

Athletes' Decision-Making in Career Change-Events

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This study examined decision-making processes in response to athletic career change-events (e.g., injury, field position change). Athletes' ($N = 338$) initial strategic decisions whether to address or ignore a change-event, and their subsequent decisions whether to make the required change were measured using the Change-Event Inventory (Samuel & Tenenbaum, 2011b). Athletes reported a high tendency of making a strategic decision to consult with others, which could be predicted from the event's perceived significance and availability of professional support. Athletes also reported a high tendency of making a subsequent decision to change, which could be predicted from the helpfulness of support, motivation for change, and certain coping strategies. The two types of decisions were related. Perceived outcome of the change process and athletes' motivation could also be accurately predicted. In conclusion, to effectively cope with change-events athletes need to feel involved, be in control, and make independent decisions that reflect their genuine needs and wishes.

Athletes are required to make decisions, pertaining not only to their athletic performance, but also to their careers (e.g., Fogarty & McGregor-Bayne, 2008), and more specifically, to within career transitions (Alfermann & Stambulova, 2007) and crisis transitions (Stambulova, 2000). These decisions can relate to any dimension of the athletic engagement, including the level of sport to engage in, the club or team to play for, equipment selection, adaptation of motivational style and level, coping with injuries, and peer-relationships to be fostered (e.g., Eklund & Cresswell, 2007; Poczwadowski, Barott, & Henschen, 2002; Pummell, Harwood, & Lavalley, 2008). To further elaborate on the concept of change in the context of the athletic career we developed a conceptual framework termed a Scheme of Change for Sport Psychology Practice (SCSPP; Samuel & Tenenbaum, 2011a). The SCSPP conceptually relies on the concepts of career transition (e.g., Alfermann & Stambulova, 2007; Schlossberg, Waters, & Goodman, 1995; Stambulova, 2000; Taylor & Ogilvie, 1998), coping with stressful life events (e.g., Beehr & McGrath, 1996), and therapeutic processes (e.g., Lambert & Ogles, 2004; Zuroff et al., 2007). It describes typical characteristics of change-events that challenge athletes to respond with matching personal adaptation, or reactive change, which can be manifested in various dimensions of the athletic engagement. These are events, which disrupt the athletic engagement status quo, either objectively (e.g., an injury)

or subjectively (e.g., a major reduction in motivation), and require athletes to apply coping strategies, as well as make certain decisions (i.e., two types of decisions termed in the SCSPP "a strategic decision," and "a decision to change"), to generate matching change and return to stability (Samuel & Tenenbaum, 2011a).

Previously¹ we have reported data related to the types, frequencies, and profiles of change-events, which athletes might encounter throughout their athletic careers (Samuel & Tenenbaum, 2011b). In the current report we present additional analyses, pertaining to the same data set, which focus on describing the decision-making involved in athletes' change processes. These data may facilitate practitioners' efforts when supporting athletes' decisions in response to change-events. The following hypotheses were postulated: (1) athletes' strategic decision is a function of the significance and severity of the event, the perception of control over the event, the influence of significant others, past experience in similar events, availability of professional support, the motivation at the appearance of the event, and personal characteristics, (2) athletes' decision to change is a function of the helpfulness of their emotional and/or professional support, their motivation for change, and their use of coping strategies, (3) a relationship exists between athletes' initial strategic decision, and their subsequent decision to change, (4) the outcome of change-events is a function of athletes' decision to change, the effectiveness of coping, and the perception of control over the event, and (5) athletes' motivation for the sport, after the event has occurred, is a function of their coping satisfaction, and their motivation for the sport at the appearance of the event.

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Method

Participants

Adult competitive athletes ($N = 338$; M age = 21.19 yrs, $SD = 3.63$; 212 males and 126 females) representing various sport events and competitive levels were recruited on a voluntary basis from university varsity teams and competitive clubs in the United States, and the Israeli National Soccer League. Institutional approval was granted, and participants provided informed consent.

Instrumentation

Change-event experiences (Change-Event Inventory, CEI; Samuel & Tenenbaum, 2011b). The CEI measures athletes' change-event experiences in a four section format: (a) demographic information, (b) experience of change-events, (c) perception of and reaction to a single change-event, and (d) decision-making and availability of help resources. The inventory has presented adequate psychometric properties, including temporal stability, internal consistency (i.e., all Cronbach's α ranged between .68 and .89), and internal factorial structure (Samuel & Tenenbaum, 2011b).

Coping strategies (Brief COPE; Carver, 1997). Coping strategies applied in addressing change-events were evaluated using the brief COPE inventory, consisting of 14 two-item subscales that represent adaptive (e.g., active coping, planning), and maladaptive coping (e.g., denial, substance abuse) strategies. Responses are in a situational and retrospective format, and are made on a 4-point Likert-type scale. Carver (1997) reported internal consistency coefficients ranging from .50 to .90.

Procedure

Potential participants were introduced to the research topic and the purpose of the study by the first author, during scheduled administration sessions. The researcher emphasized the voluntarily nature of participation, and participants were asked to provide their consent. The procedure lasted 30–40 min and ensured confidentiality.

Results

The Strategic Decision

To predict participants' strategic decisions in reaction to the appearance of a change-event, a multinomial logistic regression was conducted. To determine the most appropriate model, predictors were entered using a forward stepwise method. The analysis resulted in a two-predictor model (i.e., *perceived significance of change-event* and *availability of professional support*) that fitted the data with significant likelihood ratio tests, $LR = 524.75$, $\chi^2(2, N = 331) = 26.14$, $p < .001$, and good model fit, $\chi^2(616, N = 331) = 598.55$, $p = .69$. The Cox and Snell pseudo R^2 was relatively small ($R^2 = .08$), and 62% of cases were correctly classified by the model (i.e., case classification

was better than the rate of chance accuracy of 59.1%). The model indicated that athletes were 12.45 times more likely to consult with others than to ignore a change-event if the perceived significance increased by one point, and 3.30 times more likely if the availability of professional resources increased by one point, given that all of the other variables in the model were held constant. In addition, athletes were 3.52 times more likely to consult with others than to cope independently if the perceived significance increased by one point, given that all of the other variables in the model were held constant. As part of their strategic decision, 53% consulted with family, 41% with teammates, 37% with a coach, and 7% with a sport psychologist. On average, when addressing a given change-event, athletes reported on turning to receive emotional and/or professional support from four different sources (out of the 10 optional resources provided in the CEI), and in most cases (62%) it was their decision to consult with that source.

The Decision to Change

To predict athletes' decision to change in response to a change-event, a multinomial logistic regression was conducted. To determine the most appropriate model, predictors were entered using a forward stepwise method. The analysis resulted in a six-predictor model (i.e., *the helpfulness of the emotional/professional support*, *motivation for change*, *denial*, *acceptance*, *positive reframing*, and *instrumental support*) that fitted the data with significant likelihood ratio test, $LR = 729.36$, $\chi^2(24, N = 313) = 143.06$, $p < .001$, and good model fit, $\chi^2(1220, N = 313) = 1221.87$, $p = .48$. The Cox and Snell pseudo R^2 was moderate ($R^2 = .37$), and the model correctly classified 49.8% of the cases (i.e., case classification was better than the rate of chance accuracy of 36.8%). The model indicated that athletes were 8.80 times more likely to initiate a change than to ignore a change-event if their motivation for change score increased by one point, given that all of the other variables in the model were held constant. In addition, athletes were 11.20 times more likely to listen to others than to ignore a change-event if their score on motivation for change increased by one point, and 13.78 times more likely if they had more instrumental support, given that all of the other variables in the model were held constant. Finally, athletes were more likely to initiate change than not to initiate change if motivation for change was higher, and if they accepted the fact that a change-event had occurred, given that all other variables in the model were held constant.

The Process of Decision Making

The relationship between athletes' strategic decision in response to the appearance of a change-event, and their subsequent decision to initiate change, was examined using a Pearson chi-square test. The results are shown in Table 1, and indicate that those athletes, whose initial reaction to change-events involved consulting with others, also tended to make the necessary adjustments to cope with their change-events, or in other words, to initiate

Table 1 Distribution of Participants' Strategic Decisions and the Subsequent Decision to Change, and Non-Parametric Statistics

Initial Reaction to Change-Event	Decision to Change					Total
	Ignored the Event	Initiated Change	Did Not Initiate Change	Consulted with Others	Not Sure	
	N (%)	N (%)	N (%)	N (%)	N (%)	
Ignored the Change-Event	18 (51.4)	3 (8.6)	4 (11.4)	6 (17.1)	4 (11.4)	35 (100)
Coped Independently	7 (7.7)	47 (51.6)	17 (18.7)	6 (6.6)	14 (15.4)	91 (100)
Consulted with Others	5 (2.5)	96 (48.2)	12 (6.0)	73 (36.7)	13 (6.5)	199 (100)

$\chi^2(8, N = 325) = 1.27E2, p < .001$

$LR(8, N = 325) = 105.08, p < .001$

$\Phi = .63, p < .001$

a change. On the other hand, athletes who decided to ignore their change-event also tended not to initiate a change. In addition, many athletes who initially decided to consult with others also indicated that their decision to change was to consult with others. An examination of the type of change-events that were associated with this type of coping process indicated that the frequency of severe (26.8%) and moderate (18.3%) injuries, as well as a transition to a higher level (15.5%) were significantly higher than expected, $\chi^2(12, N = 71) = 72.37, p < .001$. In addition, athletes who coped independently, without consulting with others, also showed a relatively frequent tendency to initiate a change in reaction to change-events. Examination of the type of change-events associated with this decision did not reveal a unique pattern.

The Outcome of Change-Events

Athletes' evaluations of the *outcome of their change-events* were regressed on their *perceived control over the event*, the *effectiveness of their coping efforts*, and their *decision to change*. The analysis revealed three predictors that accounted for a significant proportion of the variance of the outcome of change-events, $R^2 = .37, F(3, 320) = 63.44, p < .001$. Effectiveness of coping was the strongest predictor ($\beta = .53$), followed by perceived control ($\beta = .11$), and a decision "not to initiate change" ($\beta = -.10$). The interpretation of the first predictor in the model is as follows: On average, as effectiveness of coping increased by one standard deviation, the perception of the outcome of the change-event increased (i.e., became more positive) by .53 of a standard deviation, controlling for perceived control and the decision not to initiate change. Similarly, the interpretation for the second predictor is as follows: On average, as perceived control increased by one standard deviation, the perception of the outcome of the change-event increased (i.e., became more positive) by .11 of a standard deviation, controlling for

effectiveness of coping and the decision not to initiate a change. Finally, the interpretation of the categorical predictor is as follows: Athletes who decided not to initiate a change in response to a change-event also perceived the outcome of their event as more negative by .10 of a standard deviation, compared with all other decisions (i.e., "ignored;" "initiated change;" "listened to others;" "not sure"), controlling for the other two model factors.

Motivation for the Sport as a Result of the Change-Event

Athletes' motivation for their sport after experiencing the change-event was regressed on their motivation at the appearance of the event and their satisfaction with the way they have coped with the event. The analysis revealed that these two predictors accounted for a significant proportion of variance in participants' motivation after the event, $R^2 = .22, F(2, 326) = 46.55, p < .001$. Specifically, as athletes' motivation for the sport at the appearance of the change-event increased by one standard deviation, their motivation for the sport after the event occurred increased by .46 of a standard deviation, controlling for satisfaction coping; as satisfaction of coping increased by one standard deviation, motivation for the sport after the event increased by .13 of a standard deviation, controlling for motivation for the sport at the appearance of the event.

Discussion

Athletes reported a high tendency of making a strategic decision to consult with others in response to a change-event. The data analysis also suggested that the most important predictors of athletes' strategic decisions were the perceived significance of the event and the availability of professional support (i.e., sport psychologist, counselor). In other words, when athletes perceived the

new situation as significant and felt they have had available resources of professional support, they were more likely to consult with others than to ignore the situation or cope with it independently. These findings correspond with current conceptualizations of coping (e.g., Beehr & McGrath, 1996), and athletic career transitions (Pummell et al., 2008). The regression analysis of athletes' strategic decisions did not support the inclusion of all moderating factors suggested by the SCSPP. It is possible that the type of change-events participants decided to report on was a moderating factor, masking the effects of the other predictors (e.g., the perception of control over the event), which might be event-dependent (i.e., different events will be associated with different levels on these variables). Therefore, the first hypothesis pertaining to the prediction of athletes' strategic decisions was only partially supported by the data.

The data pertaining to athletes' decisions to change indicated that athletes were much more likely to initiate a matching change than to ignore a change-event or not to initiate change when their motivation for change was higher. They were also much more likely to listen to others than to ignore a change-event if their motivation for change was higher, and if they tended to use more instrumental support. These findings provided a degree of support for the second hypothesis, and correspond with psychotherapy research, which has indicated that autonomously motivated behavior is associated with desirable therapeutic outcomes (e.g., Zuroff et al., 2007). The findings also provide support for the conceptual assumptions made in the SCSPP regarding the moderating role of athletes' motivation for change in making a decision for change.

It is suggested in the SCSPP that athletes who indeed make the initial strategic decision to consult with others, also tend to make a subsequent decision to initiate change in response to the demands posed by the new situation. The emotional or professional support athletes receive may help them to assume responsibility for their careers, and make a decision to change. The data supported this notion, as presented in the third hypothesis; athletes who decided to consult with others also tended to make the decision to initiate change, while athletes who decided to ignore the change-event tended not to make the decision to change. Athletes who decided to ignore the change-event also perceived it as less significant. It is encouraging that most athletes decided to consult with others and make a decision to change.

The outcome of change-events was found to be a function of athletes' decisions to change, their perceived control over the event, and their perceived effectiveness of coping with the event. This finding provided good support for the fourth hypothesis and emphasizes the importance of increasing athletes' feelings of control that may moderate the nature of the coping and change processes. This can potentially be achieved by educating athletes about various change-events they may encounter, and offering adaptive coping strategies, as well as identifying appropriate resources of support (Alfermann &

Stambulova, 2007). Finally, athletes' motivation for the sport after the event occurred was found to be a function of their motivation for the sport at the appearance of the event, and their satisfaction in the way they had coped. This finding provided adequate support for the fifth hypothesis and indicates that athletes not only need to be motivated for their sport to appropriately address a change-event, and maintain their motivation (Alfermann & Stambulova, 2007), but they also need to be satisfied in their coping efforts. Therefore, if parents, coaches, and sport psychologists wish athletes to maintain high levels of motivation after experiencing a change-event, it is important that they feel satisfied with the way they have coped. This means that athletes need to feel involved and in control, and make independent decisions that reflect their genuine needs and wishes.

Note

1. This article is based on a conceptual framework and data which were used in two previous publications (Samuel & Tenenbaum, 2011a, 2011b).

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