The Olympic Games as a career change-event: Israeli athletes' and coaches' perceptions of London 2012

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ABSTRACT

Objectives: This study used the Scheme of Change for Sport Psychology Practice (SCSPP; Samuel & Tenenbaum, 2011a) to examine athletes' and coaches' personal characteristics, perceptions of, coping with, and perceived outcome of the London 2012 Olympic Games (OGs). We also contrasted several subgroups (e.g., Olympic and Paralympic athletes) in certain variables, and examined the decision-making and support systems involved in the OGs change process.

Design and methods: A cross-sectional and retrospective design was used. Israeli Olympic and Paralympic athletes and coaches (N = 61) completed measures of change-event experiences (Samuel & Tenenbaum, 2011b) and athletic/coaching identity (AI/CI; Brewer & Cornelius, 2001) two years after the London 2012 OGs.

Results: Olympic athletes trained more, and had higher motivation and AI than Paralympic athletes. The OGs were perceived as a significant and positive change-event in the participants' careers. AI/CI was associated with the perceived significance of the OGs. At the time of Olympic qualification, the participants tended either to ignore this change-event or cope with it independently. Most participants reported making a decision to change related to adjustment and coping. Professional support was mainly available prior to and during the OGs. During this experience the participants did not consider using sport psychology services, but retrospectively, valued the usefulness of this support. Athletes' motivation after the OGs was predicted from their satisfaction of coping, and their perceived outcome of this change-event was predicted from their satisfaction of competition results.

Conclusions: Psychological support must be provided as part of the Olympic cycle, especially in promoting a decision to change. Maintaining realistic expectations may be critical for facilitating a positive perception of this change-event.

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1. The Olympic Games experience

Participation and success in the Olympic/Paralympic Games (OGs; refers to both Olympic and Paralympic Games) represent the highest professional ambition of many athletes who perceive the Olympic dream as a super-goal of their athletic engagement (Debois, Ledon, Argiolas, & Rosnet, 2012; Jackson, Dover, & Mayocchi, 1998; Wylleman, Reints, & Van Aken, 2012). However, the data indicate that the majority of athletes do not win a medal in the OGs. For example, in the London 2012 Games 10,820 athletes shared only 962 medals (8.9%; London 2012 Official Olympic Games results, 2012). Therefore, in most cases, the professional success of athletes in the OGs is not reflected in achieving a medal, and should be evaluated in relative terms, considering their world rankings and previous achievements, Olympic experience, personal expectations, as well as coach’s and Olympic Committee’s expectations. Furthermore, both failure and success experiences in the OGs present unique challenges for athletes. On one hand, lack of
success, or failure, can be overwhelming for many athletes, and lead to reduced motivation, need of a break, and even retirement (Debois et al., 2012; McArdle, Moore, & Lyons, 2014). On the other hand, major success in the OGs can also create psychosocial challenges for athletes. For example, Jackson et al.’s (1998) interviews with 18 Australian Olympic champions revealed that they had also experienced negative consequences; difficulties in coping, excessive demands, and pressure. Becoming Olympic champions has changed the way they were perceived by others.

Acknowledging the significance of the Olympic experience for elite athletes, researchers examined factors underpinning Olympic success (e.g., Gould, Greenleaf, Guinan, & Chung, 2002; Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999), as well as presented best preparation practices prior to the Olympics (Gould & Maynard, 2009) and better post-Games support (McArindle et al., 2014). Conducting focus groups with athletes from eight Atlanta 1996 U.S. Olympic teams and interviewing their coaches, Gould et al. (1999) found that teams which had met expectations participated in resident training programs, received support, used mental preparation, and were focused. Teams that had failed, experienced planning and cohesion problems, lacked experience, and faced travel and coaching problems.

2. The OGs as a career transition

Recently, researchers have begun considering athletes’ participation in the OGs as a career transition (Debois et al., 2012; Schinke, Stambulova, Trepanier, & Oghee, 2015; Sigurgeirsdottir, 2013; Stambulova, 2016; Wylleman et al., 2012). Schinke et al. (2015) classified it as a within-career quasi-normative transition; predictable only for a certain group of athletes, i.e., those elite athletes who were selected as Olympic candidates. However, in this context, we acknowledge that while for some athletes the OGs indeed represents a within-career transition, for others it can also be associated with a career termination (McArindle et al., 2014), requiring them to face the transition to life after sports (Debois et al., 2012). In both cases, athletes are faced with a set of challenges. Based on Stambulova, Stambolov, and Johnson’s (2012) five-phase Olympic cycle, Schinke et al. (2015) suggested viewing the OGs transition as a process comprised of several phases or meta-transitions: (a) entering the National Team Program, (b) entering major international tournaments, (c) Olympic qualification, (d) focused preparation for the OGs, (e) OGs participation, and (f) the post-Games. Wylleman et al. (2012) examined the changes perceived by four male athletes who competed in the 2008 Beijing OGs, using interviews (prior to and after the Games) and self-reports (during the Games). A thematic analysis indicated that prior to the Games the athletes experienced 14 changes in the athletic (e.g., increased training load), psychological (e.g., increased athletic identity), psychosocial (e.g., increased contact with the coach), and academic/vocational (e.g., decreased focus on professional activities) levels. During the Games the athletes experienced eight changes (e.g., pre-competition pressure) and after the Games they experienced 11 changes (e.g., feelings of recognition from media/public). Most of the changes occurred in the psychological level, including increases in self-confidence and athletic identity (AI) levels (Brewer, Van Raalte, & Linder, 1993). The study confirmed the multifaceted nature of the OGs experiences which entails many changes for athletes, requiring them to adapt to the new situation. However, it also had some limitations. The sample included only athletes who had experienced performance success. The researchers were therefore unable to assess the quality of this transition for athletes who did not meet their performance expectations. The qualitative design prevented the researchers from producing predictive data and conclusions. Qualitative designs were also assumed by other researchers (e.g., Debois et al., 2012; Pensgaard & Duda, 2002; Sigurgeirsdottir, 2013). The present study, therefore, attempted to account for these research limitations by examining the OGs experience using a predictive framework within the Scheme of Change for Sport Psychology Practice (SCSPP; Samuel & Tenenbaum, 2011a).

3. The OGs as a change process

Considering the multifaceted and dynamic nature of the athletic career (Alfermann & Stambulova, 2007; Stambulova, 2000), the SCSSP (Samuel & Tenenbaum, 2011a) was developed to reflect how athletes perceive and respond to various change-events. These can be transitions (Alfermann & Stambulova, 2007), crisis transitions (Stambulova, 2000), distinct events and longitudinal processes that disrupt the athletic engagement status quo, objectively (e.g., being selected to an Olympic Team) or subjectively (e.g., loss of motivation), and require athletes to respond by generating a matching psychological and/or behavioral change (i.e., a change process; Samuel & Tenenbaum, 2011a, 2011b). The SCSPP framework reflects two major shifts in the athletic career research area: (a) from focusing mainly on the athletic career retirement to examine within career transitions (Stambulova, Alfermann, Staiger, & Costa, 2009; Stambulova & Wylleman, 2014), and (b) an adaptation process perspective, including factors that influence the quality of the transition, coping resources, and potential interventions (Stambulova, 2003). The SCSSP considers the nature of the change-event (e.g., continuous or distinct), the athlete’s perception of the change-event (e.g., perceived significance), the environmental characteristics (e.g., support resources), and the characteristics of the individual (e.g., motivation, AI) as factors affecting the adaptation to the change. It aims to explain what actually constitutes an effective coping process in terms of psychological change, emphasizing decision-making (see Samuel, 2013). Therefore, it provides both descriptive and intervention outlooks on the athletic career (Alfermann & Stambulova, 2007), focusing on: (a) the three situational stages that unfold as athletes experience change-events, and (b) the therapeutic process associated with an effective change. The SCSSPP received empirical (Knowles & Lorimer, 2014; Samuel & Tenenbaum, 2011b, 2013; Samuel et al., 2015) and applied practice support (Samuel, 2013).

The OGs experience as a change process begins with athletes’ qualification to the OGs. This is the onset of the change process, reflecting the change in athletic engagement status quo from a stable state (i.e., “Stage 1” in SCSSPP) to an unstable state (i.e., “Stage 2” in the SCSSPP), which may be associated with cognitive concerns regarding the new situation. However, as suggested by Stambulova et al. (2012) and Schinke et al. (2015), the OGs experience should be considered a process, with several additional phases. Therefore, this change-event continues with the preparation period, the Games (e.g., the opening ceremony, the competition), and the post-Games period. Each phase presents new changes athletes are challenged by (Wylleman et al., 2012). According to the SCSSPP, athletes who make the Olympic criterion typically engage in an appraisal process: they consider the perceived significance of this change-event, existing coping resources, and potential solutions (Stambulova et al., 2009). This cognitive elaboration leads to a strategic decision as to how to initially respond to this change-event: (a) deny/ignore it, (b) cope independently, (c) consult with others, or (d) consult with a sport psychologist. Various factors may influence this strategic decision, such as the perceived significance of the change-event, the perceived control over the situation, and available support (Samuel & Tenenbaum, 2011a). It is expected that athletes with a strong and exclusive AI (Brewer et al., 1993) will tend to perceive the OGs as more significant in their careers. For
certain athletes, becoming highly successful or famous in a short period of time, may also lead to changes in public status and overwhelming expectations (i.e., “crisis of glory”; Stambulova, 2000).

A decision to address the change-event typically leads to a subsequent decision to avoid change or decision to change. Deciding to avoid change, athletes typically refrain from seeking further information concerning the change-event and remain in emotional instability. Deciding to change (i.e., apply all necessary adjustments required to effectively cope with the change-event), athletes typically examine the possibilities for implementing their decisions. The strategic decision and the decision to change are thought to be related; athletes who initially decide to address the change also tend to subsequently make the decision to change. Furthermore, the decision to change is moderated by the application of therapeutic techniques (i.e., processes of change; Prochaska & Norcross, 1994) independently or as part of a sport psychology consultation (Samuel, 2013), the individual's capacity for change, and existing psychological support (Samuel & Tenenbaum, 2011a). It is predicted that if athletes are highly motivated for their sport, and also feel motivation and self-efficacy for creating the required change, they will decide to change. A decision to change leads athletes to examine the possibilities for implementing the associated decision. In the context of the OGs participation, a decision to avoid or ignore the change typically means that athletes do not apply significant adjustments in their attitude, training regimen, or relationships. On the other hand, a decision to change may be related to increasing training and traveling load, changing performance related aspects, postponing academic/vocation opportunities, giving up on personal relationships (Wylleman et al., 2012), engaging in mental preparation (Gould & Maynard, 2009), and in some cases changing professional staff when necessary (e.g., coach, fitness coach, psychologist). According to the SCSPP, if athletes can implement the change, they will feel in control, and assume responsibility for initiating the change. As a result, they will perceive the outcome of the change process more positively (i.e., a favorable transition pathway; Stambulova, in press) and maintain high motivation for their sport. Yet, the SCSPP assumes a probabilistic perspective, recognizing that various factors can affect the change process outcome (e.g., the perceived results obtained in the OGs). It is also suggested that there are unique contextual factors (Stambulova, 2016) within which athletes are operating that may affect their change processes (Samuel & Tenenbaum, 2011b). Therefore, the Israeli Olympic/Paralympic preparation context of the London Olympic Cycle is now presented.

4. The Israeli Olympic/Paralympic preparation context

Israel has been participating in the summer Olympic Games since 1952, winning seven medals in total, and in the summer Paralympic Games since 1960, winning 380 medals in total. The preparation of Israeli Olympic/Paralympic athletes and the selection process for the Games is supervised since 1984 by the Israeli Elite Sport Department (IESD), the professional unit of the Olympic Committee of Israel (OCI). This unit aims to provide elite athletes the optimal conditions for attaining international level of excellence, including professional planning, financial support, coaches' training/support, and scientific support (Blumenstein & Lidor, 2008). The preparation for the OGs is structured according to the Olympic cycle (Stambulova et al., 2012), and in each year leading to the OGs athletes need to meet specific criteria to receive support. Based on their achievements, athletes are classified to different standards of support. The IESD also sets the Israeli Olympic/Paralympic criteria for each event, which in many cases is firmer than the international criteria.

The OCI had set three main goals for the London Olympic Games: (a) returning with medals, (b) having a female athlete winning a medal, and (c) achieving a medal in a “new” event (i.e., in which a medal was not previously achieved; Lustig & Davidov, 2013). These goals were not achieved and Israeli Olympic athletes did not win a medal in London. Out of 37 Israeli athletes, 22 (59%) have met the IESD's professional expectations in at least one performance (i.e., if athletes competed in more than a single event, such as in swimming; Lustig & Davidov, 2013). Regarding the London Paralympic Games, the expectations were different (based on previous Games and quality of athletes); winning several medals in various events. Israeli Paralympic athletes won eight medals in total, and 75% of the performances were within the IESD's professional expectations (Lander, 2013).

Concerning the psychological support provided to the athletes in the London cycle, the IESD shifted from using a full-time consultant in previous Games (see Blumenstein & Lidor, 2008) in addition to several hour-based consultants, to using only the latter. Sport psychology consultations were not mandatory for athletes, but were provided on a personal need basis. The consultants did not travel to international competitions, and unlike previous Games (Blumenstein & Lidor, 2008) there was no on-site consultant in the 2012 Games.

5. Study objectives

This study explored the OGs experience of athletes and coaches in the context of their careers, using a cross-sectional and retrospective design. Our objectives were to examine:

- The participants' personal characteristics, including differences in motivation and AI/CI between athletes and coaches, and also differences in motivation, AI, and training hours between Olympic and Paralympic athletes (as we expected career status differences).
- The participants’ perceptions of the OGs change-event, the relationship between AI/CI and perceived significance of the change-event, and differences between experienced and first time Olympians (as we expected that experience may affect change-events' perception).
- The participants’ coping with the OGs change-event (i.e., process and outcome), and the related decision-making process (i.e., the strategic decision and the decision to change).
- The perceived outcome of the OGs change process, predictors of athletes' perceived OGs outcome and post-Games motivation, and differences between active and retired athletes in pre-to-post-Games motivational changes (as we expected this change-event to be significant and affect athletes' motivation).
- The participants' perceptions concerning availability of support throughout the change process, and attitudes towards sport psychology services.

6. Method

6.1. Participants

The participants were 61 Israeli athletes (N = 40, M age = 31.81 years, SD = 8.66) and 21 coaches (N = 21, M age = 49.93 years, SD = 9.71) who participated in the London 2012 Olympic and Paralympic Games. The participants were part of the Israeli Olympic Team comprised of 37 athletes and 21 coaches, and the Paralympic Team comprised of 25 athletes and 16 coaches (total N = 99). The response rate was 61.6%. The average years of professional experience was 16.57 (SD = 7.35) for the athletes and...
25.10 (SD = 11.22) for the coaches. The Olympic athletes (N = 23, M age = 27.46 years, SD = 5.31) competed in individual sports (n = 15) such as gymnastics, judo, and swimming, and team sports (n = 7) such as sailing and rhythmic gymnastics. The Paralympic athletes (N = 17, M age = 37.71 years, SD = 8.92) competed in individual sports (n = 12) such as hand cycling and wheelchair tennis, and team sports (n = 5) such as rowing and sailing. On average the athletes had trained 8.48 years (SD = 6.51) with their coaches prior to the OGs. For 18 athletes (45%) and 10 coaches (47.6%) this was the first OGs participation. Finally, 29 athletes were still active and 11 retired after the London Games.

6.2 Measures

**Change-Event Inventory** (CEI; Samuel & Tenenbaum, 2011b). In this study, we used an adapted version of the Hebrew CEI, focused on a single change-event — the OGs experience. Based on existing research (Wylleman et al., 2012) we considered the beginning of this change process as the achievement of the Olympic criterion (i.e., qualifying to the OGs) and the end of the change process as the post-Olympic period.

The CEI included three parts, each structured in a different format: (a) demographic information, (b) perception of and reaction to the OGs experience, and (c) decision-making and availability of support resources. In the first part of the inventory, the participants were asked to report on their athletic/coaching and Olympic experience, their training hours preparing for the London 2012 OGs, their opening ceremony experience, and their achievements in the Games (which were also reconfirmed using the official data from the Games; London 2012 Official Olympic Games results, 2012). The second part of the inventory included 13 two-item subscales, rated on a 5-point Likert-type scale, reflecting: (a) the perception of the change-event (i.e., perceived significance of the event, perceived emotional severity of the event, perceived control over the event, perceived of the event by significant others, emotional reaction to the event, cognitive reaction to the event); (b) coping factors related to the change process (i.e., motivation for the sport at the appearance of the event, motivation for change, satisfaction of coping with the event, effectiveness of coping with the event, helpfulness of past experience in similar situations); and (c) the outcome of the change process (i.e., motivation for the sport after the event happened, perceived outcome of change-event). For example, perceived significance was evaluated by the items “How significant was the London Olympics participation experience in your career, at the time it happened?” (1 – not at all, 3 – moderate, 5 – very much) and “What was the importance of the London Olympics participation experience in your career, at the time it happened?” (1 – very low, 3 – moderate, 5 – very high). Similarly, perceived outcome was evaluated by the items “How positive or negative are the outcomes of the London Olympics participation experience in your career?” (1 – very negative, 3 – neutral, 5 – very positive) and “How do you perceive now the London Olympics participation experience in relation to your career?” (1 – very negative, 3 – neutral, 5 – very positive). Based on existing research on the OGs experience (Debois et al., 2012; Gould et al., 1999; McGraw, Mellers, & Tetlock, 2005; Wylleman et al., 2012), we added four 2-item subscales, pertaining to the quality of the professional preparation, the satisfaction with team cooperation, the satisfaction with coach–athlete cooperation, and the satisfaction with OGs competition results. All subscales were formatted in a retrospective format, other than “perceived outcome” that was formatted in a concurrent format.

In the third part of the inventory, participants were asked to indicate their initial strategic decision in response to achieving the Olympic criterion (i.e., a three-response format item: (a) ignored, (b) coped independently, and (c) received support from others; from whom — various options are given, such as family, coach, sport psychologist). Then, they reported on their decision to change (i.e., a five-response format item: (a) ignored, (b) considered the situation and decided to cope, (c) considered the situation and decided not to cope, (d) listened to the advice of others, and (e) not sure). Finally, the participants reported the degree to which they had considered using sport psychology services during their OGs experience as well as how much they consider the usefulness of this support for coping with this type of situations.

Previous research on a heterogeneous sample of competitive athletes indicated adequate psychometric properties for both the English and Hebrew CEI, including temporal stability, internal consistency (i.e., all Cronbach’s α ranged between .68 and .89), and internal factorial structure (Samuel & Tenenbaum, 2011b). In this study, alpha coefficients ranged between .52 and .95. Due to poor internal reliability, the “motivation for change” subscale was omitted from the predictive analyses.

**Athletic/Coaching Identity** (Athletic Identity Measurement Scale, AIMS; Brewer & Cornelius, 2001). The Hebrew version of the 7-item AIMS was utilized to evaluate participants’ identification with the athletic role (Samuel & Tenenbaum, 2011b). The inventory measured three aspects of AI in a concurrent format: social identity, exclusivity, and negative affectivity. Brewer and Cornelius (2001) reported test–retest reliability (r = .89), internal consistency (α = .81 – .93), and norms for athletes and non-athletes. To measure coaching identity (CI), the phrasing of the seven items was modified to reflect identification with the coaching role (e.g., “I consider myself a coach,” “I have many goals related to coaching”). In the present study, the internal consistency coefficients were: .51 (negative affectivity), .61 (social identity), .82 (exclusivity), and .77 (total AI/CI).

6.3 Procedure

The study received an institutional ethical board approval. Potential participants were recruited with the assistance of the IESD, through a letter sent to all members of the London 2012 Olympic and Paralympic teams. Data collection was then conducted in face to face meetings. The participants were asked to provide their informed consent for participation, and then were guided to take a few moments to think about their entire OGs experience from the moment of achieving the criterion until the end of participation (not only on their professional achievements). The participants were told to complete the CEI from a retrospective state of mind (i.e., considering their perceptions and responses at the time of the experience). They were instructed to complete the AIMS from a concurrent state of mind. This methodological discrepancy was known to us (Samuel & Tenenbaum, 2011b) and was reported in this study’s limitations. Yet, applying the AIMS in a retrospective manner was theoretically unjustified, as this measure evaluates athletic identity in a concurrent format (i.e., as AI/CI might change over time (Brewer, Van Raalte, & Petitpas, 2000) concurrent assessment is more meaningful than a retrospective assessment). Completion of the inventories lasted 25–30 min. On average, the participants completed the inventories 27.95 months (SD = 5.25) from the end of the London 2012 OGs. During data collection procedure, the participants were ensured of confidentiality and anonymity.
6.4. Data preparation and analysis

The preparation and analysis of data were divided into three sections. First, preliminary analyses were performed, including data inspection, statistical assumption testing, internal consistency evaluations, descriptive statistics, and crosstabs analyses. Examining the distributions of the variables, we found that they were range restricted, with relatively small variances. Nevertheless, the skewness and kurtosis values were relatively small (i.e., skewness below ±2 and kurtosis below ±7) and did not indicate any major normality distribution violations. Second, comparative analyses were performed to examine differences in selected variables between athletes and coaches, Olympic and Paralympic athletes, experienced and first time Olympians, and active and retired athletes. Third, we examined the participants’ perceptions of the change-event and the relationship with Al/CI, as well as their decision-making process and the results of the change process (i.e., athletes’ post-OGs motivation; perceived OGs outcome). We used common statistical analyses including correlations, multivariate analyses of variance, and multiple linear regressions.

7. Results

7.1. Participants’ personal characteristics

Personal characteristics of all the participants are illustrated in Fig. 1 (upper panel). As one can notice in Fig. 1, the participants were highly motivated for their sport, with moderate to high Al/CI components. The total AI mean was 39.34 (SD = 6.57) and corresponded to the 50th percentile of athletes (Brewer & Cornelius, 2001).

We compared between athletes and coaches in their motivation prior to the OGs experience and in total AI/CI, using a MANOVA. The analysis resulted in a significant group effect, Wilks’ \( \lambda = .87, F(2, 50) = 3.72, p = .03 \). However, the two follow-up univariate tests were non-significant. Therefore, athletes and coaches in this study did not differ in their motivation and Al/CI. Additionally, we compared Olympic to Paralympic athletes on the following variables: motivation prior to the OGs experience, weekly training hours during the preparation period, and current total AI, using a MANOVA. The analysis revealed a significant group effect, Wilks’ \( \lambda = .75, F(3, 30) = 3.30, p < .05, \eta^2 = .25 \). A follow-up univariate ANOVAs for each variable along with descriptive statistics are shown in Fig. 2 (upper panel). Olympic athletes reported significantly higher motivation prior to the OGs experience (\( p = .05 \), Cohen’s \( d = .67 \)) and significantly trained more weekly during the preparation period (\( p = .03 \), Cohen’s \( d = .74 \)). They also perceived themselves with higher Al (i.e., a tendency towards significance, \( p = .07 \), Cohen’s \( d = .62 \)).

7.2. Perception of the OGs experience

Descriptive statistics concerning participants’ perceptions of the OGs experience are illustrated in Fig. 1 (upper panel). As one can notice in Fig. 1, the participants perceived the OGs experience as a highly significant change-event in their careers; a positive change-event characterized by positive emotional reactions, low cognitive concerns, as well as under a high perceived control. Their significant others also perceived this experience positively. The participants also reported that their OGs opening ceremony experience was positive. The correlations between perceived significance and the participants’ athletic/coaching identity were as follows: the social identity (SI) component correlated positively, but low, with perceived significance for all participants (\( n = 58, r = .38, p < .01 \)) as well as for the athletes (\( n = 38, r = .36, p < .05 \)) and coaches (\( n = 20, r = .45, p < .05 \)) independently.

Additionally, we compared between first time and experienced Olympians (i.e., athletes and coaches) in perceived significance of
the OGs experience, perceived control over the OGs experience, and emotional reaction to the OGs qualification (descriptive statistics are shown in Fig. 2, lower panel). The MANOVA resulted in a non-significant group effect, Wilks’ $\Lambda = .99$, $F(3, 54) = .22$, $p = .89$. Therefore, experienced and first time Olympians did not differ in their perceptions of the OGs experience.

### 7.3. Coping with the OGs experience

The descriptive statistics shown in Fig. 1 (lower panel) indicate that the participants reported high motivation for change in response to this change-event, felt that they had coped effectively, and were satisfied with their coping efforts. They also felt that their past experience in similar competitions facilitated their coping with the OGs change-event. Furthermore, to evaluate the participants’ decision-making in response to the OGs experience, we conducted a crosstab analysis. Most participants (46.4%) decided to cope independently with the change-event as part of their initial strategic reaction upon achieving the Olympic criterion, or to ignore this change-event (32.1%). The participants who consulted with others (21.4%), mostly referred to a psychologist (53.8%), a coach (46.2%), and a partner (38.4%). Furthermore, most participants (80.4%) made a subsequent decision to change (i.e., to make the necessary adjustments required for effective coping). The strategic decision and the decision to change were not correlated, $\chi^2(8, N = 56) = 4.60, p = .80$.

Next, we also analyzed possible differences between the participants who made different strategic decisions in their perception of the OGs experience. A MANOVA with the following dependent variables was performed: perceived significance, perceived severity, and availability of professional support prior to the OGs. The analysis revealed a significant group effect, Wilks’ $\Lambda = .70$, $F(6, 106) = 3.39, p < .01, \eta^2 = .30$. Univariate ANOVAs were then conducted for each of the dependent variables. A non-significant effect was found for the perceived significance of the change-event ($p = .36$). A significant effect ($p = .02$) was revealed for the perceived severity of the change-event, indicating that those participants who decided to consult with others perceived this change-event as more negative than participants who decided to ignore it (Cohen’s $d = .96$). Moreover, the analysis revealed that participants who decided to ignore the change-event used significantly ($p = .04$) more available resources of support than those who decided to consult with others (Cohen’s $d = .72$).

### 7.4. Change process outcome

As indicated by their descriptive statistics (Fig. 1, lower panel), the participants rated the outcome of the OGs experience as positive in the context of their careers, their motivation after the OGs was moderate, and so was their satisfaction from their competition results. To predict the athletes’ perceived outcome of the OGs experience, we conducted a multiple linear regression. The predictor variables were: perceived control over the event, the decision to change, effectiveness of coping, athlete’s satisfaction from OGs competition results, coach’s satisfaction from OGs competition results (i.e., only for athletes to whom a clear score could be identified), and actual competition result. Actual competition result failed to correlate with the dependent variable and was removed.
from the analysis. Because there was hardly any variation in the decision to change, this variable was also removed from the analysis. Finally, the variables athlete's satisfaction from OGs competition results and coach's satisfaction from OGs competition results were very strongly correlated (N = 20, r = .90, p < .01) which could result in multicollinearity of these two predictors; thus we removed the latter from the regression. The analysis, therefore, included the following predictors used as a cluster: perceived control, effectiveness of coping, and athletes' satisfaction from OGs competition results. The regression analysis is presented in Table 1 (upper panel), and revealed significant predictive power accounting for a considerable proportion of variance in the perceived outcome of the OGs experience. The athletes' satisfaction of their OGs competition results was the main significant predictor.

In addition, to study athletes' motivation for their sport participation, prior to and following the OGs experience, a repeated measure analysis of covariance (RM ANCOVA) was performed, using actual competition results and athletes' satisfaction from results as covariates. Both active (N = 29) and retired (N = 11) athletes reported significant decreases in their motivation for their sports following the OGs, Wilks' Λ = .89, F(1, 36) = 4.44, p < .05. Moreover, a significant time (i.e., prior to OGs qualification, post OGs) by activity status (i.e., active athletes, retired athletes) interaction effect emerged, Wilks' Λ = .77, F (1, 36) = 11.15, p < .01. Active athletes reported a substantially smaller decrease in participation motivation than retired athletes which resulted in a very strong effect size (McArdle et al., 2014). As one can notice in Table 1, all three predictors had positive interactions were found between time and actual results (p = .62) as well as between time and satisfaction from results (p = .50).

To predict athletes' motivation for the sport after the completion of the OGs experience, we conducted a multiple linear regression with the following predictors used as a cluster: motivation prior to the OGs, satisfaction of coping, and availability of support following the OGs. The results of the analysis are presented in Table 1 (lower panel). As one can notice in Table 1, all three predictors had positive correlations with athletes' motivation post-OGs. The analysis was significant and accounted for a considerable proportion of variance in participants' motivation following the OGs. The satisfaction of coping was the main significant predictor of motivation for the sport.

7.5. Support provided throughout the OGs experience

Referring to Fig. 1 (lower panel), the participants reported high availability of professional resources prior to and during the OGs; after the OGs the degree of available support decreased. Also, they indicated that throughout their OGs experience they did not consider using sport psychology services much. In contrast, they reported that sport psychology support could be useful for coping with this change-event. Finally, we compared between first time and experienced Olympians (i.e., athletes and coaches) in consideration of using sport psychology services during the OGs experience. As one can notice in Fig. 2 (lower panel), the experienced Olympians considered using sport psychology services more than the first time Olympians (Cohen's d = .70), t(57) = 2.70, p = .009.

8. Discussion

Many athletes consider the participation in the OGs as a super-goal of their athletic engagement (Debois et al., 2012; Wylleman et al., 2012). Few achieve the opportunity to take part in the OGs, and even fewer experience Olympic fame in the form of a medal. For most athletes, advancing within the competition or setting a personal best reflect an Olympic success. Recognizing the importance of this experience for elite athletes, sport psychology researchers examined factors related to Olympic success (Gould et al., 1999), as well as presented programs related to preparation to Games (Blumenstein & Lidor, 2008; Gould & Maynard, 2009) and to post-Games support (McArdle et al., 2014).

Athletic career researchers (e.g., Schinke et al., 2015; Stambulova, 2016; Wylleman et al., 2012) have recently begun considering this experience as a multifaceted and continuous within-career transition. Schinke et al. (2015) referred to this experience as a quasi-normative transition; predictable only for a certain group of athletes who become Olympic candidates. Nevertheless, the context surrounding athletes’ qualification for the OGs may differ. For example, in the Israeli Olympic delegation there were few athletes who did not meet the Israeli Olympic criteria, and actually added at the last moment, as young Olympic prospects. The underlying reasoning of the OCI's was that young Olympic prospects can benefit from “a first OGs” experience. This reflects the recognition that the OGs is a transition to which athletes are required to adjust, including the media coverage, the Olympic village stay, and the Olympic tournament conditions. Also, almost half of the athletes in this study were first time Olympians, so that for many of them this was also a transition to a higher professional level. On the other hand, for certain athletes (i.e., 11 in the current sample) the participation in the OGs was also associated with the end of their careers, as they decided to retire after reaching this peak. So, as advocated by Stambulova (2016), athletic career transition taxonomy should expand beyond the traditional views, considering contextual factors that may affect the course of the transition. In this context, the SCSP framework suggests that

| Table 1 | Multiple linear regression analyses predicting the change process outcome (upper panel) and athletes' sport motivation after the completion of the OGs experience (lower panel). |
| Dependent variable | Predictor | Pearson correlation with the dependent variable (p) | B | β | t | p | F (df) | p | R² |
| Change process outcome | Constant | | | .99 | 1.37 | .18 |
| | Perceived control | .45 (.00) | .29 | .25 | 1.57 | .13 |
| | Effectiveness of coping | .56 (.00) | .28 | .24 | 1.27 | .21 |
| | Athletes' satisfaction from OGs competition results | .50 (.00) | .24 | .33 | 2.14 | .04 |
| | Overall model | | | 8.30 (3,36) | .000 | .41 |
| Motivation after the completion of the OGs experience | Constant | | | −1.58 | −.71 | .48 |
| | Motivation prior to the OGs | .42 (.00) | .51 | .17 | .91 | .37 |
| | Satisfaction of coping | .53 (.00) | .66 | .42 | 2.33 | .03 |
| | Support following the OGs | .35 (.01) | .02 | .03 | .17 | .87 |
| | Overall model | | | 5.07 (3,35) | .005 | .30 |
change-events cannot be fully understood without realizing the unique context within which athletes are operating (Samuel & Tenenbaum, 2011b).

The descriptive data concerning the participants’ personal characteristics indicated that although they were highly motivated for their sports, they reported only moderate to high AI/CI. This finding could result from the fact that the AIMS is a concurrent measure of AI, as well as from the inclusion of four study groups (i.e., Olympic and Paralympic athletes and coaches). Additionally, the athletes and coaches in this study exhibited comparable levels of motivation and AI/CI, suggesting that they share the same high investment in their athletic/coaching careers. Furthermore, the Olympic athletes possessed stronger AI and motivation than the Paralympic athletes, which may be attributed to differences in training hours and in professional/vocational status (i.e., most Paralympic athletes are not full-time engaged in sport and tend to have an additional vocation). It is also possible that Paralympians have different career developmental pathways than Olympians. Depending on their disability history (i.e., whether they were born with a disability or sustained an injury/illness), Paralympians might tend to develop into elite level sport in a more “unexpected” way; at a later age and without a pre-elite period as long as Olympians. The Olympic period was perceived as a highly significant and positive type of change-event in athletes’ and coaches’ careers, characterized by positive emotional and cognitive reactions, and high perceived control. This change-event resembled other “positive” change-events such as a transition to a higher level and achieving a major accomplishment (Samuel & Tenenbaum, 2011b), which share similar characteristics. As the OGs change-event is multifaceted, athletes and coaches may certainly experience high stress and lack of perceived control, especially during the preparation phase (Debois et al., 2012; Stambulova et al., 2012) or prior to their competition (Blumenstein & Lidor, 2008; Gould et al., 2002); however, it seems that in the context of their careers, the experience as a whole is perceived as under high control. This might be related to the participants’ feelings of high available support, as well as to the IESD setting clear expectations for the athletes and coaches. Finally, the participants reported a positive opening ceremony experience. Considering the OGs as a continuous change-event, it is important to acknowledge that the perception of this change-event may be influenced by various factors (i.e., not only by the final achievements), including the opening ceremony experience.

The perception of the OGs was not found to be affected by the participants’ prior Olympic experience. This finding is explained in two ways: the participants were able to focus solely on their London OGs experience without referring to previous experiences, or the OGs experience is perceived as a positive type of change-event regardless of previous experiences. We also found small correlations between the social identity component of athletic/coaching identity and the participants’ (i.e., both athletes and coaches) perceived significance of the OGs experience. This finding replicates previous data reported for a heterogeneous sample of competitive athletes (Samuel & Tenenbaum, 2011b), suggesting that as athletes and coaches identify stronger with the athletic role they also tend to perceive this change-event as more significant in the context of their careers (Brewer et al., 1993).

The SCSSP (Samuel & Tenenbaum, 2011a) was developed in line with Stambulova's (2003) athletic career transition model. The two conceptual frameworks address challenges, coping, resources, and support associated with the transition or the change-event. The athletic career transition model suggests that the effectiveness of coping with a transition depends on the dynamic balance between coping resources (e.g., previous experience, support) and barriers (e.g., low self-efficacy; Stambulova & Wylleman, 2014). The SCSSP considers effective coping process in terms of psychological change (Samuel & Tenenbaum, 2011a). This change is manifested in two main decisions athletes tend to make when facing a significant change-event in their career. The assumption is that athletes who face a significant change-event tend to consult with others (i.e., strategically decide to address the change) and then make a conscious decision to apply all necessary adjustments in order to effectively cope with the change (i.e., a decision to change). These two decisions are moderated by various factors related to the perception of the change-event, personal characteristics, application of therapeutic processes, and the existing psychological support.

The descriptive data in this study indicated positive perceptions of the participants’ satisfaction with and effectiveness of coping (i.e., process and outcome of coping). In terms of decision-making in the change process, the participants mostly made a strategic decision to cope independently or to ignore this change-event. Because of the importance of this change-event along with a strong feeling of self-control, the athletes and their coaches might have felt that they possessed the required knowledge to prepare for the OGs. Yet, athletes who consulted with others perceived the change-event more negatively. Furthermore, athletes and coaches who decided to ignore the change-event reported having more available professional resources of support at the pre-OGs period compared with those participants who coped independently or consulted with others. Thus, it is possible that the athletes who ignored this change-event felt more confident in recruiting mental support, and use coping strategies at the beginning of the change process. Even so, the majority of participants reported making a subsequent decision to change, reflecting the necessary adjustments required for effective coping. This finding corresponds with previous studies (Samuel & Tenenbaum, 2013; Samuel et al., 2015), and provides support for the conceptual tenets of the SCSSP. Interestingly, both athletes and coaches indicated a tendency of making a decision to change. As many coaches were former athletes, they use the same active coping approach that athletes apply (Olusoga, Maynard, Hays, & Butt, 2012).

According to the athletic career transition model a successful transition is the outcome of effective coping (i.e., a favorable transition pathway; Stambulova, in press). In this context, the SCSSP (Samuel & Tenenbaum, 2011a) adopts a probabilistic perspective, suggesting that when athletes are motivated for their sport, and are capable to change (i.e., feel motivation and self-efficacy for creating the required change) they also tend to make a decision to change. If they can implement the change, they feel in control, and assume responsibility for initiating the change. Consequently, they perceive the outcome of the change process more positively. To predict the change process outcome in this study, we conducted two regression analyses. First, we were able to predict athletes’ motivation for the sport after the completion of the OGs experience from their motivation prior to the OGs experience, their satisfaction of coping, and the availability of professional support following the OGs. Athletes’ satisfaction from their coping was a significant predictor, whereas motivation prior to the OGs was not. This finding is somewhat different from the previously reported finding (Samuel & Tenenbaum, 2013) and may be attributed to the unique nature of the OGs experience. As this change-event represents the peak of many athletes’ careers, as well as the professional peak of athletes’ season, many athletes take a break after the Games (Debois et al., 2012; Wylleman et al., 2012). Contrary to Wylleman et al.’s (2012) findings, the athletes in our sample reported a decrease in motivation following the OGs experience. This effect was more prominent for the athletes who retired following the London Games. Gordin and Hensch (2012) and McArdle et al. (2014) proposed that athletes tend to experience negative mood and
even a void following the OGs, as their goal was reached and no new goal is readily apparent. It is also possible, that for retired athletes, a decrease in sport motivation might be functional and facilitate their athletic retirement transition. Our findings, therefore, suggest that athletes' motivation for the sport prior to the OGs is not necessarily a strong predictor of their motivation following the OGs. Moreover, these findings indicate that to maintain athletes' motivation following the OGs experience one must feel satisfied with his/her coping efforts. It is recommended, therefore, to facilitate athletes' coping by providing them with adequate support and by increasing their perceived control (Pensgaard & Duda, 2002; Pensgaard & Ursin, 1998) in the change process (e.g., allowing them to participate in decision making concerning their competition schedule).

A second regression analysis was aimed at predicting the perceived outcome of the change process. The significant predictor of the outcome was the athletes' satisfaction from their professional performance. Interestingly, the actual performance results were not correlated with the perceived outcome of the OGs experience. Examining the emotional reactions of the Sydney 2000 Olympic Games' athletes, McGraw et al. (2005) found that both the actual finish and the anticipated finish had an effect on the perceived happiness of athletes. In this vein, Pensgaard and Ursin (1998) reported that Olympic athletes' coping was positively correlated with their perception of control, and subsequently, with their performance satisfaction. The findings of the present study suggest that athletes' satisfaction from their OGs competition results affects their outcome perception of the OGs experience stronger than their actual competitive outcome. In fact, the athletes' satisfaction from their competitive outcomes were not correlated at all with their actual results, but were strongly correlated with the coach's satisfaction from their performance. Therefore, the responses of coaches to their athletes' performance in the OGs may be highly influential in the way the athletes would perceive the outcome of the OGs experience.

Finally, studies conducted with Olympic athletes and coaches emphasized the need to provide them with adequate support in all phases of the change process (Debois et al., 2012; McArdle et al., 2014; Pensgaard & Duda, 2002). In this study, the athletes reported high availability of professional resources of support (e.g., coaches, medical staff, a psychologist) prior to and during the OGs. After the OGs, however, they felt that the level of support decreased, particularly for coaches. The Israeli athletes and coaches did not receive on-site psychological support (i.e., a psychologist did not accompany them to international competitions) in the preparation for the Games and during the Games (although some athletes maintained communication with practitioners with whom they were consulting prior to the Games). This finding suggests that in the case of the OGs (i.e., a complex multi-event competition environment), athletes and coaches may experience receiving adequate support from various resources; not necessarily psychologically designated ones. This is further supported by the finding that during the OGs experience, the athletes refrained from considering the use of sport psychology services. On the other hand, they retrospectively felt that this type of support is indeed important for coping with change-events such as the OGs experience. Therefore, athletes and coaches might not be aware of their need for specific psychological support, and might rely on other resources available in their environment, such as coaches and Union personnel. In this context, the experienced athletes and coaches considered more using sport psychology services than the first time Olympians. Typically, the experienced Olympians are also those who have had a previous experience with sport psychology services. It is well documented that athletes and coaches may be apprehensive about using sport psychology services, and that athletes who have had previous consultation experience tend to be more appreciative and less apprehensive concerning these services (Martin, Lavallee, Kellmann, & Page, 2004; McArdle et al., 2014).

8.1. Study limitations and future research

This study had several limitations. First, although the use of a cross-sectional retrospective design enabled us to collect extensive data and produce predictive findings, it also increased the risk of a recall bias. A longitudinal and concurrent approach (e.g., Samuel et al., 2015) could have facilitated more accurate data collection concerning this continuous change process. Second, two of the subscales of the AIMS (Brewer & Cornelius, 2001) showed relatively low internal consistency. Also, this measure allowed us to evaluate the participants' athletic/coaching identity only concurrently. We were unable to evaluate athletic/coaching identity at the time of the qualification to the OGs, therefore reducing the predictive power of this variable. Additionally, we could not identify potential changes in AI/CI levels throughout the change process (e.g., Samuel et al., 2015). Third, the CEI was developed for athletes, and here it was also used to evaluate coaches' change processes. It is possible that the change processes of coaches include other elements, not completely covered by the CEI. Also, four subscales were added to the original inventory, that were not psychometrically evaluated, other than by internal consistencies values (i.e., z ranged between .76 and .95). Fourth, whereas the inclusion of several study groups (i.e., athletes and coaches, Olympic and Paralympic participants) enabled us to conduct comparative analyses and receive a more comprehensive picture of the OGs experience, a larger and more homogeneous sample could have improved our predictive power in certain analyses. Finally, our sample included participants from a single Olympic delegation, with unique demographic and athletic characteristics. This might reduce the generalizability of the findings regarding the OGs experience of athletes and coaches from other countries. We recommend future studies to examine the OGs experience using cross-cultural designs (Stambulova, in press).

8.2. Practical implications

This study's findings present several practical implications concerning the support provided for athletes and coaches throughout the OGs experience. Consultants should be aware that this experience is not merely another competition, but reflects a significant career change. However, athletes and coaches may not always be aware of their need for sport psychology services throughout the OGs experience, especially at the beginning of the change process (i.e., the qualification to the OGs). Many athletes and coaches may not realize that they experience changes prior to the OGs (Wylleman et al., 2012), which may require guidance and support (Schinke et al., 2015). Therefore, based on Samuel's (2013) framework, consultants should first identify athletes' and coaches' perceptions of the new situation, and then recognize existing coping efforts/strategies and support resources in the athlete's/coach's environment. Consultants should focus on increasing athletes' and coaches' perceived control in this new situation. Additionally, consultants should realize that even though the OGs experience is positive, it may also involve a “crisis of glory” (Stambulova, 2000), so it is imperative to assist athletes and coaches in securing high motivation and AI/CI throughout the change process. Furthermore, if athletes and coaches tend to make a decision to change as a coping mechanism then they should be supported in this decision (Samuel, 2013). Considering the possibility of motivation loss and dissociation from the athletic role following the completion of the OGs experience, it is important that athletes feel satisfied from their coping efforts. Supporting athletes...
throughout the OGs and facilitating their perceived control may increase these feelings. Finally, to increase athletes’ satisfaction of their OGs competition results, it is important to set realistic expectations and goals prior to the OGs (Gould et al., 2002), and support athletes who failed to achieve their goals.

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References


