, but didn't have a good opportunity, since I was moving so often and so busy with the Military.
- I wanted to keep in touch with Track + field
- and give back what I enjoyed.
- I saw the application form on the OTFA website about how to join as an official.
- Today everyone needs to be a volunteer at something either as a coach, official or for admin.
- 47 X My son joined a T&F club...
- ...rather than attending his meets as spectators it would be preferable to assist in some capacity.
- About the same time, an introductory officials' clinic was announced which we attended and within a few weeks we were working as new finish line judges and timers.
- 48 X I was a national level athlete at the junior level when I was injured requiring extensive surgery.
- After surgery it was "pay back time" for all those who had helped my sister + me.
- Coaching was great
- 49 X until I had a family. Then I turned to administration + officiating.
I became involved as an extension of my coaching duties as a JR/SR High School teacher.
- Track & Field is an awesome sport that is available to a wide variety of people.
- 50 X I participated in track & field as a youth,
- I believe in giving back what you receive I love the sport and enjoy being there.

- 51 X taught physical education
- liked track coached x country and track
 - invited to attend a clinic in P.E.I
- 52 X Our son started running and competing in his mid-teens...
- ...the second summer we started volunteering/officiating. Also, I am a “doer” as opposed to being a “bystander”
- 53 X As a coach
- there were times that I had to officiate in order to have a needed competition.
- 54 X My children were competing
- 55 X I became involved as a parent initially.
- Since I also was a fan of Track + Field
- I continued to coach and officiate.
- 56 X As a means to help athletes and meet organizers...
- ...run more and better events.
- I was a t+f athlete myself...
- ..owed a lot to the sport.
- 57 X Both of my daughters were members of the Burl Track + Field Club +
- one day they needed help at the finish line
- some of the executive members of the club asked if we would help + since that time we became more and more involved.
- 58 X having our own children participate.
- 59 X I have been a coach since 1971.
- When we have our TRACK Meets in Newfoundland we always have a shortage of officials.

So, out of necessity I helped officiating since we had our first meet.

60 X I am a former athlete in T&F.

I decided to volunteer and chose a sport I enjoyed in my youth

61 X Initially I became involved when my son competed in Track & Field in 1977.

Officials were needed at the Legion Track Meets and the school Track Meets. I was encouraged to train and did so.

62 X I was coaching in high school...

...was appaled by the low quality of officiating – lack of rules knowledge – inability to set up the competition.

63 X I started as a father

progressed to coach

when my career changed & involved weekly travel, and home on weekend – I gave up coaching & began officiating.

64 X After my daughter left the track club we had established and was not being coached by my husband we decided that if we were going to the meets we *should* get involved,

I had coached and organized meets in my school and area as a teacher so I knew what was involved.

65 X I am first and foremost a coach;

I began officiating to ensure that there were qualified people overseeing the events in which my athletes competed. My involvement grew from there. As the corps of officials in Ottawa improved I officiated less and less often.

66 X I was a competitor from school days and periodically thereafter.

When I could no longer participate, (did maters track and age 40) I wanted to remain as close as possible

and also to be there for other athletes.

67 X participation in veterans' athletics...

...led to helping/ volunteering at the university where I taught (not in physical education)

- 68 X Was an athlete.
- 69 X Enjoyed helping out at meets.
was asked to work a meet ('69)

give back to a sport
- 70 X Brother was a runner. Helped out at club meets
- 71 X I became involved because of some volunteer requirements for a University class. I was then invited to return to another meet.
- 72 X Involved in T+F for about 50 years...was an athlete

and wanted to give back to the sport.

-very interested in all areas – competition – officiating – coaching – board work – clinics –

international events.
- 73 X As an interested parent.
74 X As an injured athlete,

I helped out as an official.
- 75 X I enjoyed the years of official's time for me when I was an athlete

and decided I would give 10 years back to the sport as an official.
- 76 X high school experience.
- 77 X Child in track
I was asked by [an official] in 1963 to assist as a starter in a number of Hamilton area meets.

In 1967 I wrote a series of National AAU of Canada Exams with [3 people] and others of the Hamilton Olympic Club. I then became a registered AAU of Canada official.
- 78 X A way to enjoy being involved with the sport

and friends in it.
- 79 X How-I retired from an executive position and I finally had some flexibility with my time.

-I sought out other track and field officials

-I sought out the large local track and field club

79 X Why

6)I was a track and field athlete for 5 years in highschool (pentathlete, heptathlete...)

80 X

as a young teacher of phys ed I ran a spring t&f meet.

In our area [there] was a retired person who had great knowledge at the international level. He came out to help.

He invited me to go with him to higher level meets. I did. He showed me what to do I just continued moving up the ranks of officiating.

Note. *Italics added by researcher

Appendix K - Meaning Units table 2

ID	M	F	Quote
1	X		I like to keep involved with young athletes. A couple close friends (fellow officials... ...encouraged me to continue by being an official.
2	X		I enjoy working with the officials I work with, I enjoy track and field events,
3	X		and I enjoy phototiming I enjoy the atmosphere + the people I work with.
4	X		Enjoy officiating, the people...
5	X		... and the athletes I have fun doing it, there is a feel of authority.
6	X		LOVE THE PEOPLE,... ...THE ATHLETES + THE EXCITEMENT OF TRACK + FIELD AFTER ALL THESE YEARS STILL ENJOY BEING INVOLVED WITH OUR YOUNG PEOPLE
10		X	Like the people
11		X	Like to watch track meet I enjoy it
12	X		have a lot of friends that officiate. I was asked by [a] coach to help with some
13		X	I like who I work with

14 X 1)still paying back for a lot of good years...

...for children when involved.

2)Enjoyment

3)Friendly people

4)Retired = keep busy.

15 X I enjoy watching the competition

feel good about helping out.

16 X I am retired now

and I LOVE TRACK + FIELD

17 X -people

-I enjoy running myself

18 X I really enjoy track a lot

I also like the people around me.

20 X I enjoy the excitement...

...and the camaraderie

22 X I enjoy all aspects of it.

-people,

athletes,

23 X INTEREST IN SPORT

24 X because I like this sport...

and I'm happy to help athletes progress

26 X Love it

27 X I like it!!

28 X I enjoy the sport,

the people in it

- and want to assist in its continuation through volunteering as an official
- 30 X 2/ assist future athletes
- 3/ friendly social life.
- 4/ pursue new opportunities
- 31 X keep up to date
- enjoy athletics
- officiate around the world
- 32 X everyone has to do their part to keep costs down
- you get the opportunity to see some wonderful athletes, as competitors and as positive citizens.
- 33 X as I said before I am exathlete and now is the time I give back what I learned in the past.
- I do not work and I have a lot of time to dedicate to the sport.
- 34 X Because I believe the athletes (especially the young ones) deserve good officiating when they compete.
- Moreover, I would like to support track & field and encourage young athletes to participate in it,
- 35 X I enjoy teaching school officials to properly run events, (mostly teachers) + club officials (mostly parents) as they tend not to be Athletics Canada officials
- I also enjoy helping athletes at lower or younger levels, who have not had proper coaching, to learn the proper techniques of their events as well as competition rules.
- 36 X I am currently volunteering to officiate track and field because I enjoy doing the tasks.
- I enjoy travelling
- and meeting new people.
- I feel like I am truly assisting athletes reach their goals and fulfill their dreams,

- I am also requested...
- 37 X ...and much needed at [a specific university's] meets.
Realize there is still a need for competent officials and I don't see too many coming into the sport.
- I enjoy officiating
- 38 X – enjoy the contact with healthy, active, smart young people.
I enjoy the people I meet through officiating,
love to help the young athletes to advance,
and the opportunities to advance + to travel.
- 39 X I love the people,..
athletes...
+ the sport
- 40 X I have always enjoyed the camaraderie that is prevalent among officials
as well as the feeling of helping someone to achieve success.
- I am also repaying a debt to officials who assisted me when I was a competitive swimmer.
- 41 X Because I enjoy the sport
and the people I work with
and I enjoy interacting with the athletes as well
- 42 X Because I enjoy it.
I like seeing the progress of certain athletes.
I feel that officiating helps the athletes obtain their goals.
- 43 X Because I currently enjoy officiating –
enjoy the other officials
– enjoy seeing the competitors always trying to improve themselves enjoy seeing the success of the competitors
- 44 X I believe we have one of the strongest groups in the country – both in terms of numbers and ability. I take pride in that achievement.

- 45 X really enjoy officiating
- enjoy sharing/ talking with other officials their stories
- 46 X Track and field needs volunteer officials in order to keep operating,
- For me I like to be a volunteer in the community. It is very satisfying for me. It gives me a qualification.
- It allows me to contribute to my favourite sport.
- It allows me to help young people develop at Track + Field.
- 47 X I have now worked as a throws official for the past seven years and find it always rewarding...
- ...to see athletes develop their skills and know I perhaps had a bit of influence in their development.
- I enjoy working with my fellow officials
- and assisting new people on the officiating team to learn more about throwing events and hopefully continue to come out and become a registered official.
- The best reward for me as an official is for the competitors to come over after the completion of the event and say "thank you" with a handshake.
- as I am currently Chair of the [province name] Officials Committee and therefore have an obligation to continue working as an official
- 48 X I still enjoy being there for the athletes.
- It is also nice to see friends from across the country.
- 49 X I enjoy the sport
- and the interaction with the athletes
- 50 X My children are now able to take themselves where they want to go. So I can go where I want to go,
- a trackmeet is a great place to go.

- 51 X -I like it
 -enjoy athletes,...
 ...officials, coaches
 -volunteering is part of my lifestyle
 thing that I feel contributes to a better society.
 -enjoy travel...
 ...to watch track.
- 52 X I enjoy meeting people
 and *now* travelling around to meets in other cities/provinces.
 At each event I enjoy teaching new volunteers and officials on a casual
 basis, rather than in a classroom, and feel that “real life incidents” help to
 bring the event to life for these new people.
 Last but not least, I enjoy and applaud the athletes as I watch them improve
 from meet to meet + year to year.
 And I believe they feel more confident when they see a familiar face among
 the crowd of officials facing them
- 53 X To help the athletes and their clubs
- 54 X My son has returned to track and field
- 55 X I enjoy officiating
 I feel an obligation to help with the sport.
- 57 X We enjoy watching athletes come from the grass roots level up to
 International levels.
 We have given seminars around the world on track + field officiating
 + my husband + myself are the 2 experts in Canada when it comes to
 officiating disabled events – ex. Wheelchairs, amputee, C.P. + Blind
- 58 X Love of the sport
 & watching athletes achieve.

- 59 X I very much enjoy being outdoors on the TRACK...
...with athletes,
and try to help.
- 60 X I have enjoyed the past 23 years for the most part.
I am at a high level and in demand.
I enjoy watching athletes perform.
I enjoy meeting people from all over Canada and sometimes the world.
- 61 X Currently I volunteer to officiate because of the need for officials, qualified officials.
And the other part is my commitment to the athletes of the Province. They are great.
- 62 X I enjoy doing it.
I do it well and I'm happy when an event is run well.
- 63 X the camaraderie.
As a father/ coach & a national athlete – I understand the need of officials for the sport
- 64 X It is still fun
Enjoy spending time with the athletes
and seeing them develop over time.
It is a good area in which to volunteer..
...because you are outside and working with others who are dedicated to the sport.
- 65 X I love the sport
and the people in it.
Reliable qualified officials make competition a joy for those participate. They (officials) are part of the fabric of the sport.
- 66 X To keep in touch and enjoy being part of the sport.
- 68 X Enjoy working in the sport with other officials

- 69 X and like to help sport, which is so beneficial to young people.
To help athletes (able/disabled) ...
- 70 X ...receive proper officiating
assist brother-in-law (club coach) and wife (volunteers with paralympic track & field)
- 71 X Sometimes it is to fulfill my power need the control for organisation.

I have a need for love which I get from friendships. I have a need for belonging that I get from being part of the team

I have a need for success which I get from helping complete an event.
- 72 X I like the sport and I enjoy the events –

one of the few sports where officials do not get paid – I like to volunteer.
- 73 X Because I enjoy it.
- 74 X To give back to the sport
- 75 X I get satisfaction in running an event for athletes in an honest and fair manner because the athletes express their appreciation of it.

I also enjoy the people I work with and value their friendship.
- 76 X I enjoy the individuality of the sport
- 77 X The dedication of the other officials makes the days enjoyable.
I enjoy working with youth in the sport of track + field.

I have over the years made many friends.
- 79 X 1)I consider it a meaningful and worthwhile contribution to the development of youth; as they need officials to be able to have competitions, and they need competitions to be able to develop further

2)I decided that, when I retired and had some flexibility with my time I would do volunteer work;

I combined that desire with my love of track and field in highschool and with the availability of track and field facilities and competitions here.
- 80 X I have made many friends of officials.

It is hard to turn down organizers who need help.

I am not involved with other activities so why not.

Appendix L - Meaning Units table 3

ID	M	F	Quote
2	X		clearer and easier to understand upgrade criteria.
6	X		CONTINUING COMMUNICATION AMONGST OFFICIALS WHO ALL WORK AS A TEAM
8		X	WOULD LIKE TO SEE MORE YOUNG PERSONS INVOLVED WITH OFFICIATING. SINCE A NUMBER OF OUR OLDER OFFICIATES ARE READY TO RETIRE.
11		X	If it was easier to move level to level if there was less infighting amongst higher ups.
12	X		Let event officials discuss with meet directors how their events are run on meet day. Ex/ 1 flight or 2 flights for Horizontal jumps.
14		X	Encouragement politically Eg – financial - PARTICIPACTION re <u>health</u> -
15	X		Greater training to encourage development. My perception is many officials are getting on in age and we must encourage new membership
20	X		More recognition for our volunteer work, and certainly more financial commitment by all levels of government
27	X		To have more officials involve[d]
29	X		better education of athletes and coaches of what the rule book states. Better communication from athletics Canada to all officials).
30	X		1/ more financial support to cover costs. 2/ more opportunities in major meets.
31	X		Government -values our service -simpler more <u>non</u> political method of upgrading.

-upgrading based on experience and not who you know.

33 X better understanding of [how?] officials work the track and field events

34 X I would like to see more officials become less “**officious**” and remember that they’re there to serve the athletes.

I would also like to see officials, especially the higher ranked ones, treat lower ranked officials and uncertified volunteers with more respect and consideration at track meets.

35 X More opportunities to officiate at higher level meets...

It bothers me that high level officials are not required to work community level meets. I discovered this last track season that I had worked 15 meets culminating in international meets, whereas, higher level officials came out at the end of the season to work 2 or 3 national + or international meets. Athletics Canada then does not credit me for the extra hours

36 X guidelines that are clearly stated for each part of every role must be written and followed by senior officials on the committees of Athletics Canada.

Also a true mentoring system must be setup –not the unclear guesswork system in place now. Set requirements need to be listed step by step for Level 4 and 5 – explicitly stated for each job on the track.

Also every meet must be attended by a full team of officials not just a few dedicated ones who get overworked

37 X More recognition of officials by organization – esp AC

It is frustrating to see international teams at foreign venues with more staff than athletes and officials from Canada paying their own way to officiate

39 X would like a bit more travelling to out of province meets.

40 X There has seldom been a time when officials have been treated on a par with coaches, athletes, and administration when considerations are made regarding accommodation, transportation, and food.

Little things mean a lot and positive acknowledgement is one way to keep people involved with volunteering. If funding is unavailable, officiating becomes the area where cuts occur as though it does not hold much importance in the scheme of things.

Some put in very long days and receive very little thanks for their efforts.

41 X As I try to become certified at a higher level, I wish it was easier to attend

out of town and out of province meets.

There is a lack of funding as with all other aspects of sports in this country.

42 X Some of the track meets run too long + especially all comers. Last Sunday for example, the meet started at 9:30 AM & I did not finish until 7:45 PM. Then we have 1 ½ hour drive home. We were eating dinner at 10 P.M.

43 X – require a method of making young people interested.

44 X I would like to see coaches and the provincial organization show greater support for the officiating community.

45 X -encourage more money for upgrading, travel

show ath Canada is behind officials development

encourage NOC to publish rules/regulations/procedures then follow the “letter of the law”

need more sponsors to support Athletics Canada and its programs
get Ath Canada out of debit

provide more opportunities for level 5 officials to travel international

47 X More officials to come out and assist at our meets.

More cooperation from coaches, parents and athletes and the realization that officials are not “experts” but volunteers. Although officials are volunteers with special knowledge, they are occasionally prone to making mistakes especially after a long, hot day with no breaks.

Most of the time we, as officials are taken for granted, and that is unfortunate as without two groups of people, athletes and officials, there would be no track and field meets.

48 X The politics at the provincial level, but more especially at the national level NEED to change.
Athletics Canada does little, if anything for us + N.O.C. has become an “old boys club”

49 X -discipline officious officials.

-Encourage meet organizers to treat volunteers as the important people they are.

- Create a fee schedule to pay officials. What other sports do not pay officials?
- 51 X -to travel nationally – not really interested in much international travel but have gone to USA
- continued travel expenses to keep up with inflation
- housing + food that is better than just adequate.
- 52 X More logical scheduling of events, especially on the track, in order to give officials a decent break + time to chew their food before swallowing. Often, we don't get time to even snack during the event, so the food we've grabbed from the travelling cart gets thrown out. If we're late at the food tent there's little or nothing left.
More logical scheduling and perhaps adding events on a Fri night would eliminate 12-14 hour shifts.
- 53 X Programs to attract + train more young officials.
- 56 X More time for myself and family whereby officiating would be a leisure activity rather than 1 more thing out of the house!
- 57 X We would like to see more parents involved as our number of officials is getting smaller, with few new officials getting involved.
- 58 X More communication with all organizations
- 59 X Through the 1980's until 1993 our Province received funding to send 1 official every year to the Nationals. But, because of fiscal restraints, Newfoundland has not send any official for over 10 years to the Nationals!
- 60 X Having more qualified officials so you don't have to work long hours.
- Chances to travel to big meets when my kids are older. Not all in the same year. Needs to have all qualified officials have a chance to travel internationally.
- 61 X Changes: positive recruitment of younger officials. And once recruited, no "screwing around" when it comes to asking them, instead of someone in their dotage, to officiate at major provincial national and international meets. This has happened in the past. We need them. When we do not use them + treat them well – we lose them.
- 62 X I would like to have the opportunity to travel to more meets outside the province/country
- 63 X 1) the organizing committees must ensure that there are enough "quality"

officials available to put on a quality meet.

- 2) The schedule must be reasonable. Some of us have a day job on Monday!

- 64 X the meet schedules need to have a reasonable time frame. Some of us work full time and need to be ready to go back to work the next day.

The meet organizers need to have enough quality officials to carry out a quality meet without stressing the volunteers.

Quality accommodations and food are important

- 65 X More younger officials have to be found to keep the burden from becoming too great on the older officials.

Short 2-3 hr twilight meets are a marvellous introduction (seduction?) to new officials. Long "marathons" in burning sun or freezing rain are not something one would want to come back to.

- 68 X Need more officials working so that there is less pressure to work at so many meets throughout the year.

- 69 X equality of assignments (national/international)

rid of the "old boys club"

- 71 X Recognition of officials at events in the form of rewards would be a help. Where are the material things such as, T-shirts. Uniforms, vouchers, \$, certificates, thank-you notes, Bar B Qs, etc.? Of course there is a more personal thank you face to face that works very well.

- 74 X it would be nice to have people who were proficient as officials (truly good at what they do)

rather than those politicking to attain their levels.

- 75 X would not work at a meet where the media has such power to tell me how to run the event. (ie. Olympics, Commonwealth Games, World's, etc) I have worked them all in the past but not again until Athletics Canada regains their right + obligation to the athletes first + not the media's demands.

- 76 X Higher level of communication.

A website with officiating guidelines etc.

Text or written materials should be current and available

- 77 X some sort of system to allow the appearance of “old boy” syndrome to be eliminated.
- 78 X -better treatment from meet directors
-respect from coaches
- 79 X 1)There need to be more track and field officials.

4)Money is not an issue for me. Just ensure that my reasonable expenses are met without any “hassle”.
- 80 X I know there is infighting [in the officials committees].

Better if open selections to high level meets

Note. * indicates agreement by 2 of 3 independent judges. All others reflect agreement by all 3 independent judges.

