

**THE RELATIONSHIP BETWEEN COACH GUIDANCE, FEEDBACK, GOAL SETTING, SUPPORT AND A LONG-TERM DEVELOPMENT FOCUS OF UNIVERSITY ATHLETES**

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**–Abstract–**

Given that the sport industry has been recognised by student athletes as a potential career path, students consider the type of environment that a university offers to help with their long-term athletic development when choosing to register at a university. Among the individuals who play a pivotal role in the long-term development of athletes is the professional coach. As such, this study explores the talent development environment of university athletes by examining the relationship between coach guidance, feedback, goal setting, support and a long-term talent development focus. Following a descriptive research design, self-administered questionnaires were completed by a purposive sample of 289 students registered at the campuses of two public higher education institutions (HEIs) in Gauteng, South Africa. The captured data was analysed using descriptive statistics, internal-consistency reliability and correlation analysis. The findings indicate a significant positive relationship between coach guidance, feedback, goal setting and long-term focus. Coach guidance, feedback and goal setting relate statistically significantly to the long-term development focus of university athletes. A significant negative and weak relationship between support and coach guidance, feedback, goal setting and long-term focus indicates a gap in the current talent environment of athletes, influencing their long-term development focus negatively. Coaches' current lack of a supportive role may discourage certain athlete achievement motivations and it is evident that coaches

need to undergo training and development on how to provide appropriate support to enhance the talent development environment of university athletes. The empirical findings could be used to inform the universities' sport managers to address role-specific functions of coaches with the aim to enhance the current talent development environment.

**Key Words:** Talent development environment, coach, university, student athletes, long-term focus, support

**JEL Classification:** Z29

## 1. INTRODUCTION

The South African sport industry, which was previously isolated from international competition, has experienced a phenomenal growth in sport participation and spectatorship since the country's reintroduction into the international sporting arena in the early 1990s. In response to the increased interest in sport and the potential sport has to improve their image and profile, universities in South Africa used a range of marketing strategies to attract excellent student athletes (Serra, Surujlal & Redda, 2016). Given that the sport industry has been recognised by student athletes as a potential career path, students consider not only the academic gains they may achieve, but also the type of environment that a university offers to help them achieve their sport career aspirations. Sport at most universities has become commercialised and attracts huge sponsorships, which attract high calibre student athletes. One example of the commercialisation of university sport in South Africa is Varsity sports (Hodges, Keyter, Tarr, Serra & Surujlal, 2014). The International University Sports Federation (FISU) (2018) opines that sport at universities in South Africa is flourishing. University Sports South Africa (USSA) president Ilhaam Groenewald expressed her excitement regarding the state of university sport in South Africa, commenting that USSA provides an ideal springboard for many of South Africa's future global stars who may represent the country's senior national teams in the future (FISU, 2018). The prestige and competitiveness of a university and country are reflected in the calibre of athletes that compete nationally or internationally (Saayman & Saayman, 2014).

Bebetsos and Theodorakis (2003) argue that university sport includes the overall experiences of student athletes who are the heart and soul of the institution in relation to the sport department, their personnel, activity programmes and offerings, as well as the sport-related support services. This implies that universities are required to provide an appropriate talent environment in which the

student athlete is able to thrive and develop. The success of such an environment is dependent on how well it shapes, supports and retains talented student athletes (Martindale, Collins & Abraham, 2007). Henriksen, Alfermann, Larsen and Christensen (2013) describe the talent environment as a system consisting of interactions inside and outside the sport at the micro-level, and how these interactions are influenced by constituents at the macro-level. Martindale, Collins and Abraham (2005; 2007) argued that in such a system, long-term planning focusing on mastery and development of young individuals over a long-term is crucial for the successful development of the environment.

There are numerous variable factors among which the provision of infrastructure, professional coaching, provision of knowledge of the sport and the involvement of key individuals such as parents, peers and role models are considered by athletes as important in their lives (van Den Berg & Surujlal, 2013), and are some of the contributing elements to the talent development environment. Erickson and Gilbert (2013) warn that if coaches are not aware of the environment needed for athletes to achieve their potential, the progress and development of athletes may be hindered. Long-term athletic development is described as the “habitual development of ‘athleticism’ over time to improve health and fitness, enhance physical performance, reduce the relative risk of injury, and develop the confidence and competence of all youth” (Lloyd, Cronin, Faigenbaum et al., 2016:1492). Among the individuals who play a pivotal role in the long-term development of athletes is the professional coach. Generally, coaching plays an important role in providing continuous, sport-focused and individualised professional development to athletes (Denton & Hasbrouck, 2009). Within a sporting context, coaching is used to improve the performance of athletes so that they can compete at higher levels and improve the image of their organisations through their success. The manner in which the coach develops the talent of the athletes will ultimately determine the level at which the athlete will be able to compete. Among the factors that contribute to the development of a talent environment for athletes are *coach guidance*, *feedback*, *goal setting*, *support* and *long-term focus* (van Den Berg & Surujlal, 2013). This paper examines the relationship between these factors.

## **2. LITERATURE REVIEW**

### **2.1. Coach guidance**

Sport coaching has been recognised as a general practice to assist student athletes to improve their performance and achieve their potential (Segers, Vloeberghs, Hendrickx & Inceoglu, 2011). In this regard, the coach is responsible for

providing an intensive and systematic environment, facilitating individuals and a team through a variety of techniques and methods to help them attain self-congruent goals and development to improve their sport performance (Segers et al., 2011). While strong coach guidance is positively linked to performance, a lack of perceived guidance and support by coaches can lead to poor coping mechanisms and stress, influencing performance negatively (Mills, Butt, Maynard & Harwood, 2014b). To avoid low levels of coach guidance, it is important for coaches to possess and deploy a variety of organisational, management and personal communication skills to, *inter alia*, guide athletes and provide effective and directive feedback (Mills et al., 2014b).

## **2.2. Feedback**

Research has shown that coherence in coach guidance, support and feedback is important (Martindale et al., 2005; Martindale et al., 2007; Stambulova & Alfermann, 2009). Coaches are required to communicate clear and actionable messages of progression, expectations and goals to athletes in order to provide timely and regular feedback (Mills et al., 2014b). Long-term aims have to be regularly communicated, which, in turn, emphasise individual and continuous development (Martindale, Collins, Wang, McNeil, Lee, Sproule & Westbury, 2010). Feedback that accentuates the athletes' long-term goals is foundational to athletes sustaining their training and competition load, together with their academic work (Brown et al., 2015; Martindale et al., 2010). Feedback from coaches who mainly focus on extrinsic goal achievement affects performance negatively since athletes are constantly scrutinised and pressurised to produce results (Mills et al., 2014b). Feedback from the coach should therefore focus on long-term development and goal setting.

## **2.3. Goal setting**

Goal setting is a frequently embraced technique in sport to enhance performance among athletes (Weinberg & Butt, 2011). Goals should be specific, measurable, realistic, but also challenging (Healy, Tincknell-Smith & Ntoumanis, 2018). Locke and Latham (2002) suggest that goal setting can enhance performance in the following ways: 1) it allows one to focus effort and attention to the set goals; 2) it energises an individual within a task so that increased effort and energy are expended on more challenging tasks; 3) strategies and knowledge relevant to the set goals are adopted; and 4) persistence in tasks relevant to the set goals is increased. In order to set realistic goals, Weinberg (2010) suggested that coaches should take into account the situational constraints, individual focus and team

dynamics. If these are overlooked, the effectiveness of goal setting may be compromised (Healy et al., 2018), since the coach needs to support athletes in setting and attaining goals where possible.

## **2.5. Support**

Aalberg and Sæther (2016) argue that if the environment is considered supportive, it is likely that continuous and consistent interaction with such an environment will ultimately have a positive influence on an athlete's development and potential. In a university setting, student athletes often experience conflicting demands associated with their academic and sporting commitments. It is therefore more important that a supportive environment is developed and maintained for student athletes so that they are able to fulfil both commitments. If student athletes are unable to strike a balance between their sports and academic work, there is a strong chance that they will drop out of sports (Enoksen, 2002). It is therefore reasonable to believe that the quality of support athletes receive will directly influence their future careers. Van Puyenbroeck, Stouten and Vande Broek (2018) argued that when coaches display need-supportive behaviour, i.e. attending to the individual needs of athletes, they are able to address factors such as autonomy, competence and relatedness associated with the athlete. The authors argued that the display of such behaviour is motivational to the athlete. Gilbert and Rangeon (2011:232) suggested that "stable settings dedicated to improving instruction and learning" has the potential to support the long-term professional development of athletes.

## **2.6. Long-term focus**

A vision of long-term athlete development should be systematically implemented (Chunxiao Li, Wang & Pyun, 2014). Not only should the coach and athlete understand the requirements for long-term sporting progression, but through goal setting, systematic feedback, support and coach guidance also achieve the necessary changes over a prolonged period of time (Martindale et al., 2010). Poole (2016) argues that a long-term focus is a prerequisite for success as it allows one to channel small milestones to long-term objectives. Within a sporting context, this implies athletes working towards performing at the highest level in sport.

## **3. PROBLEM STATEMENT**

The development of a talent environment is not a simple short-term process (Aalberg & Sæther, 2016). Although a huge volume of research has been

conducted on the development of a talent environment for athletes, limited studies have been conducted on the role of the sport coach in the development of such an environment from an athlete viewpoint, particularly with reference to factors such as *coach guidance, feedback, goal setting, support* and *long-term focus*. Previous research (e.g. Stambulova & Alfermann, 2009; Stambulova, Alfermann, Statler & Cote, 2009) examined the external factors that contributed to athlete performance, while some studies (Alfermann, Stambulova & Zemaityte, 2004) investigated the role of the environment in the development of a talent environment. This study builds on previous research by looking at the development of a talent environment by coaches through the lenses of student athletes.

### **3.1. Purpose of the study**

The purpose of the study was to explore the relationship between *coach guidance, feedback, goal setting, support* and a *long-term focus* of student athletes within Gauteng-based universities.

## **4. METHODOLOGY**

### **4.1. Research design**

A descriptive research design following a single cross-sectional approach was used in this study.

### **4.2. Sampling method**

Three hundred and twenty student-athletes (N=320) from two universities within the Gauteng Province, South Africa, comprised the sample from which data was collected. Student athletes participating under the auspices of University Sport South Africa (USSA) were recruited to voluntarily and anonymously complete the questionnaire. Purposive sampling was deemed to be appropriate to gain insight into the experiences of specific university athlete cohort (Merriam, 1988). Data was collected over a three-week period.

### **4.3. Research instrument and data collection**

A two-section questionnaire was used to collect data for the study, where Section A requested demographic information of the participants and Section B comprised 50 items generated from the Talent Development Environment Questionnaire (TEDQ) (Martindale et al., 2010). The TEDQ is a generic tool that evaluates the environmental features that facilitate the development of talent across sports, stage/age, gender and culture (Mills et al., 2014b). Items were scored using a six-point Likert-type scale, anchored at 1 (strongly agree) and 6 (strongly disagree).

The researcher contacted university coaches and requested permission to administer the questionnaire before or after official training sessions at the different universities' sports grounds. The questionnaires were completed in the presence of the researcher, yet in an isolated instance the respective coach assisted in collecting the data. Participants were informed about the purpose of the study and that participation was voluntary and that they would remain anonymous. Participants were advised that they could terminate their participation at any time and were assured of confidentiality. Although permission was granted to conduct the study, the institutions requested to remain anonymous.

#### **4.4. Data analysis**

The captured data was analysed using the IBM Statistical Package for Social Sciences (SPSS), Version 25.0 for Windows. Data analysis was performed by the university statistician and comprised descriptive statistics, factor analysis, internal-consistency reliability and non-parametric correlation analysis. Principal components analysis (PCA) was conducted on the 50 items and Varimax rotation was used to simplify factors by maximising the variance loading across variables, with the spread of factor loadings being maximised (Tabachnick & Fidel, 2001). Five factors, namely *coach guidance*, *feedback*, *goal setting*, *support* and *long-term focus* were identified with the Cronbach alpha for the factors scoring acceptable values of .797, .838, .743, .779 and .600, respectively (Van den Berg & Surujlal, 2013).

### **5. RESULTS AND DISCUSSION**

From the 320 questionnaires that were distributed to student athletes, 289 (response rate 90%) questionnaires were returned. Twenty-two questionnaires were incomplete and excluded from the study. Consequently, analysis was conducted on data obtained from 267 questionnaires. The sample, as described in Table 1, comprised more students from university 2 (63%) compared to university 1 (36%). This is, however, representative considering the number of sporting codes presented at the different universities, yet can be viewed as a limitation to the study. The sample comprised slightly more male (50.5%) than female (49.1%) participants. The majority of participants were grouped in the 18 to 25-year age category (90.4%) with a small number of participants grouped in the 26 to 33-year age category (8.9%). Participants were mainly in their first and second years of study (29.9% and 29.6%, respectively), with only 18.1% in their third year of study and 15.5% representing postgraduate students. The participants participated in the following sports: rugby (19.4%), cricket (2.6%), hockey (15.0%), netball

(11.2%), athletics (1.9%), body building (2.2%), basketball (16.5%), dance (5.2%), volleyball (6.8%), soccer (16.6%) and 'other' (2.6%).

**Table 1: Sample description**

Variable	Categories	%
University 1	97 students	36%
University 2	170 students	63%
Gender	Male	50.5
	Female	49.1
Age group	18 to 25 years	90.4
	26 to 33 years	8.9
Year of study	1 <sup>st</sup> year	29.9
	2 <sup>nd</sup> year	29.6
	3 <sup>rd</sup> year	18.1
	Postgraduate	15.5
	Other	6.3
Sport participation	Rugby	19.4
	Cricket	2.6
	Hockey	15
	Netball	11.2
	Athletics	1.9
	Body building	2.2
	Basketball	16.5
	Volleyball	6.8
	Soccer	16.6
	Other	2.6

**Table 2: Descriptive statistics**

<b>Constructs</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Standard deviation</b>
Coach guidance	1.00	6.00	2.22	0.89
Feedback	1.00	6.00	2.31	0.92
Goal setting	1.00	6.00	3.11	1.14
Support	1.00	6.00	3.53	1.18
Long-term focus	1.00	6.00	2.38	1.01

Given the six-point Likert-type scale used to record responses (1 = strongly agree), it is evident from Table 2 that the student athletes have a positive perception regarding their coach providing guidance to them (mean = 2.22), that they receive ample feedback from their coach (mean = 2.31), and that a long-term focus (mean = 2.38) is evident. The student athletes indicated a somewhat undecided view on the goal setting that was performed with their coach (mean = 3.11), which could be linked to a perceived lack in support that they experienced (mean = 3.35).

**Table 3: Correlation matrix**

<b>Constructs</b>	<b>Coach guidance</b>	<b>Feedback</b>	<b>Goal setting</b>	<b>Support</b>	<b>Long-term focus</b>
Coach guidance	1	.563**	.475**	0.114	.442**
Feedback	.563**	1	.467**	0.099	.512**
Goal setting	.475**	.467**	1	-.154*	.323**
Support	0.114	0.099	-.154*	1	0.106
Long-term focus	.442**	.512**	.323**	0.106	1

\*\*Correlation is significant at the 0.01 level (2-tailed)

\*Correlation is significant at the 0.05 level (2-tailed)

The results in Table 3 indicate that there are statistically significant ( $*p \leq 0.01$ ) positive relationships between coach guidance, feedback, goal setting and long-term focus. The correlations between coach guidance and feedback are significantly moderate ( $r = 0.563^*$ ), which is the highest among all considered variables, followed by feedback and long-term focus ( $r = 0.512^*$ ), feedback and goal setting ( $r = 0.467^*$ ) and goal setting and coach guidance ( $r = 0.475^*$ ). The

weakest correlation coefficient was between coach guidance and long-term focus ( $r = 0.442^*$ ). The construct of support indicated only a statistically significant negative and a weak correlation with goal setting ( $r = -0.154^*$ ).

Given the inter-related and inter-dependent roles that the factors play in the talent development environment of university student athletes, the numerous significantly positive correlations between the constructs in this study can be substantiated through previous studies (Brown, Fletcher, Henry, Borrie, Emmet, Buzza & Wombwell, 2015; MacNamara & Collins, 2010). In this regard, the role of the coach in creating a talent development conducive environment is very important (Brown et al., 2015), and coach guidance in this regard relates to the study's constructs of goal setting (Jowett & Clark-Carter, 2006), feedback (Keegan, Spray, Harwood & Lacallee, 2010), support (Aalberg & Sæther, 2016) and a long-term focus (Martindale et al., 2010; Smith, 2003).

Coaches are responsible for successful university programmes, which should foster athletes' individual growth and direct daily operations beyond specific coaching and practice environments to optimise a broader organisational talent development environment (Vallée & Bloom, 2005). Coaches' guidance includes the functions of planning, developing and implementing a coherent and purposeful training and talent development environment where the coaches' feedback provided to athletes plays an integral part (Mills, Butt, Maynard & Harwood, 2014a). The significant positive correlation of coach guidance with feedback is consistent with previous research, which indicates that the coach needs to provide athletes with regular, tangible and actionable feedback regarding their current state and performance progress (Mills et al., 2014a). Student athletes indicated that they perceive coaches' guidance and feedback positively, and it can be deemed that coaches conveyed messages of progression, vision and expectations to student athletes as positive feedback (Mills et al., 2014a).

In addition, coaches' feedback should convey a message of a long-term developmental plan, designed to facilitate athletes' long-term success (Martindale et al., 2010). The significant positive correlation between feedback and long-term focus found within this study is therefore in accordance with previous studies where coaches' long-term vision helps athletes establish long-term ambitions and realistic objectives, which is related to goal setting (Mills et al., 2014a). In this regard, the significant positive correlation between feedback and goal setting is also substantiated, where coaches reinforce athletes' understanding about their long-term development paths (Chunxiao Li et al., 2014).

For athletes to pursue their long-term development and increase their long-term commitment, progress and participation, coaches should encourage athletes to take autonomy and ownership of their training and preparation (Brown et al., 2015; Weissensteiner, Abernethy, Farrow & Gross, 2012). Athletes taking ownership and responsibility for their training and progress usually incorporate some form of goal setting, which is also communicated as an important function facilitated by coaches (Brown et al., 2015; Mills et al., 2014a). Goal setting directs the athletes' attention towards their specific behavioural outcomes and directs motivation and effort (Cox, 2007). The specifically cultivated goal setting practices happen under the guidance of the coach, and will influence the interaction of athletes with their goal setting orientation (Weinberg, 2010). This is reiterated with the significantly positive correlation found in this study between coach guidance and goal setting.

Likewise, coach guidance is also significantly positively correlated with long-term focus, which is in accordance with literature stating that the coach plays an important role in the athletes adopting and striving towards a long-term vision and goal (Brown et al., 2015; Weinberg, 2010). Even though goal setting significantly correlated with coach guidance, feedback and a long-term focus, it is significantly negatively correlated with support within this study. This may be indicative of coaches not employing a structured goal setting approach to foster a supportive structure within the talent development environment. Likewise, the construct of support did not correlate with any of the other constructs, indicating that university coaches address certain aspects of the talent environment, while neglecting the aspect of integrated support that has to be provided to student athletes (Brown et al., 2015; Mills et al., 2014b).

The construct of support needed by student athletes in the talent environment has received much attention in previous studies (Brown et al., 2015; Keegan et al., 2010; MacNamara & Collins, 2010). Athletes need academic, social, psychological, physical and technical support not only from the coach, but also peers, academic staff and support team staff such as physiotherapists or sport scientists (Brown et al., 2015; Keegan et al., 2010). Student athletes in this study therefore indicated a lack of support provided by their coaches referring to a wide spectrum of aspects including their academic and social life. McKenna and Dunstan-Lewis (2004) posit the lack of support as a major concern that may impede elite athletes to enhance their performance while at university. In contrast, elite athletes who studied at universities and had access to academic, lifestyle, performance, medical and psychological support, achieved international level

results. This re-enforces the concern for the lack of the support element, not only from the coach, but also in general (Sport Development Centre, 2013).

## **6. CONCLUSION**

Coaches are influential in athletes' development and performance. An effective talent development environment characterised by coaches' clear long-term objectives and wide ranging and coherent support is therefore an important requirement. In this regard, athletes perceived goal setting, feedback, coach guidance and a long-term focus as positively interrelated factors of their current talent environment. In spite of the study limitation of not having equal number of students represented by the two universities, the athletes' perceptions still indicated significantly positive correlations of certain factors. This implies that coaches currently fulfil specific coaching practices as perceived by the athletes. Coaches therefore display an array of role-related competencies such as athlete guidance, competition management, feedback, strategic goal setting, organisation and administration. However, given that the support factor in this study displayed a statistically significant negative and weak relationship with other factors, it specifies that coaches may be focused more on extrinsic goal achievement, and guide athletes through externally focused feedback that mainly emphasises goal achievement such as winning. The extrinsic goal setting, feedback and guidance are therefore negatively correlated with the perceived support. This factor implies that the coaches currently do not function beyond the normal sport environment to provide a form of academic, psychological and social support. Recommendations include that universities should adequately train coaches on extending their coaching practices beyond the normal sport specific scope of technical and physical coaching through long-term focus, guidance, feedback and goal setting. In this regard, coaches should be trained to holistically approach the talent development environment of athletes, by focusing on the athlete as a whole person who also needs support regarding academic, psychological and social aspects. Coaches need to develop an intentional focus to provide additional support to athletes, which will enhance their talent development environment.

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