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Judo in Schools in South Africa: A Judoka's Perspective

By Petrus Louis Nolte¹ & Charl J. Roux²

Abstract: *Elite sport systems comprise the phases of an athlete's progression from school to international level, as incorporated in the Long-Term Athlete Development (LTAD) model. The model includes elements such as talent identification and development, scientific support, training facilities and coach development. However, varying degrees of implementation are accounted for by contextual differences. Judo is a popular Olympic sport that is practised in schools in South Africa, mostly as an extracurricular activity. The aim of this paper is to describe the perceptions of judoka in South Africa, of their school judo programmes, in the context of an elite judo system. The study utilised a self-structured questionnaire and a purposive random sample of 26 judoka participated in this study. Results indicate that constrained school judo programmes exist in South Africa. The programmes would benefit from a national competition league for schools that establishes partnerships with external service and facility providers, to enhance access to scientific support such as psychology, bio-kinetics, physiotherapy, and training facilities. This would contribute to a comprehensive database, informed by monitoring and evaluation of talented athletes and would embed the programme within the framework of LTAD to establish age and developmentally appropriate participation opportunities. Unique talent identification and development approaches could also create opportunities for strategic competitive advantage. Results reinforce existing literature on long-term scientific approaches to the development of athletes and Judo South Africa's existing LTAD manual, combined with the presence of judo in numerous schools across the country, provide a platform for practical implementation of recommendations in this study.*

Keywords: *school sport, long term athlete development, LTAD, judoka perceptions, judo, sport programmes, South Africa*

Governments increasingly invest significant resources in their elite sport systems with a variety of outcome goals in place. Although the impact of such investments is not always clear, they could add to the achievement of national pride, the creation of a feel-good factor that often contributes to mass participation in sport and ultimately a healthier and happier nation (Grix & Carmichael, 2012). In addition to the potential links with elite systems, sport is a social activity that arguably provides the most significant platform to contribute to nation-building, by uniting wide sections of a population (Riordan, 1999). Sport can also be utilised as a relatively cost-effective tool to support programmes related to education, health and social welfare (Maguire, 2014).

A number of phases of participation in elite sport systems exist that incorporate a programme of athlete development from the lowest to the highest levels of participation. These levels of participation can be explained by an athlete development triangle such as the one proposed by Gulbin, Weissensteiner, Oldenzel and Gagne (2013), with mass participation and school level participation forming the basis thereof. Therefore, school level participation in sport forms part of a feeder system that should increase

the talent pool and, through effective and efficient athlete development pathways, deliver a greater number of high quality champion athletes (Dyer et al., 2017; Goranova & Beyers, 2015). A popular global model that provides a conceptual blueprint for athlete progression from school to elite level is Long-Term Athlete Development (LTAD) (Balyi et al., 2016). Numerous examples exist of nations that have invested successfully in elite sport systems, such as China, the USA, Australia through the Australian Institute of Sport (AIS) and Great Britain (Böhlke & Robinson, 2009). Their systems include contextualised forms of school sport that are dependent on their unique socio-economic, cultural and political circumstances (AIS, n.d.; Chen, 2015; UK Sport, 2015; USOPC, 2020).

The increased recognition for a systematic programme of athlete development from school to elite level emphasises the need for partnerships with the education sector. This should ensure smoother athlete transition to elite status (Radtke & Coalter, 2007). The organisational system relies on input that could include human resources (e.g., athletes, coaches, administrators and technical officials), financial resources (e.g., money and sponsorships) (De Bosscher et al., 2015), material resources (e.g. access to facilities and equipment), goal setting (e.g. performance

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outcomes) and expectations (the outcomes that reaching goals should achieve) (Bevans et al., 2010; Monitoring & Evaluation, 2013). Input for a sport system results in activities (functions carried out that are associated with achieving the goals of an organisational project), outputs (the direct and immediate first level of results associated with a project), outcomes (the second level, medium-term results of a project) and impact (the long-term consequences of a project) (Monitoring & Evaluation, 2013).

The input for elite sport systems focuses on the development of school level athletes by introducing appropriate athlete development programmes including talent identification, regular training, training and qualification of professional coaches, and athlete support including sport sciences, finance, scientific research and sports medicine (Böhlke & Robinson, 2009; De Bosscher et al., 2006). Typically, LTAD plans incorporate age and developmentally appropriate training, focusing on fundamental movement skills from birth to when athletes enter the active for life stage of post-career involvement (CSL, 2015). The links between schools and elite sport systems imply that these factors are under the direct control of governments and national sport federations. Internationally, recognition exists for successful elite sport systems having extensive school sport programmes to varying degrees of implementation, depending on contextual factors, that act as feeders for sports clubs and contribute to delivering high performing athletes in the long-term (Digel, 2005; Gulbin et al., 2013).

A sport that has partnered with governments and schools globally, is judo (IJF, 2019). Judo is also part of the Olympic Movement and has more than 200 international member federations (Ohlenkamp, 2006). In South Africa, judo is practised at schools, in sports clubs, community and recreation centres and at many universities. Some judo instructors in South Africa teach judo in schools as a part of their private business, with the result being that a significant number of judoka at school level practice the sport outside of the national federation's system. Therefore, although Judo South Africa's (JSA) current membership is approximately 3000 members and is practised in seven of the nine provinces in the country (JSA, n.d.), it is estimated that there could be approximately 20,000 active judoka (practitioners of judo).

It is essential that judoka are more effectively recruited and retained within the national federation's system, to provide a sustainable athlete development programme (Gulbin et al., 2013). In line with the Gulbin et al. (2013) triangle of athlete development, an organised school sport programme that includes a systematic LTAD process, is necessary to produce elite athletes (CSI, 2014). Effective implementation of such pyramid models of sport development require attention to athlete recruitment, by incorporating smaller local sports organisations and significant others; retention that focuses on the motivation, socialisation and commitment of athletes; and advancement (establishing vertical and horizontal links to further athlete progression to higher levels of participation) (Green, 2005).

Where there are schools in South Africa that incorporate judo in their sports programme, a gap exists in terms of the understanding of the present school judo programme in the country from the perspective of judoka who have participated in this programme over an extended period of time. This could be the result of the limited formulation and implementation of a systematic, contextualised approach to school judo in the country, leading to the following question in the context of South Africa's elite judo system: What are judokas' perceptions of the school judo programmes that they participate in? Accordingly, the aim of this paper is to describe the perceptions of judoka in South Africa of the school judo programme that they participate in as part of an elite judo system. The following components of a school sports programme as informed by literature and related to the LTAD model, were selected for further exploration: Sport system, training and competition frequency, access to scientific support, training facilities and aspects of coaching and training programmes. These components are unpacked in the results section.

RESEARCH DESIGN

Conceptual framework

The perceptions of judoka were analysed and interpreted from the perspective of the Long-Term Athlete Development (LTAD) model. This model represents a conceptual framework that advocates for the systematic, age and developmentally appropriate development of young athletes to maximise their potential (Spurr, 2014). In terms of the LTAD model, judo is classified as a late specialisation sport that follows seven steps of development from active start to active for life (LTPD, 2010). In this context, the LTAD model serves as a blueprint for the personal and athletic development of judoka as well as emphasising the provision of opportunities for healthy lifelong participation (Judo Canada, 2017). Balyi, Way and Higgs (2013) further emphasise that collaboration with other sectors such as education and health are necessary to facilitate the often-demanding process of athlete development that could result in conflicting demands.

Materials and methods

This paper reports on one section of a broader national study on the development of a contextual school sport programme for judo in South Africa. Although the information is not publicly available, it is estimated from the results that there are at least 100 schools in South Africa that incorporate judo in their school sport or extramural programmes. However, taking the scope of this study into consideration, a more accurate figure would likely be at least 150 schools. This section of the study incorporated a descriptive design, making use of quantitative data, consisting of questionnaires as research instruments. The population consisted of South African judoka, 18 years and older, who appeared on the national ranking list of Judo South Africa. As a result, a purposive random sample was recruited from this population to participate in the study. In total, a representative sample of twenty-six judoka (n=26) who were recruited for the study completed questionnaires.

The content validity of the questionnaire was established by requesting members from the research population who were

not included in the research sample, to provide feedback regarding the content of the questions. Sight and construct validity were established by submitting the questionnaire to a member of STATKON (Statistical Consultation Services) at the University of Johannesburg. Data from the questionnaires was captured and analysed utilising the Statistical Package for Social Sciences (SPSS). Descriptive statistics such as frequencies, percentages, means and medians were used to describe the collective responses of respondents. The results are presented in tables and figures. Finally, reliability of the questionnaire was measured using Cronbach's Alpha. Reliability scores on the respective scales measured between acceptable (0.731) and excellent (0.979) (George & Mallery, 2003). The questionnaire was based on an instrument used to conduct a similar national study on the development of a contextual framework for a Netball South Africa elite sport system (Nolte & Hollander, 2020). Although themes were broadly similar, the questions were adapted to reflect judo as the topic of this study and literature on school sport specifically was used to inform the adaptation of questions to address the purpose of the study.

Ethical clearance for this study was obtained from the Ethics Committee of the Faculty of Health Sciences at the University of Johannesburg with clearance number REC-462-2020. Written permission to have access to the judo fraternity was obtained from the national judo federation, Judo South Africa.

RESULTS

The questionnaire was composed of two sections. Section one recorded biographical information of judoka (research participants). Section two logged the experiences of the judoka in respect of ten elements, including the sport system, training and competition frequency, access to use of scientific support, access to facilities, training programmes, transport, and considerations related to coaching within the respective school judo programmes. Questions in section two required respondents to rate their experiences by indicating the extent to which they agreed with statements on a 4-point Likert scale with the following criteria; don't agree, slightly agree, mostly agree and fully agree.

Biographical Data

Of the twenty-six judoka who completed the questionnaire, nineteen were male and seven female. The mean age of the respondents was 30.12 years with a Standard Deviation of 10.4. Twenty-one (87.5%) of these judoka have competed at national and/or international level over the past two years. This provides a highly knowledgeable and experienced sample of research participants. A total of 12 (48%) respondents indicated that they had been identified as talented judoka during their judo careers, with only 2 (15.4%) indicating that they were identified as such at school level. In addition, 24 judoka (92.3%) were from urban areas, representing two of nine provinces in South Africa.

Sport System

In this section of the questionnaire participants responded to six statements on the relationship between their school judo programme and the overall sport system they participated in (Figure 1). An acceptable Cronbach's Alpha score was recorded for this scale (0.780). The statements related to the extent to which judo was part of the school sport system and competition league, the extent to which the athlete programme provided adequate preparation for competitions, sport performance, and success and focus on competitions at school level. A total of 155 responses were recorded with percentages and numbers indicated in parenthesis: Fully agreed 32 (21%), mostly agreed 33 (21%), slightly agreed 45 (29%), and disagreed 45 (29%). These responses indicated that 65 (42%) relatively positive responses were recorded, of which 32 (49%) fully agreed and 33 (51%) mostly agreed with the statements.

An analysis of the individual statements indicated that 10 (38%) respondents believed that the athlete programme they participated in contributed to their performance at school sport level and 9 (36%) respondents indicated that the athlete programme contributed to their success from school to elite level. In contrast, 18 (69%) respondents indicated that they did not agree with the statement that judo forms part of a national school sport league and 13 (50%) indicated that they disagreed with the statement that judo was part of the school sport system. The results indicated that LTAD programmes designed to ensure success in competitions, from school to elite level, were limited, and that a general perception existed that judo did not form part of a national school sport system.

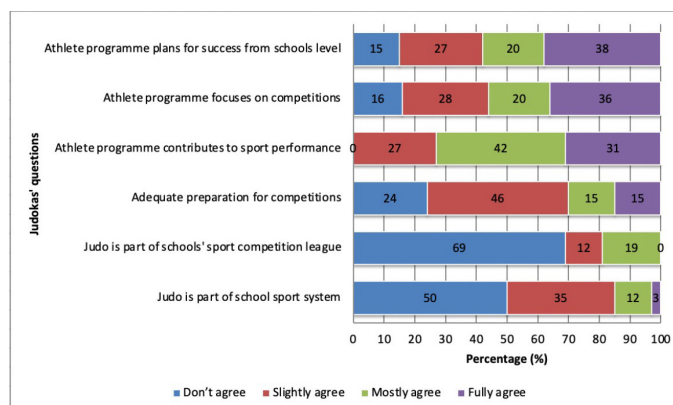


Figure 1: Judoka statements on sport system

Training and Competition Frequency

Training and competition frequency were measured by asking judoka to rate three statements related to the adequacy of school judo training, training camps and competition frequency (Figure II). A good Cronbach's Alpha score was recorded on this scale (0.851). A total of 78 responses were recorded with percentages and numbers of respondents indicated in parentheses: Fully agreed 5 (6%), mostly agreed 24 (31%), slightly agreed 23 (29%), and disagreed 26 (33%). Based on these results, 29 (37%) relatively positive responses were recorded, of which 5 (17%) fully agreed and 24 (83%) mostly agreed with the statements.



Figure II indicates that judoka mostly disagreed that school judo competitions were adequate to enhance their performances, with 9 (35%) participants recording 'don't agree.' With regard to the statement that school judo training camps were adequate to enhance competition performance, 10 (38%) participants disagreed with the statement. A more even distribution existed for responses on school judo training programmes. On the effectiveness of the frequency of school judo training for competition performance, 9 (35%) mostly agreed, 9 (35%) slightly agreed, and 7 (27%) did not agree. Results indicated a clear perception among judoka that the frequency of school judo competitions and training camps were inadequate to enhance competition performance. It is interesting to note that a higher percentage of judoka were more positive regarding the frequency of judo training for competition performance. This could be accounted for by the possibility that some judoka participated in judo training at school and club level.

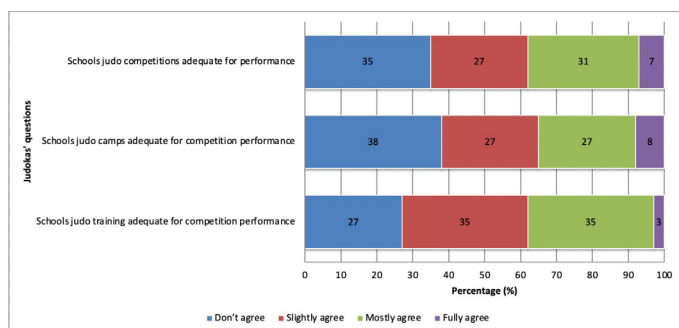


Figure 2: Judoka statements on training and competition frequency in school judo programmes

Access to Scientific Support

Judoka were requested to indicate the extent to which they agreed with seven statements relating to their access to scientific support as it pertained to their school judo programme (Figure III). A good Cronbach's Alpha score was recorded on this scale (0.881). A total of 182 responses were recorded, with percentages and numbers of respondents indicated in parentheses: fully agreed 8 (4%), mostly agreed 20 (11%), slightly agreed 45 (25%), and disagreed 109 (60%). The results showed a small number of relatively positive responses to the statement that addressed access to scientific support (28; 15%). A majority of 154 (85%) respondents only 'slightly agreed' or 'did not agree' to having access to scientific support in their school judo programmes.

When the results of each statement were analysed, it was evident that the majority (15; 58%) of respondents 'did not agree' to having access to bio-kineticists (an allied health practitioner specialising in the rehabilitative modality of exercise), dietary support 17 (65%), physiotherapists 15 (58%), medical doctors 13 (50%), sport scientists 19 (73%), psychology support 15 (58%) and lifestyle support 15 (58%). It is evident from the results that the majority of judoka did not have access to scientific support in their school judo programmes. Scientific support forms an es-

sential part of the LTAD model and the lack of access to this type of support at school level could limit the development of athletes toward the elite level significantly.

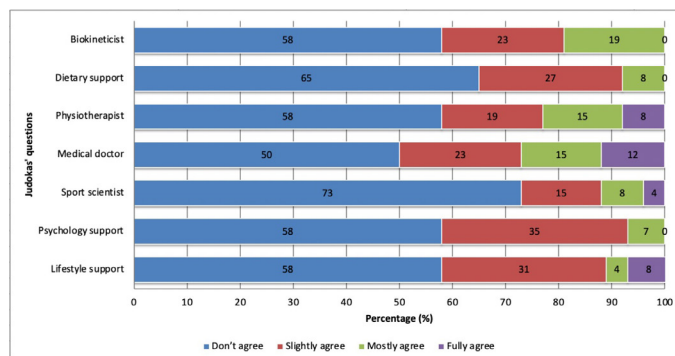


Figure 3: Judoka statements on access to scientific support in school judo programmes

Utilisation of Scientific Support

Judoka were requested to respond to seven questions related to the extent to which they utilised scientific support in their respective school judo programmes (Figure IV). An excellent Cronbach's Alpha score was recorded for this scale (0.907). A total of 174 responses were recorded, with percentages and numbers of respondents indicated in parentheses: Fully agreed 18 (10%); mostly agreed 29 (17%); slightly agreed 29 (17%); and disagreed 98 (56%). In conclusion, 47 (27%) judoka were relatively positive about their use of scientific support as part of the school judo programme, with 18 (38%) respondents fully agreeing and 29 (62%) mostly agreeing to the respective statements.

Analysis of the responses regarding the utilisation of scientific support indicated that the majority of judokas' responses fell in the 'don't agree' category as follows: Bio-kineticists 14 (56%), dietary support 14 (56%), physiotherapists 12 (48%), medical doctors 11 (44%), sport scientists 18 (72%), psychology support 14 (56%) and lifestyle support 15 (63%). Results on this scale were similar to the results on the access to scientific support scale, indicating that a significantly limited number of judoka had access to scientific support, thus negatively influencing the extent to which they made use of it.

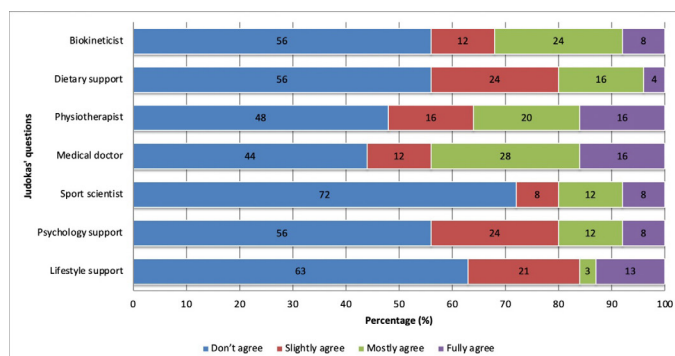


Figure 4: Judoka statements on utilisation of scientific support in school judo programmes



Training Facilities

Judoka were requested to respond to four questions regarding the extent to which they had access to and utilised training facilities in their school judo programmes (Figure V). A good Cronbach's Alpha score was recorded on this scale (0.864). The statements related to strength and conditioning gymnasiums, judo training centres and sport accommodation. A total of 153 responses were recorded with 22 (14%) fully agreeing, 29 (19%) mostly agreeing, 26 (17%) slightly agreeing, and 76 (50%) disagreeing. In total, 51 (33%) relatively positive responses were recorded of which 22 (43%) fully agreed and 29 (57%) mostly agreed with the statements.

An analysis of the individual statements indicated that 15 (58%) judoka did not have access to sport accommodation, 13 (50%) did not have access to a strength and conditioning programme and 10 (38%) did not have access to a judo training centre as part of their school judo programme. The highest proportion of 'fully agreed' responses were recorded for access to a judo training centre, with 6 (23%). It is concerning to note that a high number of judoka did not have access to a judo training centre (venue). These judoka often did judo in school classrooms and temporary training facilities that were used for a variety of other purposes that often took priority over judo. The high percentage on the Access to Sport Accommodation scale could be accounted for by the fact that the schools' respondents attended, either did not have boarding facilities, or they did not require accommodation because they resided in the immediate vicinity of their schools.

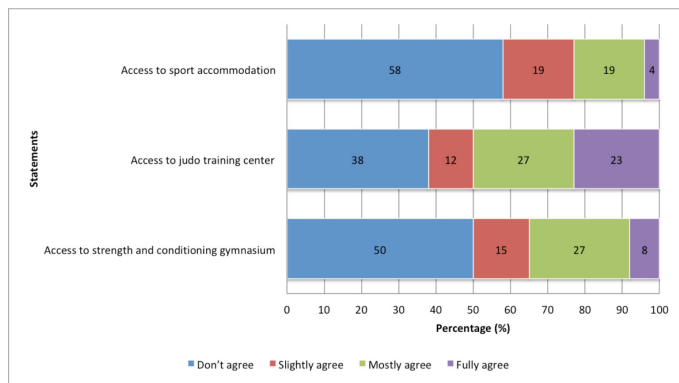


Figure 5: Judoka statements on access to judo training facilities in schools

Training Programme

Judoka were requested to respond to four questions regarding the extent to which training programmes in schools were sufficiently evaluated, monitored, communicated and accessible (Figure VI). An excellent Cronbach's Alpha score was recorded on this scale (0.916). A total of 104 responses were recorded with percentages and numbers of respondents indicated in parentheses: Fully agreed 10 (10%), mostly agreed 19 (18%), slightly agreed 29 (28%) and disagreed 46 (44%). Overall, 29 (28%) participants responded positively, with 10 (34%) fully agreeing and 19 (66%) mostly agreeing with the statements.

The highest scores on the 'don't agree' scale were recorded for evaluation 13 (50%), monitoring 12 (46%), and communication 12 (46%). Numerous judoka also disagreed that they had access to training programmes at school level, with 9 (35%). The results on this scale are particularly concerning when considering the importance of age and developmentally appropriate training programmes as part of the LTAD process.

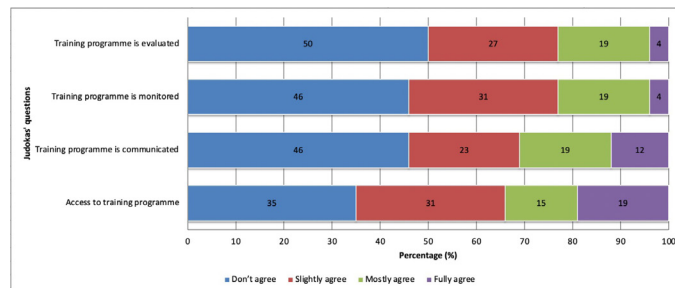


Figure 6: Judoka statements on school judo training programmes

Coaching

On this scale, judoka were asked to rate five statements that related to the coach-athlete relationship and competition performance in their school judo programmes (Figure VII). An excellent Cronbach's Alpha score was recorded on this scale (0.958). A total of 130 responses were recorded with percentages and numbers of respondents indicated in parentheses: Fully agreed 39 (30%), mostly agreed 34 (26%), slightly agreed 21 (16%), and disagreed 36 (28%). In conclusion, 73 (56%) relatively positive responses were recorded, of which 39 (53%) respondents fully agreed and 34 (47%) mostly agreed with the statements.

Based on an individual analysis of the statements, most judoka fully agreed 8 (31%) and mostly agreed 8 (31%) that they had access to their judo coach in their school judo programme. The majority of judoka also fully agreed with the statement that school judo coaches communicated competition performance with, 8 (31%); that their school judo coaches had adequate knowledge to ensure competition performance, with 10 (38%) and that the relationship with their school judo coach stimulated maximum performance, with 9 (35%). In contrast, a majority of 11 (43%) judoka indicated they did not have meetings with their school judo coaches regarding their competition performances.

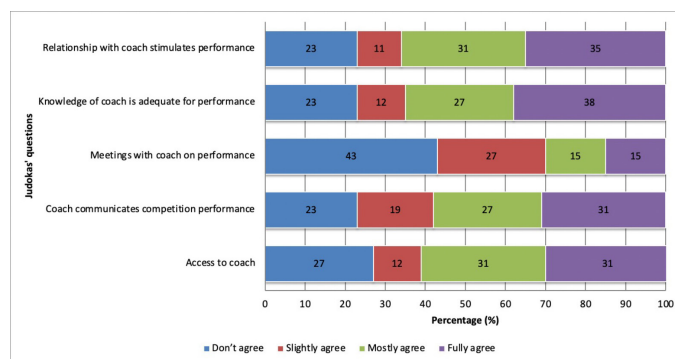


Figure 7: Judoka statements on coach-athlete relationship and competition performance in the school judo programmes



DISCUSSION

This section discusses the results of this study as they pertain to the components that constitute a school sport programme and are positioned within the conceptual framework of the LTAD model. Elements include athlete development (development pathways and sport sciences support), coaches' development (training and qualification of coaches) and physical resources (such as accommodation, strength and conditioning gyms and judo training centres).

Development Pathways

It is evident that the perceived frequency of training and competitions in school judo programmes in South Africa are constrained when compared with the criteria set out in the LTAD model by Balyi et al. (2016). This is particularly relevant in relation to judo training sessions, training camps and competitions. The results reaffirm the fact that judo in South Africa is not incorporated into the national school sport system as is required for a systematic programme of athlete development (Gulbin et al., 2013; Green, 2005). Furthermore, although a national school judo championship exists, South Africa has not incorporated a structured national school competition league. Interestingly, a relatively high proportion of judoka felt that the frequency of judo training, training camps and competitions in their school judo programme was adequate. This could be explained by the fact that Judo South Africa mostly incorporates a club system and school judoka participate in club judo events. At a more individual level of training, many judoka felt that their training and performances were not monitored and evaluated and that communication and access to training programmes was insufficient to create conditions for high level performances. This is especially concerning when considering that successful LTAD plans include systematic monitoring and development to formulate and implement individualised athlete development plans. Most judo coaches in South Africa only offer one judo training session per week at schools. While some of these coaches provide extra training at clubs in the vicinity, others do not, which is a further compounding factor that leads to the limited implementation of training programmes and the associated monitoring and evaluation thereof. Regular appropriate training from a young age is essential as part of a system of athlete development (De Bosscher et al., 2015).

The results indicated significant challenges in the implementation of training programmes that would ensure a sustainable LTAD programme that delivers high performing elite athletes. Taking into consideration the limited preparation of judoka at school level, it is not surprising that there is a high drop-out rate of judoka when they progress to club level (when they should be registering with the national judo federation). Clearly, a nationally coordinated and implemented school judo programme that incorporates a national judo league with regulation of participation opportunities, should enhance the experiences of judoka training at school level. Another significant aspect

of these findings is related to the role of talent identification and development through training programmes. In line with De Bosscher, Bingham, Shibli, Van Bottenburg and De Knop (2008), countries with smaller populations could gain strategic competitive advantage over their larger competitors by focusing on these elements. Although South Africa has a relatively high population, the small population of judoka by comparison, could derive significant benefit from a strategic focus on these aspects. This further emphasises the need for a contextualised approach to the implementation of LTAD at school level in the South African judo environment.

Sport Sciences Support

Judoka reported limited access to scientific support services at school judo level. The services related to bio-kinetics, dietary support, physiotherapists, medical doctors, sport scientists, psychology support and lifestyle support. Similar results were reported regarding the extent to which judoka made use of scientific support services.

Medical doctors, physiotherapists, sport scientists and bio-kineticists relate mainly to injury rehabilitation and fitness training, whilst psychology and lifestyle support form part of a long-term approach focused on ensuring mental health and post-career involvement, in addition to performance-related success. The fact that the majority of judoka indicated that they did not have access to or utilise scientific support services as part of the school judo programme, has potentially negative consequences for the preparation of judoka for higher levels of participation (Balyi et al., 2016; CSI, 2014; CSL, 2015; De Bosscher et al., 2006).

Providing scientific support services as part of an LTAD plan, particularly at school level, should contribute to a supportive environment for the sustainable development of judoka and establishing partnerships with specialist service providers would encourage a more holistic approach of athlete monitoring and evaluation. In turn, a comprehensive data base of talented judoka can be generated. In combination, this could benefit the national federation by increasing the number of judoka that progress to club and higher levels of participation with the necessary physical and mental skills, attributes and qualities that ensure long-term performance success. Higher post-career involvement of judoka in South Africa could also see them taking up positions as technical officials, administrators and coaches, to a greater extent than is the case at present.

Coach Development

In general, judoka were relatively positive about the criteria relating to their coaches at school level, providing an interesting contrast to other scales of measurement in this study. The criteria which yielded the highest 'fully agree' scores were the statements: Relationship with coach stimulates performance; knowledge of the coach was adequate for competition performance; coach communicates competition performance and access to the coach. In

contrast, the majority of respondents indicated that they did not have meetings with their coach to discuss competition performance.

Professional coaches who teach judo at schools in South Africa do this for a living. At least theoretically, this would imply that they should be accessible to discuss performances with their judokas and be present regularly at judo events such as competitions. The limited contact time at school judo level, where professional coaches often offer only one judo lesson per week, could account for the fact that judokas reported that they did not have sufficient opportunities to meet with their coaches to assess their performances. The fact that most judokas reported they had a good relationship with their coaches, and perceived the coach's knowledge as adequate, contributed to enhanced communication, and confirmed the value of the coach-athlete relationship in an LTAD plan (Böhlke & Robinson, 2009).

It should be noted that regular meetings with judoka regarding their performances could further strengthen the coach-athlete relationship and contribute to positive experiences for judoka in school judo programmes. It is essential for the overall effectiveness and functioning of LTAD plans that they be designed and implemented by highly skilled, experienced and knowledgeable coaches.

Physical Resources

A significant number of judoka indicated that they did not have access to sport accommodation and strength and conditioning gymnasiums at school level, although responses regarding access to judo training centres at school level were relatively positive.

The results regarding facilities clearly concurred with the those of scientific support services and training programmes, indicating that the majority of judoka at school level participated in an environment that provided limited physical resources. This falls short of the goals set out in LTAD models. The high proportion of judoka who did not have any access to a judo training centre at their school is of concern and is perpetuated by sharing venues with other school activities that often take priority over judo. Many schools also do not have strength and conditioning gymnasiums on their properties. De Bosscher et al. (2006) highlights the importance of access to training facilities in the process of long-term athlete development. Access to training facilities is an essential requisite in the establishment and implementation of athlete development pathways and by implication in a school judo programme. If strength and conditioning gymnasiums are not available as part of school facilities, it is vital that partnerships are established in local communities in order to address such shortcomings. Such partnerships could be with community and recreation centres or universities.

The LTAD model has provided significant insight into the interpretation and understanding of judoka perspectives

as they relate to school judo programmes in South Africa. At national level, it is of utmost importance that a competition league is developed, for judoka in all schools to participate. This would have the added benefit of contributing to efforts of establishing judo's status as a recognised school sport in the country. Access to resources such as facilities and sport sciences support could be enhanced by this recognition, as well as partnerships with external service providers. Future studies should focus on posing questions related to the transition process from school to club judo and how this impacts on access to resources and the development pathways of athletes.

Limitations of This Study

These results should be understood within the context of a relatively small sample size that largely resides in urban areas and represents only two provinces in South Africa. Additionally, a limited number of female judoka participated in the study. Therefore, caution should be taken when attempting to generalise the findings to the broader population in the country.

CONCLUSION

Results reported in this study largely correspond with those of the broader national study on the development of a contextual school sport programme for judo in South Africa. Judoka in South Africa identified various aspects that require improvement in the school judo programmes that they participate in, to form part of a holistic LTAD model that could lead to elite judo success and post-career involvement in the sport. Development pathways that incorporate training programmes and training and competition frequency, as well as access to and utilisation of scientific support, should take priority when addressing the implementation of these programmes. Interestingly, a positive aspect that emerged from the results was that judoka perceived the coach-athlete relationship as satisfactory in relation to eliciting competition performance, providing feedback and communication surrounding competition performance, having access to the coach, and regarding the coach's knowledge as adequate for stimulating competition performance.

Whilst it is evident that the school judo programme in South Africa is limited in its implementation and impact as part of an elite sport system, judo in South Africa would benefit from establishing a structured national judo competition league for schools. In turn this should contribute to establishing and eventually enhancing the status of judo towards becoming a recognised school sport in the country, by providing vertical and horizontal links for athlete progression. Further to this, a recognised and effectively implemented competition league could also contribute to partnerships with external service and facility providers, resulting in better access to physical resources such as training facilities. It is vital that the formulation and implementation of a national school judo league is embedded within the conceptual framework of LTAD and informed by age and developmentally appropriate considerations. Therefore, such a league should not only create enhanced oppor-

tunities for competition participation, but also training camps supported by scientific support such as psychology, bio-kinetics, physiotherapy and others that would enhance the athlete development process and establish a database through comprehensive monitoring and evaluation of talented athletes throughout their careers. A significant strategic competitive advantage could be derived by focusing on formulating and implementing contextually appropriate talent identification and development as part of the training programmes of athletes from school level.

Although the results of this study confirm the literature that a research-informed, scientific approach to the development of judoka as part of a systematic long-term approach to the development of athletes is necessary, South Africa's context is varying and complex which requires a contextualised approach to implementation. Therefore, this study contributes to the existing body of knowledge in this regard. In addition, the judo specific LTAD manual for South Africa has been available since 2010 and the existing presence of judo in numerous schools across the country already provides a platform for the practical implementation of the recommendations in this study.

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