Exploring the Perceived Effectiveness of a Life Skills Development Program for High-
Performance Athletes

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Author Note

Sarah J. Hardcastle, Rachael Glassey, and Martin S. Hagger, Health Psychology and
Behavioural Medicine Research Group, School of Psychology and Speech Pathology, Faculty
of Health Sciences, Curtin University, Perth, Australia; Marian Tye, Centre for Sport and
Recreation Research, Faculty of Humanities, Curtin University, Perth, Australia.

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Correspondence concerning this article should be addressed to Martin S. Hagger, Health
Psychology and Behavioral Medicine Research Group, School of Psychology and Speech
Pathology, Faculty of Health Sciences, Curtin University, GPO Box U1987, Perth, WA 6845,
Australia, email: martin.hagger@curtin.edu.au

Abstract

The purpose of this study was to explore attitudes towards, experiences of, and perceived effectiveness of a life-skills programme for high-performance young athletes from multiple perspectives, including the athletes, coaches, parents, programme facilitators, and sport administrators. Six focus groups were conducted with 54 high-performance athletes from six sports: squash, softball, baseball, netball, triathlon, and surfing. Three focus groups were conducted with parents ($n = 8$) of athletes and a further eight semi-structured interviews were conducted with coaches ($n = 4$) and lead facilitators ($n = 4$) of the life-skills programme. Four semi-structured interviews were also held with representatives from State Sporting Associations (SSAs) from the sports involved. Thematic content analysis revealed seven main themes: *achieving balance and managing stress, time management, goal setting, confidence and control, information overload and repetition, credible role-models, coach reinforcement and follow-up*. The programme was perceived to be moderately successful in developing adaptive behaviours and motives including better engagement in training and in adopting time management and planning skills in contexts outside of sport such as homework and academic study. The programme also fostered the development of skills, attitudes, and motives important for sport success such as goal setting and having confidence to succeed. To improve the effectiveness of such programmes, more emphasis should be placed on the practice of, and engagement with, applied techniques to develop skills with less emphasis on information giving and theory. Facilitators of programmes should also be more pro-active in involving parents and coaches as a way to improve continuity and provide post-program reinforcement and support.

Keywords: Life skills; Intervention; Adolescent athletes; High Performance; Qualitative evaluation

Introduction

Youth sport programmes have been recognized to have a positive impact on youth development through helping young athletes to learn about themselves and to develop life skills (Papacharisis, Goudas, Danish & Theodorakis, 2005). Life skills may include physical (e.g., healthy diet), behavioral (e.g., goal setting), or cognitive (e.g., self-talk) aspects (Danish, Taylor, Hodge & Heke, 2004). The domain of sport has been recognized as a good context for fostering and developing life-skills and an appropriate medium to promote positive youth development (Goudas & Giannoudis, 2008; Tremayne & Tremayne, 2004). Positive youth development may be fostered in sport through “being taught skills, values, and virtues that help them during adolescence which can also help them thrive throughout life” (Jones & Lavallee, 2009, p. 160). There is evidence to suggest that many of the skills required to succeed in sport are transferable to other life contexts. These skills include problem solving, time management, goal setting, coping with success and failure, and, performing under pressure (Catalano, Berglund, Ryan, Lonczak & Hawkins, 2004; Danish et al., 2004). In the present study, we adopted Gould and Carson’s (2008) definition of life-skills as “those internal personal assets, characteristics, and skills such as goal-setting, emotional control, self-esteem, and hard work that may be facilitated or developed in sport and are transferred in non-sport settings” (p. 60).

Several youth sport programmes have been developed to foster both life and sport skills and promote personal, social and sport development. Sport United to Promote Education and Recreation (known as SUPER) is one example of a life skills programme in sport (for a full description see Danish, Forneris & Wallace, 2005). The aim of the SUPER programme is to provide participants with the skills to overcome barriers, set goals and think positively. Research has supported the effectiveness of the SUPER programme in increasing knowledge of and confidence in using goal setting, overcoming barriers, and thinking positively (Brunelle, Danish & Forneris, 2007; Goudas, Dermitzaki, Leondari & Danish, 2006; Papacharisis, , 2005). In a variation of the SUPER programme, Papacharisis et al. (2005) assessed young athletes in sport skills and typical self-regulation skills (i.e., goal

1 setting, positive self-talk, problem solving). The intervention resulted in successful changes in
2 athletes' adoption of sport skills, and improved confidence to apply life skills relative to
3 athletes in the control group. A second study on physical education students also
4 demonstrated effectiveness in relation to gains and retention on physical fitness (measured by
5 sit-and reach and push-up tests), knowledge and self-beliefs regarding goal setting compared
6 to a control group (Goudas et al., 2006).

7 A similar programme, *Going for the Goal*, has demonstrated success in increasing
8 intrinsic motivation for school work and improvements in self-esteem (Hodge, Creswell,
9 Sherburn & Dugdale, 1999). Two large studies involving between 350 and 479 middle school
10 students respectively have also evaluated the Going for Goal programme (O'Hearn & Gatz,
11 1999; 2002). Findings from the first demonstrated a significant increase in knowledge of goal
12 setting skills and a significant increase in goal attainment (O'Hearn & Gatz, 1999). The
13 second study also revealed significant improvements in problem solving skills following the
14 GOAL programme. The *Play It Smart* programme, developed by Petitpas, Van Raalte,
15 Cornelius, and Presby (2004), aimed to improve adolescent athlete's academic, athletic and
16 personal development. Results demonstrated grade point increases, increased participation in
17 community volunteering and increased knowledge and use of health enhancing behaviours.
18 Finally, in the *First Tee* programme, participants referred to ways in which they could transfer
19 life skills learned and developed in programme to non-sport settings (Petitpas, Cornelius &
20 Van Raalte, 2008). A recent evaluation of The First Tee also demonstrated that strategies
21 learned during the intervention, in particular, coping with negative thoughts and emotions,
22 were used both on and off the golf course (Weiss, Stuntz, Bhalla, Bolter, & Price, 2013).
23 Specifically, the skills and strategies that were successfully transferred to other life domains
24 included STAR (stop, think, anticipate, respond) and the 4 R's (Replay, relax, ready and
25 redo).

26 A limitation of these studies is that no direct measures of life skills were taken and
27 there is considerable evidence that knowledge and motivation alone do not necessarily result
28 in subsequent behaviour change (e.g., Chatzisarantis & Hagger, 2005; Hagger &

1 Luszczynska, 2014; Sniehotta, Pesseau, & Araújo-Soares, 2014). A similar point has been
2 echoed by Hodge, Danish and Martin (2013) stating that most evaluations of life skills
3 interventions give “no indications that either knowledge can be applied or that the self-beliefs
4 resulted in actual behaviour change” (p. 1131). Another gap in the literature on life skills
5 interventions is the inclusion of high level performance athletes, and this is a strength of the
6 current study. In one of only a few studies that have conducted with high-level athletes (at
7 least county level, some international), Jones, Lavallee and Tod (2011) reported
8 improvements in perceived use of communication and organizational skills in sport. However,
9 the study by Jones et al. (2011) did not explore whether participants transferred life skills
10 across to other life domains. A particular strength of the current study is its focus on whether
11 participants use life skills taught on the programme in other life domains outside of sport.
12 Following research demonstrating the effectiveness of life skills interventions through sport,
13 more recent work has attempted to identify which life skills are most needed by young
14 athletes. In a survey of high school coaches, Gould, Chung, Smith, and White (2006) found
15 that poor communication skills, a lack of motivation and discipline, and failure to take
16 responsibility were the main areas that required development in young athletes and would
17 lead to better personal and social outcomes. A further study used focus groups to explore the
18 life skill needs of adolescent athletes from a range of perspectives including coaches, parents,
19 student-athletes and sport directors (Gould, Carson, Fifer et al., 2007). The life skill issues
20 identified as important included: dealing with increased pressure, handling unhealthy parental
21 involvement, restructuring inappropriate attitudes about winning and the meaning of success,
22 and resisting pressures to use and abuse tobacco, alcohol and drugs. In order to meet these
23 demands, and keep the life skills programmes focused on adaptive outcomes of to athletes,
24 Gould and Carson (2008) suggested that a robust life skill set would include time and stress
25 management skills, character development and decision making skills, communication skills,
26 leadership skills, links to positive adult and peer role models, and general confidence and self-
27 efficacy. In a more recent study with those who coach young athletes, Vella, Oades, and
28 Crowe (2011) found that coaches saw themselves as responsible for the development of many

positive outcomes in athletes including character, competence, confidence, psychological capacities, connection, and life skills. It's noteworthy to point out that the theme of life skills was the second most frequently cited outcome fostered by coaches with character being their most frequently cited intended outcome. Another study involving coaches in high school and community settings found that self-confidence and respect were the most frequently reported life skills taught by the coach (Trottier & Robitaille, 2014). The addition of life skill components indicates a shift in focus from purely sporting outcomes towards a more holistic approach to coaching young athletes.

The present study aimed to evaluate the perceived effectiveness of a life-skills programme, known as *Developing Champions* (DC), which focuses on the key aspects of life skills deemed as important in previous work (Gould & Carson, 2008). The DC programme was developed through a partnership between the Department of Sport and Recreation (DSR), a division of the state Government of Western Australia, and the Western Australian Institute of Sport (WAIS) as a life skills programme for emerging high-performance young athletes. The population of athletes is school-age children and adolescents and therefore need to balance the challenges of regular practice and training, competition, and stress demands of their sport alongside those of their academic work, and social and family relationships. Research has identified that learning to deal with increasing pressure and expectations and counteracting inappropriate attitudes and expectations about winning and the meaning of success are key life skill issues and concerns faced by today's high school athletes (Gould et al., 2009). This makes the target population of high-performance athletes a primary target group for life skills interventions such as the DC programme that aims to assist athletes in coping with the demands of their lifestyle as a high-performance athlete and also provide them with skills to effectively manage their time and emotions and improve coping skills. The DC programme was designed to help develop psychological skills in young high-performance athletes and provide them with key self-regulation and coping skills to perform at their best in sport, whilst maintaining a balance between sport, academic studies and a social life. The aim of the DC programme is to assist aspiring young athletes to engage in adaptive behaviours in

sport (e.g., training, competition) and outside of sport (e.g., home, school, and social life) and make positive decisions, which will enable them to successfully enter and then progress along the high-performance highway. The DC programme is delivered to athletes aged 13 and 18 years of age via a three stage delivery model: Stage 1 – *Foundations for My Success*; Stage 2 – *Advancing along My Sporting Pathway*; Stage 3 – *Intensive Servicing*. Within Stages 1 and 2, there are core and elective modules based on the needs of the athletes. The core module covered by all athletes includes the following topics: sporting commitment and life balance, self-awareness, mental states and performance, confidence, managing stress and planning for success. The elective modules include: Managing my body, Mental skills, A Positive Me, and Communication. The DC programme was delivered by didactic-type lectures and seminars in conjunction with the use of workbooks and worksheets. The facilitator, in discussion with the coach, selected the elective module based on what was deemed most appropriate for the athletes at the time. The objectives of the DC programme are to achieve positive behaviour change in targeted athletes by developing athletes' interpersonal and personal life skills; and enhancing their ability to apply these skills within different contexts. The DC programme was delivered by trained facilitators ($n = 4$). The lead facilitator who designed the programme had a degree in Sport Psychology and postgraduate certificates in training and assessment, and in career development. The other three facilitators all had careers in elite sport with sport coaching experience. These former elite athletes had been involved in the delivery of the DC programme for two years prior to taking on a lead facilitator role. In order to be a lead facilitator, these individuals also participated in a Facilitator Training Professional development course. The research is expected to provide detailed insight into the attitudes toward, and perceived effectiveness of, the DC programme in terms of developing key transferable life skills (such as goal setting, problem solving, time management, and coping with pressure) targeted by the program that are likely to be applicable to participating athletes' behavior in and outside of the sport settings.

Given the broad nature and flexible aims of life skills training programmes, evaluation of the programmes in terms of their impact on key outcomes and comparing their efficacy

across programs presents a considerable challenge. Nevertheless, thorough evaluation efforts should be conducted alongside the delivery of the programme in order to evaluate the impact of life skills programmes on the development of key skills in participating athletes and key outcomes relevant to their sport performance and in other life contexts (e.g., school, social and home life). The importance of qualitative research in this area has been highlighted: “We know so little about life skills development through sport that describing the conditions and experiences of those involved is essential” (Gould & Carson, 2008, p. 69). It is also important to involve athletes, coaches, service providers and parents in the evaluation of the effectiveness of such programs. However, the attitudes, views and experiences of significant others with whom the athlete or facilitator interacts (e.g., coaches, parents) are often neglected (Sharp, Woodstock, Holland, Cumming & Duda, 2013). Such process evaluation research is essential to identify the aspects of the programme that are leading to effective change; the so-called ‘active ingredients’ of the programme that lead to salient outcomes (Hagger, 2010, 2014; Hagger, Wood, Stiff & Chatzisarantis, 2010). Previous studies have provided a conceptual model and identified candidate mediators that may explain how the content of life skills programmes affect a change in key behaviours in athletes.

A key example is provided by Hodge et al. (2013) who identified that the mechanisms by which life skills programmes affect behaviour change in athletes is through the provision of support for basic psychological needs by the coach and other programme leaders based on self-determination theory (Deci & Ryan, 2000). Fostering autonomy support toward key behaviours is important because it is more likely to lead to increased autonomous motivation and intentions to participate in the behaviours (Cheon & Reeve, 2013; Hagger, Chatzisarantis, & Harris, 2006). From our perspective, autonomy support focuses on two aspects of programmes, that are not entirely independent, but each will have an effect on changing behaviour. The first is the content. Life skills programmes need to provide content that will engage athletes and assist them in developing goal content that is meaningful, personal, and consistent with their sense of self. This will foster autonomous forms of motivation toward the key lifestyle outcomes that are the target of the programme because the goals will be

consistent with basic psychological needs of autonomy (goals that are meaningful, personal, and consistent with sense of self) and competence (mastery experiences). The second is interpersonal style has been identified as one that is extremely important in behaviour change interventions (Hagger & Hardcastle, 2014). Coaches and leaders can adopt a style that scaffolds athletes' motivation by providing them with a rationale for their actions, giving them a sense of choice, acknowledging travails and conflicts, encouraging exploratory and questioning approaches to problems, and avoiding controlling or didactic language. These will be consistent with, and satisfy, athletes' psychological needs for relatedness. Together, these approaches form the mediating factors that may be the means by which the programme affects change in behaviour. It is important that researchers and practitioners alike are aware of these possible mechanisms for change, and that any evaluation of programmes is made through the lens of potential mechanisms.

To date, there have been few qualitative studies conducted to evaluate the effectiveness of life skills programmes (e.g., Camire, Trudel & Bernard, 2012; Goudas & Giannoudis, 2010; Petitpas et al., 2008). The majority of life skills research have used quasi experimental (e.g., Petitpas et al., 2004) or experimental designs (e.g., Goudas & Giannoudis, 2008; Papacharisis et al., 2005) using questionnaire data to assess aspects such as knowledge and self-beliefs, or behavioural outcomes such as sport-skills tests (e.g., Goudas & Giannoudis, 2008; Papacharisis et al., 2005) or academic achievements (grade point averages) (Petitpas et al., 2004). The only qualitative study exploring the perceived effectiveness of a life skills programme from multiple perspectives, including athletes', coaches', parents' and administrators' was conducted by Camire and colleagues (2013). They provided a comprehensive case-study of the programme and found that the programme's format allowed coaches to spend time and develop quality relationships with players and implement innovative approaches to teach life skills and values. However, Camire et al.'s (2013) study only involved athletes from one sport (Ice hockey) and all participants were male. As such, the findings may not necessarily generalise to programmes using other sports to develop life skills.

Extending the work of Camire et al. (2013), the present study is unique in that it adopted qualitative methods to explore the perceived effectiveness of a life skills programme across a range of sports and from the multiple perspectives of athletes, coaches, parents, and administrators. The value of a qualitative method is that it enables in-depth, detailed views of program participants and facilitators experiencing the programme, particularly the efficacy, perceived effectiveness, and acceptability of the programme. These views may not be captured in scaled responses to items focusing on a narrow range of researcher-defined constructs in quantitative research. The extraction of emergent themes from qualitative analysis of participants involved in a life skills programme may assist in the interpretation of data from other programme evaluations and inform the development of future measures of belief-, motive- and behaviour-change as the result of the programmes. Specifically, the research aimed to explore athletes attitudes and beliefs toward key adaptive skills and behaviors targeted by the DC programme, including attitudes and motives toward training/practice and competition for their sport, using mental skills to improve their performance, managing their body more effectively including better nutrition, and coping with the pressures of being an high-performance athlete. We also expect the themes extracted from our analysis will also reflect the potential mechanisms behind the effect of the programme on behavioural outcomes. Specifically, the themes may point to the fostering of autonomous forms of motivation through basic psychological need satisfaction consistent with the conceptual model proposed by Hodge et al. (2013) and self-determination theory (Chatzisarantis, Hagger, Smith & Sage, 2006; Deci & Ryan, 2000; Hein & Hagger, 2007;). The study also aimed to canvass the views of key stakeholders of the athletes including coaches and parents and the people delivering the programme. The research is expected to provide evidence in support of the development and evaluation of future training programmes to maximize adaptive life skills and associated outcomes in young high-performance athletes.

Methods

Participants and Recruitment

Participants were high-performance athletes identified through state-level sport governing bodies and involved in high-performance programmes from a variety of individual and team sports. Opportunistic sampling was used to recruit participants and depended on which athletes attended training the day the focus group discussions took place. Inclusion criteria were: enrolment in a high-performance athlete programme, aged 13 to 18 years, and received at least one workshop of the DC programme. The coaches were selected from a limited pool of individuals involved in the coaching of athletes in the programme, and were interviewed after responding to requests from the research team. Parents were recruited by word-of-mouth through the coaches and athletes that were involved in the programme. The facilitator sample comprised the entire DC programme facilitator cohort. State sporting association (SSA) representatives of the sports involved in the DC programme were recruited through contact with the associations through WAIS and the DSR. Overall, six athlete focus groups were conducted with athletes from the following sports: Squash ($n = 10$), Softball ($n = 8$), Baseball ($n = 8$), Netball ($n = 10$), Triathlon ($n = 8$), and Surfing ($n = 8$). Three focus groups were also conducted with parents of athletes. One-to-one semi-structured interviews were conducted with the lead facilitators of the DC programme ($n = 4$); coaches ($n = 4$); and SSA representatives ($n = 4$). In total, 12 one-to-one interviews and 9 focus groups were conducted involving 73 participants. The authors were not involved in the development of the DC programme or its delivery. This was made clear to all participants prior to consent and reinforced at the beginning of each interview or focus group. The aim was an independent evaluation of the programme that could encourage open and honest discussion.

Ethical approval was obtained from [University name omitted for masked review] University prior to data collection. Participants and their parents or guardians signed consent forms to confirm that they were fully informed about the purpose of the study and understood

1 their participation rights (e.g., voluntary participation, right of withdrawal, and confidentiality
2 of the data).

3 **Focus Group Procedures**

4 Focus group interviews were chosen over one-to-one interviews because they offered an
5 open platform for the athletes to freely discuss their views towards the DC programme with
6 their fellow teammates, and the group environment could facilitate interactional dynamics,
7 which may bring in more open discussion and elaboration of perceptions and experiences
8 with the programme. The decision to adopt a focus group methodology was also a pragmatic
9 one given that gaining access to the athletes for individual interviews prior to or following
10 training sessions would be extremely difficult from a logistical and resource allocation
11 perspective. We used the focus group methodology advocated by Sparkes and Smith (2014).
12 There was an attempt to be pro-active in encouraging participants who were less forthcoming
13 in expressing their views to contribute, but without pressuring them unduly. However, it is
14 acknowledged that a limitation of focus groups is sometimes the dominance of a few
15 participants.

16 The focus-group interviews lasted approximately 60 minutes. According to Millward
17 (2012), most focus group researchers agree that the maximum duration for each session
18 involving children is 1 hour. Prior to commencement of the interviews, participants were
19 reassured that their identities and sensitive information would not be disclosed. Participants
20 were encouraged to share their honest experiences and attitudes following participation in the
21 DC programme. In order to facilitate group interactions and the depth of discussion, the
22 researcher encouraged participants to discuss freely with other interviewees in the focus group
23 and to provide additional comments, elaboration, or clarification of their expressions. Each
24 focus group included athletes from a single sport. The focus group interviews with athletes
25 explored their understanding of the key messages of the programme, and their attitudes and

beliefs about the programme including its value and how it has affected their motivation and behaviour, particularly their attitudes towards sport, their commitment, and their motivation and behaviour outside of sport such as application in school. Each focus group was led by a trained facilitator (the project co-ordinator or others on the project team) with experience with focus groups and interviewing skills. Participants were given a brief introduction to the focus group and its purpose, and that their involvement in the discussions was entirely voluntary. Permission was sought to audio-record the focus group discussion. After a brief 'ice-breaker' exercise to build rapport, the facilitator used the previously-developed focus-group schedule to generate discussion and interaction between the group members and politely encourage all members of the group to contribute. Example questions included the following: "Can you tell me a bit about your experiences with the DC programme?"; "What has stuck in your mind?"; "What did you learn?"; "Did you find there's anything that you were taught during the course of the programme that you took to your training?"; "How did you get on with the athlete workbooks that you were given?"; "Did you fill them out?"; and "If you could make one recommendation for improving the DC programme, what would that be?" Each focus group recording was transcribed verbatim.

Semi-Structured Interviews

Semi-structured one-on-one interviews (Sparkes & Smith, 2014) were conducted with the lead-facilitators of the DC programme and external stakeholders (coaches and representatives from SSA's) to elicit their attitudes and beliefs toward the DC programme and to explore their perceptions on the effectiveness of the programme on athlete attitudes, motivation, and behaviours. Some of the example questions put to the facilitators, coaches and SSA's included the following: "What is your understanding of the DC programme?"; "What do you see as the key messages of the programme?"; "What do you think your athletes have taken away or done differently (if anything) since their participation in the

programme?”. These interviews were audiotaped with the consent of the participant and transcribed verbatim. In total (including both focus group and one-to-one interviews), there were 285 pages of transcribed data.

Analysis

Data were analysed using inductive thematic analysis (Braun & Clarke, 2006). Several steps were involved in the process of analysis. The first step involved *immersion*. During the immersion process the transcripts are read carefully several times to identify participants’ meanings and experiences. The second step involved attaching codes to salient text segments. The initial coding was systematically conducted on the entire data set. The third step involved the identification of themes at a broader level and examining whether codes may be combined to form an overarching theme. During these processes, inductive analysis was used to identify themes that emerge directly from the data linked to attitudes toward, and experiences of, the DC programme. This is in contrast to a deductive approach whereby predetermined themes are used to organize quotes. It is recognized, however, that although there is an attempt to be ‘open’ to the data in terms of emerging themes, the subsequent themes developed and interpretations offered will also be influenced by the researchers’ prior knowledge and in relation to previous research and theoretical constructs (Bradley, Curry, & Devers, 2007; Braun & Clarke, 2006). The final step involved reviewing themes, cross-checking for overlap and differences and finally defining and naming themes. The processes involved in undertaking a thematic analysis are explained in further detail by Hall et al. (2012).

Markers of Quality

We have attempted to demonstrate quality in the current analysis and interpretation by meeting the criteria for quality in interpretive research outlined by Tracy (2010). She proposed eight markers of quality in qualitative research: worthy topic, rigour, sincerity, credibility, resonance, contribution, ethical, and meaningful coherence. Given the recent

developments and interest in using sport as a context to promote life-skills and the potential for these programmes to promote youth's academic, personal and social development (e.g., Camire et al., 2012; Gould et al., 2008), we consider the evaluation of such programmes as a worthy topic. We aimed to achieve rigour by a thorough approach to data collection, collecting data from a variety of contexts (different sports), and multiple viewpoints (athletes, parents, coaches, facilitators, sport directors). We have attempted to demonstrate credibility by use of thick description and multivocality to allow reader judgement of interpretations. We aimed to achieve resonance through evocative representation of participant attitudes and perceptions and the potential for transferability of findings. Finally, we attempted to satisfy the criterion of meaningful coherence by achieving its aims and by meaningfully interconnecting literature, research questions and findings and interpretations with each other.

Results

The purpose of this study was to explore attitudes towards, experiences of, and perceived effectiveness of a life-skills programme for high-performance young athletes from multiple perspectives, including the athletes, coaches, parents, programme facilitators, and sport administrators. The thematic content analysis of the data identified seven main themes connected to experiences of, and perceived effectiveness of the programme and these included: *achieving balance and managing stress, time management, goal setting, confidence and control, information overload and repetition, credible role-models, coach reinforcement and follow-up*. The first four themes are related to the central research question of perceived effectiveness and behaviour change (*achieving balance and managing stress, time management, goal setting, confidence, and control*). The following themes of *information overload* and *credible role models* are connected to experiences of, and attitudes towards, the programme. The final theme of *reinforcement and follow up* is related to the effectiveness of the programme and the

likely need for reinforcement and coach involvement. These themes will be discussed in turn.

Achieving Balance and Managing Stress

One of the key themes that emerged in the current research was importance of achieving a 'balance' between academic, social and sporting demands and coping with stress. Athletes identified this as an important aspect of their development and needs: "Time management with like school and stuff, like school a priority, important and you need to like balance out your school work and your homework and stuff with sport" (Female (F), Softball). Another participant referred to the need to be able to "balance your sporting with your social and all the other stuff like work school" (M, Triathlon). When asked what they learnt from the programme, several athletes pointed to the importance of balance: "that you can't invest all your time into one thing, you've got to have balance" (F, Netball) and "how to have like a balance in life" (M, Surfing). The DC programme appeared to help athletes develop a balance across their various commitments by prioritising their time and effective planning:

We had a little square and it had like what are your four main priorities, they were school, sport, social, family and we had to number it in what we thought was most important at the time and the least and from that you could kind of do your planning but if you thought one was more important than the other one then you put more time to that obviously ... it was good like because you never sit down and think what's more important than the other you just like go through your day but having to sit there and be like which ones more important than the other made you think about what you wanted" (F, Netball)

In addition, athletes indicated that the programme had utility in assisting them to cope with stress through the provision of coping strategies for dealing with stress "like how to deal with stress...breathing, just take 10 deep breaths" (F, Surfing). Other stress management techniques learnt on the DC programme and adopted include imagery and positive self-talk "I reckon imagery, I did it today...the confidence and mental part of it

was a big thing for me, I'll stress out and stuff up...so like if I do stuff up I just think oh okay do it again and do it better, I never used to do that and it helped me out" (F, Softball). Mental imagery and self-talk were also adopted by a surfer following participation in the DC programme "It was helpful like after a wave if you stuff up or when you're paddling out, rather than think about everything you did wrong just visualise what you did right and just fix it on the next wave" (M, Surfer). Stress was something that the athletes could relate to, had experience of and as such found that "learning about stress is good...like going to school at the moment and doing training can be a bit stressful and learning to deal with it together is good" (F, Squash). The programme appeared to help equip the athletes with stress management tools.

Time Management

Improved time management was identified as a key outcome of the programme. The focus on time management led some athletes to make behavioural changes:

I adjusted my timetable and made it more realistic so before I would have like 3 hours of study straight after school before I get 15 minutes to go and get to training but now I do give myself like half an hour after school to chill out and then do 2 hours and then give myself half an hour to get to training then that's a lot easier to effectively put in play rather than putting all these you know unrealistic time frames (M, Triathlon).

Some described being more organised since participating in the DC programme "Its got me into being more organised with like my training and out of training like school, social all that stuff" (M, Triathlon) and "it helped us out with our time management" (F, Softball). Another hinted that time management skills developed through the DC had been transferred to her academic studies "I did make a table over exams like time management and like I did study blocks and training blocks and then all the other like in between stuff because otherwise things wouldn't have worked" (F, Netball).

Another athlete alluded to improvement in time management following participation in DC "I would just leave my homework until like after softball like the very last minute

1 when it was due but now I kinda try to do it early and get it done then do sport. Even
2 though I still go to sport I just kinda do my homework before” (F, Softball). Another
3 athlete’s parent also referred to the success of the DC programme in helping her child to
4 use the tools they were introduced to on the programme “There was something sent
5 through that Jon [fictitious name] took away and used some of it, it was online a timetable
6 or something that he’s adapted” (Parent, Swimming).

7 **Goal Setting**

8 Many athletes referred to goal-setting as a key tool they learnt from the programme.
9 However, although most agreed that goal-setting was important and useful, there were
10 mixed behavioural responses. Some athletes reported they went on to use goal-setting
11 while others reported that they did not. The main message that athletes assimilated in
12 relation to goal setting concerned the importance of setting realistic goals “to keep them
13 realistic because there’s no point having a goal that’s unrealistic because you’re just
14 gonna set yourself up for failure” (F, Surfing) and process goals: “it kinda made you
15 aware of all the little steps in between that you had to achieve first” (F, Surfing).

16 Some athletes could not remember their goals “I forgot all the goals I wrote down”
17 (M3, Squash) or had goals that were not necessarily attainable “I’m pretty sure I wrote
18 down that I wanna be number 1...she told me that was unrealistic...I thought she was
19 joking but there was actually a reason, I think it was because that goal was affected by
20 others” (M3, Squash).

21 It would appear that writing itself was ineffective for most in terms of making
22 behavioural changes and sticking to them. Although goal-setting was adopted by some
23 athletes, change was perceived to be rather short-lived by some of the parents and coaches
24 “I think the goal setting was really good and I know my son did put a few things on his
25 wall to remind him and I think the planning and all that...but they do it at the course and
26 then walk away and that’s it...I think he learnt a lot but I don’t see any major changes in
27 him” (Parent). Another parent indicated the short-lived nature of lifestyle changes “While
28 it was fresh they’re running really well with that then it did taper off you know the food,

1 the anti-foods started to creep back in, comfort, you know, the reward food rather
2 than...but yeah I definitely saw it while it was fresh in his mind, he really applied it”
3 (Parent, Surfing). Another questioned the effectiveness of goal-setting when it’s done
4 solely by the athlete and not in conjunction with the coach “I’ve got the feeling though
5 most of them write it down, they don’t discuss it with anyone...is it realistic, they don’t
6 discuss a time frame that I can get there...at the course they are told to write it down but
7 us coaches never see it” (Coach). The coach also alluded to ineffective planning on how to
8 achieve goals and perhaps the importance of setting process goals “We had a session in
9 January and a lot of them put to get fitter and we went away and two of them didn’t...so
10 the goals they made yes they were realistic they just didn’t do them” (Coach).

11 The DC programme material was delivered mainly through seminars using
12 workbooks. However, such pen and paper techniques may not be the most effective way
13 of facilitating behavioural changes. Several athletes started using apps on their computers
14 and this appeared to be something taken on board from the WAIS athletes on the DC
15 programme acting as role models). One athlete referred to an application on her laptop
16 that helps her to focus on all tasks and acts as a self-monitoring tool:

17 I’ve got a really good app on my lap top and its always there so like if I’ve got it
18 always there like rather than on a piece of paper, it’s called ‘I procrastinate’ and
19 rather than having a set thing you actually like add a task to the subjects, like if its
20 English I can add it to English, or if it’s something to do with netball or tutoring or
21 whatever I can add it to that so all of today’s comes up today and you can see
22 tomorrow and all of the tasks...on a piece of paper it just gets lost cause I never
23 check it, I never look at it (F, Netball).

24 Another player reported using her phone as a planner and self-monitoring tool. She
25 found the prompts as a reminder particularly useful “ I used to do it on my phone last
26 year, I had all the training sessions and then it gives you little reminders and then I’d add
27 stuff and I found that really easy because you’re on the phone all the time” (F2, Netball).

1 A triathlete also referred to using an app, having been recommended to him by an elite
2 athlete in the DC programme:

3 I think Jessi [one of the elite athletes] was going through some of the apps that he
4 used to write down what he would do in training and he sort of suggested that and I
5 took to the idea and started doing it...it's good to look at your training diary and see
6 what you were doing during training and then replicating that to get the best
7 performance because obviously that style or whatever you're doing works the best
8 (M, Triathlon).

9 The triathlete above and others also demonstrated self-awareness and the capacity for
10 self-evaluation and reflection that may also emanate from participation in the DC
11 programme. Indeed, one of the topics within the core module is self-awareness. Another
12 triathlete also started to use such self-monitoring techniques. When asked if she got the
13 idea from DC, she replied "Yeah I'd also been told before to do it but I just couldn't be
14 bothered but now I've realised I need to do it" (F, Triathlon). The manner in which
15 information and strategies are delivered would appear to be important. The previous quote
16 indicates that being 'told' to do something isn't very effective for eliciting change. These
17 athletes only digested the information when they were able to see it as personally relevant
18 for them and/or had the added support of the WAIS elite athlete. Findings point to the
19 importance attached to the delivery 'style' in which material was delivered in addition to
20 the provider (credibility) of information. For these athletes, credibility in the form of
21 experience was important in the acceptance of information and proposed strategies. This
22 point related to credibility of role-models will be discussed further in a later section.

23 **Confidence and Control**

24 A key message that athletes appeared to take away from the DC programme was the
25 importance of having confidence in sport "We learnt that you have to be confident in
26 yourself to be good at what you're doing out there like if you're not confident in yourself
27 then you're nothing" (F, Softball). She goes on to say "that helped me out like if I do stuff
28 up just think okay do it again and do it better, I never used to do that and it helped me

1 out". Another said "We learnt a lot about confidence...that you can be successful if you're
2 confident in yourself" (M, Baseball). The baseball player referred to playing with a
3 different approach since participation in the DC programme "well you come to play with a
4 different approach...like self-talking up more, feeling more confident in yourself like yeah
5 I can hit xxx even though my throw is a mid-80".

6 One of the coaches suggested that the DC programme had enhanced athlete self-
7 control whereby athletes were taking more initiative in their training "I think they're
8 taking more ownership, and that's from the programme that they know the ownership is
9 theirs...it's not up to the coaches to do their training for them, they've now come back
10 and are initiating stuff so they are realising if I want to do it it's up to me" (Coach).

11 However, not all coaches felt that the strong focus on confidence to be so essential for
12 many of the athletes involved "The athletes were already showing quite a high level of
13 confidence so I felt there wasn't much change because obviously they were already rating
14 quite highly on that".

15 **Information Overload and Repetition**

16 Several athletes expressed that the amount of information provided in the course of
17 the DC programme was excessive and, at times, overwhelming:

18 I think we just get told a lot of information kind of I think that's the thing, there's a
19 lot of things that are like do this do this do this and you'll be a better player and after
20 a while there's just so many things that you should be doing on goals setting and all
21 that and just like how much can you do (F, Netball)

22 Information overload was also associated with the duration of workshops, which
23 were often regarded as too long and not sufficiently engaging "they were pretty brutal
24 mornings...a long lecture is very tedious" (M, Squash).

25 The theme of repetition was related to overlap of some of the material covered in the
26 DC programme with material covered at school and/or within the club setting. It has been
27 linked to information overload in that such overload might be avoided if the intervention
28 material was mapped against what athletes already cover (at school, within the sports club

environment), so that repetition could be avoided and hence volume of material could be subsequently reduced. The problem of repetition highlighted by athletes was also picked up by some coaches “A lot of those girls do a lot of this in school so maybe that’s something that they might be repeating so it would be worth asking the sorts of things they do at school” (Coach). Overlap of material was also highlighted by a parent “Our club provides a lot of information sessions and nutrition sessions, psychological sessions so they get a lot of that within the club environment anyway” (Parent, Swimming). The issue of repetition was also raised by the athletes where the mental skills component of the DC programme was better received compared to the physical health components “the health we do at school...like what to do with your injuries and that stuff I knew what to do...the mental part was better” (F, Softball). One specific finding was the overlap between content of the DC programme and material covered at school “I found it very similar to school...the school classes I have...like year 12 sports science literally covered every aspect they covered” (M1, Squash).

The volume of content to be covered was referred to by a SSA representative and she indicated that perhaps workshops should be shorter in duration and with less material covered “I certainly think trying to do it shorter, whether or not you don’t cover as much but what you do cover is you know they enjoy and they take it in and they take it away and use it” (SSA representative). A coach suggested a blended learning approach to the DC programme involving both e-learning and workshops “Perhaps the athletes would do a two hour on line workshop and a two hour face to face workshop...and they can work through the e-learning stuff at their own pace” (Coach). Another s coach also highlighted the efficacy of the internet, and in particular, Facebook as a way to involve athletes and promote discussion:

A Facebook DC, I mean I hate it but it’s obvious ...they would look at it and then discuss with each other on Facebook. Did you do xxx [the tasks set in the workbook, for example], did you look at [the worksheets on effective goal setting, for example]

xxx and then they're talking about it because they do discuss a lot of things don't they (Coach).

In relation to methods of teaching and learning, the coach suggested that the best reaction he got from the girls was when he "did interactive stuff, scenarios...got into little groups and got stuck into it...but there were other occasions where it was just like blank canvass there with some of the girls and you knew that they didn't have any idea what they were talking about" (Coach).

Credible Role-Models

In terms of the perceived credibility of the information delivered through the DC programme, it was the elite athletes that were asked to act as occasional programme facilitators that were held in the most high positive regard by the athletes, not only because of their knowledge but their previous sport and competitive experience "He's [referring to the elite athlete] just really relatable cause like he's done what we've done so we just like we'll listen to you more cause you know what you are talking about" (F, Netball). Another said "It was good how there was people who could speak from experience...because they had their own experiences that they could share...what they found helpful and things like that (F, Surfing). One athlete makes a clear distinction between knowledge and experience "It's good they have athletes not just random people, someone who sits behind a desk all day...someone who's actually been through what you are going through or going to go through" (M, Baseball).

The credibility of the elite WAIS athletes was also noted by the coach "As soon as the Hockey lady came bang the kids sat up again because I think in the back of their minds, (often the facilitators) have never been there...never done it, never experienced it whereas these athletes have" (Coach). A similar belief was echoed by one of the workshop facilitators "I think really believing what you're saying and not just giving a generic example...so you've got to know what you're talking about...if you've been through the experiences it helps" (Facilitator 2)

1 The approval and testimonies of the elite athletes that served as occasional
2 facilitators of the DC programme was also noted by a parent and coach “We say it’s really
3 good but if a WAIS athlete said well that actually, it works, it means something yeah, I
4 think that’s the main thing having a WAIS athlete there...this is a real person” (Parent &
5 Coach).

6 **Coach Reinforcement and Follow-up**

7 All interviewees (athletes, coaches and SSA’s) referred to the importance of
8 reinforcement and follow-up sessions following participation in the DC workshops. From
9 a mechanisms of change perspective, this is important as coach involvement with the
10 programme and the suggested activities and changes that the programme is aimed at, will
11 likely satisfy athletes psychological need for relatedness, and, through that, autonomous
12 motivation to maintain the change. One athlete indicated the lack of accountability in the
13 follow-up of tasks “they asked us to do as homework and bring it in next time...but we
14 didn’t go over it...like we didn’t have to show them” (M, Baseball). Several athletes also
15 pointed to the volume of information they received and the lengthy time gap between the
16 DC sessions:

17 It needs more follow up, if there was more follow up you might actually start using
18 it more, like if you’re having it more regularly then you could actually assess
19 yourself...6 months ago is a long time to remember a 4 hour class...you’re not going
20 to retain that (M, Squash).

21 Some athletes desired further guidance on the practical implementation of strategies. For
22 example “how to plan out nutrition and like availability of stuff on like a low budget...we
23 are all students and everything and like after school once we are independent how to do
24 certain things” (M, Triathlon).

25 From the interviews, it was apparent that some coaches were very involved in the DC
26 programme and kept athletes accountable for the follow-up of tasks whilst others appeared
27 to know very little about the content of the programme and therefore did not integrate
28 with their own training regimes

(that's) what I did with the workshop I've just run...you have to do this activity, this activity and this activity and we're going to discuss them on Wednesday so I said you have to print them out and bring them with you...not that all of them did but a lot of them did so that kind of thing definitely works (Coach).

Another proactive coach also referred to the importance of constant reinforcement and reminders:

I was able to keep drip feeding it constantly...I think the DC sets up the base and then so long as you've got a coach that knows how to run with it they can keep doing it like I ways this year...drip feeding it through...so I think that's important that the coach be there because I think sometimes the coaches haven't always attended (Coach)

From the interviews, it appeared that levels of engagement of coaches at workshops varied considerably and that participation and involvement of the coach within the DC programme was seen as an important factor in its perceived effectiveness:

Some coaches will sit in on it and they engage and they come up with scenarios and problems...and then there's others that will make sure the kids are there and then skip off which makes it really hard because they are the ones who are going to be there coaching seeing if these kids are applying what we are trying to help them with...so I think it's really important for the coach to know what we are saying so that they can hold these kids accountable at training and monitor if it's really working or not (Facilitator 2)

Clearly, follow-up of DC material and sessions was not adopted by some coaches "To be honest I did not follow up what they wrote down with the DC's, that was a slip for me to do that" (Coach).

And another coach indicates success of the programme in helping athletes to set goals but that he hasn't been involved in the process "I have never seen any of their goals so I don't know if they've followed their goals...I would say that before the programme 95% of them didn't set goals" (Head Coach).

Others emphasised the importance of reinforcement, particularly in this adolescent age group “It’s an area we need to develop more I think because we’ve only just touched the tip of the iceberg...I think that constantly needs to be reinforced particularly with sort of athletes of their age” (SSA representative). The importance of reminders and prompts was also reinforced by a parent and coach “I think just reminding the kids...hey look at your goals do you need to change them...do you need to change your work plan...they do walk away thinking it’s great and then typical kids in a couple of weeks it’s gone out of their heads” (Parent & Coach).

Discussion

The present investigation aimed to identify the attitudes towards, experiences of and perceived effectiveness of a life-skills programme for high-performance young athletes from multiple perspectives including the athletes, coaches, parents, programme facilitators and sport administrators. There were seven main themes identified as part of the analysis: *achieving balance and managing stress, time management, goal setting, confidence and control, information overload and repetition, credible role-models, and, coach reinforcement and follow-up.*

The DC programme appeared to be successful in helping these athletes to achieve a balance between their academic, social and sporting demands and activities. Several athletes reported improved time management and planning skills following participation in the programme. Improved time management was also noted by some of the parents. The finding that time management skills were seen as essential self-organization skills has been reported elsewhere (e.g., Jones & Lavalley, 2009; Jones et al., 2011). The present study provides direct evidence of time-management skills learned on the programme being transferred to the context of academic studies; a finding that other studies on life-skills programs in athletes have been unable to demonstrate (e.g., Goudas & Giannoudis, 2008 & Jones et al., 2011). However, this finding is entirely consistent with recent research that has demonstrated transfer of motivation for adaptive skills and behaviours across contexts (Fleig et al., 2014; Hagger & Chatzisarantis, 2012, 2014). This is important because it illustrates that the current

1 programme may be effective in fostering coping skills across multiple domains relevant to
2 optimal functioning for athletes (e.g., training, school, social).

3 The DC programme was also successful at increasing knowledge of the principles of
4 effective goal setting, particularly the importance of setting SMART (i.e., specific,
5 measurable, attainable, realistic, timely) goals. Previous life skills programmes have also
6 demonstrated success in knowledge and confidence to set goals (Goudas & Giannoudis, 2008;
7 O’Hearn & Gatz, 1999; 2002; Papacharisis et al., 2005) and in one case goal attainment
8 (O’Hearn & Gatz, 1999). The present study builds on findings from previous work
9 demonstrating that some athletes implemented goal setting and made some behavioural
10 changes (as opposed to simply increasing knowledge and confidence for goal setting).
11 However, such changes were perceived to be rather short-lived by some of the parents and
12 coaches. At other times, goals were written on paper but not acted upon. It would appear that
13 the DC programme was effective in heightening awareness of key adaptive self-regulation
14 skills but was insufficient in helping athletes to consistently implement such strategies. It may
15 be that there were insufficient components within the program to develop more autonomous,
16 self-determined motives to engage in self-regulation skills like goals setting. Research has
17 demonstrated that self-determined, autonomous goal setting is more effective in
18 demonstrating persistence with, and adherence to, behavioural change (Fenner, Straker,
19 Davis, & Hagger, 2014; Vansteenkiste, Simons, Soenens, & Lens, 2004). One means to do
20 this is through autonomy support, and the testimonies from the facilitators indicate that the
21 presentation of the programme did not take into account the presentational style which may
22 have fostered autonomy in the athletes toward the program content (Cheon & Reeve, 2013;
23 Hagger & Hardcastle, 2014). Furthermore, a lack of continued support and follow-up of the
24 themes and content using autonomy-supportive approaches may have been necessary to
25 engender the kinds of self-determined motives in athletes to engage in goal setting and other-
26 self-regulatory behaviours relating to sport performance on a regular basis (Hardcastle &
27 Hagger, 2011).

The athletes felt that they had learned a lot about the importance of confidence in sport and the teaching of techniques to enhance confidence such as positive self-talk. This is consistent with Hodge et al.'s (2013) purported mechanisms for behaviour change and those we have suggested based on self-determination theory. Providing athletes with personal control and confidence is likely to satisfy their basic psychological needs for competence and autonomy, and is, therefore, likely to lead to greater autonomous motivation toward the given behaviour change. Current data also suggest that coaches, as key support personnel, were not involved in the goal setting process or were unaware of the content covered in the DC workshops. Gould and Carson (2008) suggest that if life skills programmes are to be effective, they must teach life skills and values in a purposeful and systematic manner. It would appear that in the present study, athletes were exposed to a variety of life skills but that individual skills were not systematically taught, practiced and reflected upon. Furthermore, there was a lack of formal follow-up of the programme outcomes and no designated responsibility for the athlete to continue with the content and skills they had been provided in the programme. For example, if goal setting is to be effectively implemented, the athletes, coaches and programme facilitators should be involved in the activities planning and evaluating goal setting. In the present study, the coaches could choose whether or not to participate in the workshops, and evidence suggests that most chose not to participate. Furthermore, they were not actively involved in the DC programme delivery or any follow-up activities and therefore were not party to the athletes' instruction on goal setting and its principles ("they are told to write it down but us coaches never see it", Coach). There was considerable variation in levels of engagement of coaches at workshops. Some attended while others did not and some actively attempted to reinforce messages from the DC programme whilst others did not. The findings reveal that further reinforcement is necessary and coaches and parents should be integrated into the programme in order to maximise the effectiveness of messages and adoption of strategies taught as part of the DC programme. Recent work has demonstrated that youth coaches see themselves as responsible for the development of many positive outcomes through sport including that of life skills (Trottier & Robitaille, 2014; Vella

et al., 2011). Furthermore, involvement of coaches and other social agents such as parents may assist in engendering more self-determined or autonomous motives toward the program content. Autonomous motives will likely lead to more persistence with the content and skills taught during the course of the program. Given the importance of follow up and the responsibility that coaches have toward their athletes, they are likely to be open to ways of building life skills in athletes they work with. Integrating their role within life-skills programmes like the DC should be considered a priority when developing athlete life-skills programmes in future.

However, our findings also highlighted barriers to further coach involvement. The coaches had limited contact with athletes other than during practice and game activities. In addition, most coaches have not received formal training in psychology or sport psychology and so may lack the training or time to develop life skills (Goldberg & Chandler, 1995). However, recent research indicates that little formal training may be necessary to achieve significant improvements in life skills. O'Hearn & Gatz (2002) found that a 10 week GOAL intervention increased knowledge of life skills and improvements in problem solving skills in middle-school students that were maintained at further 10 week follow-up. These findings are promising since the intervention was delivered by high school students that were trained by graduates and university teachers in a two day retreat (O'Hearn & Gatz, 1999). In the current study, athletes were given homework and tasks to complete, but the lack of follow-up or coach and parental involvement appeared to interfere with the implementation and thus perceived effectiveness of the skills learned during the workshops.

Much can be learned on the importance of the coach in teaching key life skills to young athletes from Camire et al.'s (2013) unique study of a life skills programme for athletes. The case study examined the strengths and limitations of a high school programme to teach ice hockey players life skills and values from multiple perspectives, similar to the aims of the present study. However, the programme-study format adopted in their research allowed coaches to work with the players seven days-per-week during the season on the development of life skills, values and sport specific skills (through three on-ice training sessions, two off-

ice conditioning sessions and two developmental classes per week), which is very unusual but provides rich data on their experiences of developing life skills in young athletes and the specific strategies they use. In the study, coaches used a number of strategies to develop life skills and nurture positive relationships with their players. Firstly, players were asked to keep a journal detailing personal events that related to sport or life. Coaches read the journals on a weekly basis to analyse content and check in with players about their perceptions and feelings. Second, coach-parent-player meetings were held in order to share the programme's approach and to provide players and parents with feedback on players' academic, personal and sport specific development.

A key finding of the present study was the significance attached to using elite athletes in the delivery of the programme, where the elite athletes were seen as effective and credible role models for the young athletes. The participant athletes appeared to be more attentive of the WAIS athletes who served as occasional facilitators compared to the regular facilitators of the programme and the emphasis placed on experience rather than knowledge was evident. The themes of credible role models and confidence and control lend support for the conceptual model provided by Hodge et al. (2013) to explain how life skills programmes may affect behaviour change among athletes. These themes of credible role models, and, confidence and control reflect features of the programme likely to satisfy the psychological needs of relatedness, competence and autonomy respectively from Deci and Ryan's (2000) self-determination theory. The need for relatedness in particular was satisfied by the WAIS athletes. The advice and testimonies of the elite athletes were deemed important by the athletes. It seems that more frequent use of elite athletes would be an effective means to foster engagement in the program material as opposed to a programme that is majority led by facilitators with expertise in knowledge and theory but a limited experience within sport.

Finally, given the culture of immediate internet access via smart phones and tablets and, in particular, use of Facebook, future interventions should explore the effectiveness of a blended learning approach to programme delivery comprising on-line learning to support and

consolidate learning alongside the modules. Furthermore, discussions and blogs could be used to better engage these athletes and act as a reminder and reinforcement of applied strategies.

Limitations

Limitations of the current research should be acknowledged. Although we invested considerable effort to canvass opinion across a variety of different sports, our approach aimed to derive in-depth, rich data that explored the key attitudes towards, experiences of, and perceived effectiveness of a life-skills programme for high-performance young athletes from multiple perspectives rather than make global generalizations regarding attitudes and experiences common to all athletes that engaged in the life skills programme.

Conclusion

The present study adopted a qualitative approach to study the attitudes towards, experience of and perceived effectiveness of a life skills programme for high-performance young athletes from multiple perspectives. The testimonies of participants involved in the DC programme and associated facilitators, coaches, and parents indicated that the programme was perceived to be moderately successful in developing better engagement in training and in adopting time management and planning skills in contexts outside of sport such as homework and academic study. The programme also fostered the development of important skills and attitudes important for sport success such as goal setting, motivation, and having confidence and the mind set to succeed. However, the delivery of the programme could be improved such that firstly, participants remain engaged and secondly, that they gain practice in using the applied strategies that are taught in the workshops. To minimise overload, there needs to be less on information giving and theory and more on the implementation of applied techniques and strategies. Such programs could also make more use of elite WAIS athletes as facilitators as they seem to be very good at maintaining attention and are viewed as credible role-models. Such programmes also need to build follow-up support structures to ensure that the key skills delivered in the programme and concomitant behaviour changes are revisited by participants and put into long-term continuous practice. There also appears to be a need for additional practice and implementation sessions to maximise reinforcement of skills alongside the

1 workshops. One way to achieve continuity and reinforcement of material is to actively
2 involve parents and coaches in the programme and foster a collective sense of purpose and
3 accountability for making behavioural changes. Another strategy could be to use the internet
4 and social media (e.g., Facebook) to promote key self-regulation skills such as self-
5 monitoring and goal setting or to prompt discussion and experiences of dealing with stress or
6 anxiety for example.

7

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