Sporting Excellence in Malta Viewed Through an Ecological Systems Lens: A Qualitative Investigation Into Athletes’ Attitudes, Aspirations and Feelings

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Abstract: Many different personal, social, and structural factors determine the experience and success of teams in international tournaments. This study aimed to explore some of these factors by looking at similarities and differences in the experiences of two variedly successful Maltese teams involved in international competitions. Athletes from Special Olympics Malta and a Maltese male senior national team participating in the World Games and European Championships respectively were recruited to the study. A total of 11 athletes of Maltese nationality, aged 14-38 years, were interviewed before and after their respective competitions and provided audio diary entries about their experiences during the competitions. Semi-structured interview data and diary entries were transcribed verbatim and analysed using interpretive phenomenological analysis. Results found contrasting attitudes, aspirations, and feelings among participating athletes. How these themes intersect with various layers of influence using an ecological system lens is discussed and provides an insight into what appropriate support structures may benefit Maltese athletes in the future.

Keywords: Athlete development; elite competition; Maltese sport; coach-created climate

Introduction

In an attempt to improve international sporting success and geopolitical standing, an increasing number of nation states, of varying population sizes and equally varied economic outputs, have increased funding for elite level sport (De Bosscher 2008; Houlihan and Zheng 2013). This seems to be a sensible approach in a purely sporting sense, as government and commercial investment, as well as population size, are important predictors in determining medal hauls at major international sporting competitions (Emrich et al. 2013). There is a consensus among stakeholders within the Maltese sports milieu that action needs to be taken to improve Malta’s standing in international competitive settings. Although Malta’s population is small, with fewer than one million inhabitants, there has been some significant investment in sport and future investment in elite sport planned (Bonett 2016). However, financial investment (= input) alone does not guarantee success (= outputs) and factors (= throughputs) such as athletic career support, facilities investment, new and existing workforce upskilling, talent identification systems, effective governance and leadership, and coach development play an important role in success on the international stage (De Bosscher 2008).

In an attempt to understand what factors or ‘throughputs’ determine international sporting success, numerous studies have employed an iteration of the Sports Policy Factors Leading to International Sporting Success (SPLISS) model (De Bosscher 2008; De Bosscher, De Knop and van Bottenburg 2009; De Bosscher et al. 2009; De Bosscher...
et al. 2010; De Bosscher et al. 2015). However, while acknowledging that this approach can be insightful, there have been calls for a shift in emphasis from looking for uniformity to studying contextual uniqueness (Henry et al. 2020; Sztompka 1988). This aligns with the approach we have taken in this study, where we explore Maltese teams in international settings using an ecological systems lens.

There are many different personal, social, and structural factors that determine the experience and sporting success of teams in international tournaments. However, while success is often framed in terms of medal counts, we go beyond the social perceptions related to winning and losing and focus on the short- and long-term influences of the social and contextual environment on the athletes' attitudes, feelings and behaviour in order to explore how such factors determine their experience at a competitive level.

Given that research relying primarily on quantitative methods is unable to capture the full complexity of factors that contribute to elite level international success (De Bosscher, Shibli and Weber 2019; Dowling et al. 2018; Valenti, Scelles and Morrow 2020), we take a qualitative approach to build on quantitative approaches to contrast the experiences of Special Olympics (SO) athletes and those of a national sports team throughout their preparation and participation in international competitions. These teams were selected in order to explore similarities and differences in the experiences and feelings of athletes from successful and less successful Maltese teams on the international stage. The outcomes will inform and substantiate our recommendations for appropriate support structures from which Maltese athletes can benefit in the future.

In order to do this, we (1) Contrast the experiences, attitudes, aspirations, and feelings of Maltese SO athletes and those of another Maltese national team in their preparation and engagement in major international competitions, and (2) Identify and explore the impact of social and structural factors on athletes' experiences through an ecological systems lens.

**Literature Review**

To study or interpret human behaviour and cognitive activity in isolation without reference to the environment is a reductivist approach that we reject in this paper (Araujo and Davids 2009). This is a line of enquiry followed by Bronfenbrenner (1979) in his thesis on child development, whereby he suggests that multiple factors, internal and external to the child, affect physical and psychological development. This is now recognised in athlete development (Aarresola, Lämsä and Schubring 2021; Côté and Erickson 2016b; Klein, Macaulay and Cooper 2020). Prior to Bronfenbrenner, psychologists studied individuals, sociologists and anthropologists focused on the family and society, political scientists explored political structures, and economists studied financial and commercial frameworks. Bronfenbrenner’s approach however championed the necessity of considering an ecology of human development approach, which valued the entireties and complexities of the psychological, social, economic, and political worlds as integral to an individual’s life course.

The original conceptualisation of the Ecological Systems Theory proposed by Bronfenbrenner (1979) refers to four nested levels within an ecological structure that can be visualised as concentric circles or, as referred to by Bronfenbrenner, a set of Russian dolls (see Figure 1). The first level, with the highest influence on the individual, is referred to as the microsystem. It comprises the people with whom direct interaction occurs in daily life (e.g. family, friends, and significant others). The second level is referred to as the mesosystem, whereby two or more microsystems involving the developing individual interact (e.g. interaction between the coach and parents). Occurrences outside the individual’s control exist in the exosystem, within which mesosystems are nested and where exchanges that
influence the individual's setting occur (e.g. interaction between coach and administration/organisation). The last level refers to the macrosystem, which relies on the exosystem, and is where the political and policy decisions are made that will, in turn, shape the cultural and social forces an individual athlete will experience. The chronosystem was later included (Bronfenbrenner 1986) to reflect how the passing of time (which presupposes how varying facets of globalisation, mediatisation and technological change) impacts on the function of the other four levels.

Figure 1: Bronfenbrenner’s (1979) Ecological systems theory

The process-person-context-time model (PPCT) was later proposed by Bronfenbrenner (1995), taking into consideration the influence of interacting contextual forces on the individual's development. The model considers the process as the fulcrum whereby interactions between individuals and environment, called proximal processes, occur. The person component of the model describes what occurs between person-environment interactions. Bronfenbrenner identified the importance of the attributes of the person most likely to influence the development and experience of—for our purposes—the athlete and how they interact with the way that individual reacts, engages, and interacts with the environment. To this end, one of the primary proximal processes that impacts athlete development, and the one we focus on hereafter, is the repeated and daily interactions between coach and athlete. For the purpose of this study, therefore, our interest is in athletes’ perceptions of the coach-created climate, to what extent such perceptions determine athletes’ experiences, and also the impact of the coach-created climate on athletes’ self-perception. The coach-created climate we refer to is comprised of the physical environment and the interactions between individuals within that environment (the micro-, meso-, exo- and macro-system). Time is the final component of Bronfenbrenner’s developmental model, suggesting that individual development is best understood if studied over time.

A recent challenge to the original nested conceptualisation of ecological levels was made by Neal and Neal (2013). In contrast to its original conception, the criticism proposed that the ecological system should be considered as a network of social relationships, influencing
the individual, directly or indirectly, at different levels in an overlapping rather than nested process (Neal and Christens 2014; Neal and Neal 2013). When applied to the context of an athlete's competitive experience, conceptualising the ecological system theory within a social network would see the athlete as part of intersecting ecological levels, linked to one another, and influenced to various degrees by interlinked social interactions, rather than at the centre of hierarchical system as originally conceived. This suggests that ecological systems should be conceived of as analysing a pattern of relationships close to the individual, rather than a hierarchy of pre-defined levels (Neal and Christens 2014).

The implications of adapting the network model of ecological systems theory for this study, and for elite sport systems in general, is that it allows for an intellectually legitimate space in which to consider the complex, highly emotive, and pressured relationships experienced by two groups of participants. Moreover, it also allows us to explore how the interrelation of social and contextual determinants, across different levels and types of sporting competition, impact the experience of Maltese athletes.

**Methods**

*Methodology*

Given that the focus of the study was to interpret individual experience, interpretative phenomenological analysis [IPA] (Smith 1996) was used and underpinned by critical realism (Bhaskar 2013). IPA is particularly suitable to address our aims insofar as its pivotal purpose is searching for experiential meaning as it relates to an individual in a particular (sporting) context (Smith 2019). Critical realism allowed us to combine a constructivist epistemology with a realist ontology (Archer et al. 2013). Our justification is that, while we consider objectivity unrealisable in the context we are exploring and human experience to be idiosyncratic, we suggest that experience is, in part, shaped by a mind-independent world. We also consider a level of intersubjectivity to be a necessary condition for psychological enquiry. In this, we align with Heidegger’s perspective on intersubjectivity where (Smith, Flowers and Larkin 2009), with individual meaning-making being framed by a particular point of view, participants' and researchers' interpretations of experience are shaped by their cultural, social, and historical environment (Heidegger 1998).

*Participants*

A purposive sample of six Maltese residents was recruited from one national level sports team and five from another elite team, with ages ranging between 14 and 38 years. Three of the participants were new to major international competitions, participating for the first time at this level. All participants were involved on a non-professional basis and either had another career or were in education.

*Procedure*

The study gained institutional ethical approval, and we followed all approved procedures, including getting consent from the two respective national governing bodies. All participants gave their written informed consent to take part in the study, were told about their contribution, and informed of their right to withdrawal. The first author distributed the interview schedule to participants to familiarise themselves with the questions type of questions asked (Smith, Flowers and Larkin 2009).
Data Collection

Semi-structured Interviews

In-depth, one-on-one, semi-structured interviews were used in order to engage with the participants’ accounts of their experiences (Reid, Flowers and Larkin 2005). Face-to-face interviews were conducted by the first author two weeks prior to the competition, with follow-up interviews conducted a month post competition. An interview schedule with semi-structured questions was prepared and used to guide the interviews but was deviated from as necessary during the interviews (Smith 2004). Questions were targeted at generating information about what participants experienced and the impact of such experiences on their emotions, behaviour, and attitudes.

The interviews lasted between 40 and 55 minutes and were held at the same location where the athletes trained, for the least inconvenience possible and also for familiarity with the surroundings. With English language not being the participants’ native language, they were given the option to hold the interviews in whichever language they felt most comfortable to express themselves in. Replies were given both in Maltese and English. Interviews were audio recorded and manually transcribed verbatim by the first researcher for close engagement and familiarity with the data (Kvale and Brinkmann 2009). To safeguard participants’ confidentiality, pseudonyms are used.

Observations

The first author was given access to training sessions, warm-up sessions before competing, and to all competitions, allowing observations of the participants and their interactions. Sharing this experience with the athletes facilitated the researcher’s degree of sensitivity and reflexivity about what was seen and heard. Such reflections informed the questions which were asked all throughout, further exploring and probing issues which, in the judgement of the first author, were influential informing experiences.

Semi-structured Audio Diary Entries

Besides the interviews, we also asked participants to make an audio diary entry before and at each event. These included a maximum of three open-ended questions sent via a WhatsApp message first thing in the morning and after each competition. The entries were brief to ensure minimal invasion of the athletes’ privacy and sent to the first author by the end of each day. The questions aimed at capturing the athletes’ perceptions and feelings in relation to the experience they were living in real time and informed by what the first author observed in person.

Data Analysis

Following IPA guidelines, data analysis proceeded in the stages suggested by Smith, Flowers, and Larkin (2009). Following verbatim transcription, the first author read the text from each interview several times for familiarisation and made general notes and comments in the left-hand margin of the transcript—reflecting any significant thoughts and observations which came to mind upon the initial encounter with the text. Each transcript was evaluated independently to facilitate the emergence of new themes, ensuring the uniqueness of each case and reflecting the idiographic nature of the IPA process. The first author identified emergent themes from each transcript and these were then developed into super-ordinate themes (Smith and Shinebourne 2012). During the abstraction process,
reference was made to the original transcript for a reliable interpretation. The final stage was the integration phase, which involved looking for patterns, commonalities, and individuality across cases, resulting in the emergence of super-ordinate themes for both groups. All coding in the data analysis process was facilitated by the data analysis software Nvivo.

Quality and Methodological Rigor

Throughout this study, rigour has been sought through an appropriate application of IPA’s idiographic methodology in relation to the aims of the research (Smith and McGannon 2018). To enhance the quality of the study, the research team employed the four principles put forward by Yardley (2008), including sensitivity to context, commitment and rigour, transparency and coherence, as well as impact and importance. Sensitivity to context was established during the initial stages of the research design during recruitment, data collection, analysis, and report writing. A research diary facilitated a reflexive approach with brief notes made on preconceptions, values, assumptions, and position throughout the research process which proved useful when interpreting data by reducing researcher bias whilst adding quality and robustness to data analysis (Dodgson 2019). Throughout the whole process there was an explicit focus on Commitment and rigour, with methods, results, and interpretations discussed with the research team who acted as a ‘critical friend’ (Smith and McGannon 2018) to encourage and enhance reflection and further exploration of possible interpretations. Transparency and coherence was secured through an audit trail, which documented the entire research process, including raw data from transcripts, tables, and documentation of the entire analysis process. Impact and importance of the research is the contribution it could make in terms of recommendations for support structures, from which Maltese athletes could benefit in the future. Finally, the first author conducted member reflections, discussing the results with participants and asking further questions to check understanding and interpretation (Smith and McGannon 2018; Tracy 2010). In those cases where queries and disagreements arose with reference to interpretation, the participant’s perception overruled that of the researcher.

Results

These results explored the comparative experiences of two groups of athletes representing Malta. Fifteen themes emerged, reflecting differing levels of ecological systems. The nature of the themes, and the interactions between them appear to ultimately influence the athlete’s experience. Participant quotes prefaced with an A were from the interviews with SO athletes and those prefaced with a P were from the National Team.

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**Table 1:** An overview of superordinate and subordinate themes and the ecological system levels they are situated within

**Organisation-created Motivational Climate (Exo-level)**

Differing experiences relating to structural factors were identified between the groups. Participants noted the impact these experiences had on their wellbeing, cohesion, and performance.

**Strategic Planning**

The planning of competition logistics was felt to influence individual and group preparation. This related to broad structures, such as the scheduling of domestic and international competitions, to the management of training and competition camps. For example, one National Team (NT) athlete noted:

> We live day by day, which you can’t in a competition like that, where everything has to be planned. Even how we travel, why you travel ... You are going to spend 15 days all together. If there are no rules, if there is no plan, that’s where things go wrong. (P1)

**Long-term Athlete Development**

A long-term, holistic, and tailored programme of support was felt to be essential to competitive success. For example, one Special Olympics (SO) athlete noted:

> The preparation was great, one and a half years full out training. In all my life I never had this kind of preparation which was over and above.... All coaches helped me, and without them I wouldn’t have made it. (A1)

Conversely, the lack long-term support experienced by NT athletes was felt to thwart their potential.

> My job is to train and to perform. Your job is to make us perform better by helping us with whatever we can have... The people who plan are people who are not inside the team—and that is the problem. So, you need to know what is happening and how to act. (P1)

**In-competition Support**

Participants valued appropriate support and resources during the competition to their performance and identity formation. One participant noted:
We did not have all of this [results] if we were not prepared like that. If you see the before and after, the difference is huge. It was a big step that helped me a lot in my performance. Even the fact that when you see the other athletes you see that we got the best treatment like proper athletes. (A2)

Another participant noted a contrasting experience,

I believe if we went in competition at 100% of our fitness, good preparation and everything good, we would have been in position to get a better result. Maybe we wouldn’t have but we would have been in a better position. (P1)

Athlete Wellbeing

Organisational backing provided peace of mind and a sense of security. The commitment shown through long-term holistic support gave a sense of appreciation that was the foundation to a positive identity and wellbeing. One participant noted:

This made me feel that we matter, that there are people believing in us and investing in us. It is a booster that makes us feel important and that we can do everything. (A2)

In contrast, referring to the lack of appropriate athletic and logistical support, athletes noted the stress and fatigue when entering competition:

The players give a lot of their time, losing on school, on work, and some of them even give up their business. Apart from training, we are away from our families. So, for the commitment we are giving we are not being appreciated as much. (P4)

Cohesion

Organisational structures were felt to influence relationships within teams. For example, club rivalries experienced prior to international competitions were felt to reduce team cohesion and motivation.

When you go down for a game and you see a team functioning as 2 or 3 groups of different people and compounded with a lot of lost games at the beginning of the competition which affect your motivation. And at a point it was a case of, “can’t wait to get back home. (P2)

Sustained relationships with agreed goals promoted valued rapport.

...this experience, I think, it brought me closer to my teammates than it would ever have if we were just training ‘cause we spent the entire day together so you get to know them much better and you build a stronger relationship with them. (A3)

Athletic Preparation (Meso-level)

High-quality physical and psychological preparation was considered crucial. Both groups identified several themes felt to influence preparation for competition.
Training Timeframes

The SO squad recognised the benefits of a 2-year programme of support. In contrast, NT athletes felt that restricted preparation time reduced their competition readiness.

We weren’t prepared for a long tournament like that. In three days, you cannot switch from the expectation of your club to a national team... You cannot go to European Championships without your own identity, without your own tactics. They might be the same as the others, but the others know how to put them in action—we don’t. Physically we might be equal, but tactically they are better. (P1)

Professional Support Staff

The SO team valued the experience of various professional staff in promoting their welfare and performance.

At first I thought I would have the same programme but the training programme has been adapted to each individual athlete’s needs. It has also been very useful for everyday life and for the upcoming competitions and for the future. (A3)

NT athletes felt that the lack of support from professionals was restricting their development and performance.

The psychologist would help if we discuss the problems we have with the coach. One cannot talk certain things with other players because you would be influencing your mates. The psychologist can serve as a link to help the coach to better himself, attitude-wise. (P4)

Athletic Attitude

The SO team preparation included psychological support aimed at promoting a positive identity and confidence. In contrast, NT athletes experienced doubts and insecurities.

Knowing that you are not doing your best to prepare for the competition also contributes to this feeling of inferiority. It’s a huge factor. But in Malta, all players have a job or studies, so we don’t have the time they have. They are professionals... Enthusiasm lacks in the senior team, especially during training sessions. (P6)

Perceived Coach-created Motivational Climate (Micro-level)

The coach relationships identified by both groups are central to the quality of their experience. Three contrasting themes emerged.

Coach Behaviour

SO coaches promoted an adaptive motivational climate focused on confidence by building relationships with participants that extended beyond athletics. Participants reported coaches showing discipline, balance between being a friend and a mentor, and flexibility in supporting athlete needs.
She is quite serious, my coach. She jokes around with me ’cause she understands me. Her character is like mine. But when it’s serious[ness] time, it’s serious[ness] time…. She motivates me a lot. But she is part of the system now. When I have doubts, she helps me clear my doubts. (A1)

NT athletes experienced a coach who appeared stressed, unequal, inconsistent, unenthusiastic, and without a structured approach. For example;

Something which bothers me is when not everyone is treated the same. When someone makes a mistake, and it is one of the older ones, it is ok. If it is the younger ones it’s different. It’s just a little thing which might affect me. (P6)

I believe that the coach has lost his enthusiasm for the trainings sessions and that is why I told you that with him I cannot prove myself. (P4)

Feedback

The quality and tone of feedback contrasted between the two groups. While SO coaches provided constructive, specific, and actionable feedback, NT athletes felt feedback was too general, focused on faults, late in coming, and not directed to future performances. This left several participants feeling alone to cope, without clear guidance for upcoming matches. For example, an SO participant noted, “She not only points out what I’m doing wrong, but she also tries to correct them with you. She helps you a lot as a coach… She pinpoints the negative, not as destructive feedback, but constructive to my benefit and improve[ment].” (A1)

Conversely, a NT participant said, “He gives general feedback. However, he does not tell us what we could have done better. He does not give specific feedback.” (P4)

Long-term Development

Athletes wanted to feel that coaches knew them deeply and were invested in their long-term development. Being able to tailor their training in this way promoted trust and confidence. One SO participant stated;

She knows me inside out. She knows everything, like what will make me push myself more, what less and how much I have left in me during a training session… She understands how we feel and adapts. (A2)

Athlete Self-concept (Individual Level)

Individuals’ self-conceptualisation was developed through interactions with their environment, with participants relating these personal attributes to themes throughout the ecological levels. Individual factors were felt to contribute to overall wellbeing and performance, with emergent themes differing between groups.

Athlete Identity

The training programme and competition outcomes contributed to the participants’ athletic identity. One NT athlete noted,

We should remember that we’re [competing] with professionals. These are people trained to do this, up to six, eight hours a day. So, our physical
preparation will never be as [equal to] theirs, no matter how much we try to cram in the last three weeks. (P2)

This was felt to impact performance, with one NT athlete noting:

Why should we keep having the mentality that we are inferior to everyone? We are not the kind of team to compete at the top level but you cannot go into the pitch with a mindset that you are going to lose. (P6)

**Athlete Confidence**

During the initial stages of the training programme, athletes are doubtful about coping. This might be due to fear of the unknown and what they perceive as impossible to attain. As the athletes themselves acknowledge, a structured support system facilitated the journey, equipping the athletes with attitude, confidence, and skill:

Above all, psychologically I did not feel important. This made me feel that we matter, that there are people believing in us and investing in us. It is a booster that makes us feel important and that we can do everything. (A2)

The organisation-created environment, apart from equipping athletes with competitive competence, also developed their social skills:

And so first I was just an athlete and then I ended up a role model... this affected me positively and boosted me, feeling appreciated for what I am doing. (A1)

**Projected Image**

Participants felt the responsibility of positively representing Malta. Furthermore, individual and group presentation influenced their confidence and self-conceptualisation. One SO stated, “It is not a normal competition, since it is something big, since you are representing the Special Olympics and your country. It is a huge role.” (A2)

However, NT athletes reported the detrimental impact of feeling you were presenting an unprofessional image.

Even the image you project to other teams, going down for breakfast at separate times. It’s a bad image. We look like tourists. If we start improving on these small things and be more disciplined, other countries would notice that we are getting better. Even if we want to be invited for training camps. They know we are serious. We get more respected... The image which you project is very important. (P1)

**Discussion**

Our results support the broad principles outlined by Bronfenbrenner (1977) in his ecological systems theory, where individuals function within a complex system of relationships and are affected by multiple levels of their surrounding environment. The evidence presented to us suggests an environment-athlete relationship that influences the nature of social interactions, as well as how athletes construct attitudes and perceptions about themselves.
and others. Consequently, how athletes made sense of their social environment determined the quality of their experiences and their athletic development.

Nonetheless, in contrast to Bronfrenbrenner’s original idea of a hierarchal system of influence, our findings point to social contextual determinants being interrelated across the different levels of the ecological system and together influence, in contrasting ways, the experiences of athletes from both groups. This supports a networked ecological model which places primary importance on the individual’s interactions with systems over the discrete, nested ecological structure (Neal and Neal 2013). That is, the nested configuration of systems does not adequately explain the interactions and influences upon the individual. This is evidenced by the direct influence that organisational structures had on athletes’ identity and wellbeing.

Exosystem structures, such as strategic planning, long term-athlete development plans, and in-competition support were perceived by both groups as determining team and individual outcomes. The nature and influence of the systems differed between groups. The SO athletes valued a long-term, individualised, and holistic programme of psychological and physical support.

Our findings recognise the direct and indirect influence of distal systems on individuals within a networked model. Lee and Martinek (2013) discussed the role of process-person-context-time relationships for the development and transfer of values and attitudes in youth sport participants. This highlights the role of broader systems that provide an enduring influence upon an individual. The current findings support the proposition that attitudes are the result of the relationships athletes perceive over time within their athletic environment, including feelings of being valued and listened to within the exosystem structures. Thus, support and planning at an organisational level provide the foundation for athletic identity, cohesion, and wellbeing.

The theme of athletic preparation recognises the importance of an integrated approach of sport performance support and its influence on the individual. Previous research has shown the influence of mesosystem contexts without a particular focus on athletes themselves. For example, the relationship between parents and teachers has been predicted as determining school engagement in primary education (Hughes and Kwok 2007). Current findings highlight the coherent and tailored physical and mental support from a range of appropriate professional staff contributes to enhanced confidence, positive social relationships, and athletic development.

SO programmes commonly aim to provide holistic athlete development (Farrell et al. 2004), with a particular focus on enhanced sports confidence, social competence, and self-esteem (Dykens and Cohen 1996; Pedrinelli et al. 2012). SO athletes in our present study felt socially supported and professional staff (e.g. parents, peers, nutritionist, psychologists, physiotherapists, etc.) developed a positive identity and confidence. Conversely, restricted support lacking a clear structure promoted a sense of inferiority, poor social interactions, and reduced confidence, especially in tactical planning.

Within the athletes’ microsystem, a structured, coach-created environment was perceived to influence athletes’ ability to face competition challenges and experience success. Coach behaviour and feedback within a long-term development plan was identified as central feature in determining these interactions.
The perceptions of the coach-created climates contrasted between the two groups. Findings suggest that SO coaches facilitated an environment whereby athletes felt themselves part of the decisions taken about their progress, offered constructive feedback, provided athletes with developmental opportunities, and made them feel appreciated and valued. Shapiro (2003) has previously noted the importance of similar support in the motives of SO athletes. We suggest that this is a vital aspect of a coach’s role insomuch as athletes can experience a sense of agency and mastery over their environment, thus disguising the inevitable (yet unhelpful) reality that they are often receivers of sporting and political policy structures.

The inclusive support noted by SO participants reflects an autonomous supportive climate which recognises athletes needs and the impact of the coaching behaviours, as framed by self-Determination theory (Ryan and Deci 2017). The satisfaction or thwarting of athletes’ basic psychological needs of autonomy, relatedness, and competence has been shown to influence the quality of motivation and wellbeing (Delrue et al. 2019). In this sense, sport coaching is understood as a form of policy enactment that is as much a political and social action as it is pedagogical one. This, of course, is a difficult terrain to navigate and is further complicated given that coaches’ perceived and actual behaviours often differ (Smith et al. 2016), making the development of these autonomous supportive climates challenging.

Previous authors have noted the frequency with which coaches, rather than athletes, appear to be the defining individual within an ecology (Ribeiro et al. 2019). That is, resources and practices are often determined by the needs and preferences of coaches rather than athletes. To this end, Woods et al. (2020) suggest coaches be viewed as learning environment designers, adopting a local-to-global approach that truly reflects the athlete at the centre of the ecological system.

Athletes’ self-perceptions differed between the two groups, appearing to have developed through interactions with social contextual determinants at different levels of the ecological system. Findings suggest differences in athletic identity, confidence, and their own projected image, largely centred on the meaning of being an international athlete representing Malta. Reflecting a networked approach (Neal and Neal 2013), the influence of all levels of the ecological model are apparent when exploring these athlete characteristics.

While previous research (Balaguer et al. 2012) has shown the impact of the motivational climate on athlete wellbeing, Delrue et al. (2019) found effects of the coaching environment on athletes are largely independent of the individual’s dispositional motivation. This supports the role of broader systems upon athlete engagement, wellbeing, and performance.

Traditional conceptions of sport performance adopt a closed loop model in which skill execution is considered in isolation. In contrast, Araújo, Davids, and Hristovski (2006) argue that human performance, underpinned by decision making, is an expression of the open environment-individual dynamics. This study goes some way to consider the affordances available to the individual athletes derived from all systems within an ecological model. Therefore, our current findings support expanding our notion of systems that influence individual development (see Figure 2).
Limitations

The current study compares the Maltese athletes’ experiences of competition preparation and performance. While exploring athlete support, it is recognised that the needs of SO and mainstream athletes will differ. While specific features of support may not be comparable, current findings highlight the need for long-term, tailored support for the individual athlete.

A limitation of the current study was the inability to explore systems within other settings. The networking of settings, such as family, work, and school play a central role in the athletic development of all athletes (Côté and Erickson 2016a). Thus, future research should explore the interplay of domestic, professional, and athletic settings through an ecological systems lens.

Conclusions

This study used an ecological systems approach to contrast the experiences of two groups of Maltese athletes preparing for and engaging in major international competition. The results found differences between more and less successful teams at all levels of ecological systems. Individual athletes felt the influence of coach-created microsystems as well the nature of exosystem structures. Further evidence of interacting systems supports a networked ecological model approach. The results highlight the importance of tailored, long-term support that promotes inclusion, autonomy, social connection, and organisational commitment to athletes. This requires an athlete-centred approach at all levels of the ecological model.

Recommendations

This research has inevitable applications to the existing sports policy landscape in Malta, especially given recent announcements by the Maltese government that significant funding is planned for elite sport. Our first recommendation then, given that there is a lack of
studies that consider the unique geography of Malta and its unique cultural contexts, is to warn against merely mapping other sporting systems and strategies, from other nations, onto the Maltese context, without an empirical base and without a rigorous methodology that monitors and evaluates emergent sporting initiative and policies.

The standing of Malta in international elite sport is unique in the sense it is a small nation regularly competing against much larger nations with more mature and better-funded sports systems. Our findings in the Maltese context not only echo other research in the area, which emphasises the key role of the coach, but suggest all organisation decisions should aim to foster an environment that empowers the athlete to feel in control, one that shields them from external stressors such as political expectation related to investment and expected outcomes. From this position, the psychology of the athlete is similar to those from other nations and higher-ability groups. This is only possible in an environment which recognises the needs of the athletes and is sensitive to the influence of organisational decisions on athletes’ attitudes, feelings, and behaviour. Therefore, our second recommendation is to make athletes directly part of the decision-making process, whereby sports policymakers listen and give a voice to the main stakeholders, empowering them with a sense of identity and ownership over their athletic development.

Our third and final recommendation is to professionalise the organisational systems involved, in order to coordinate travel, fixtures, training, and support systems to prioritize the athletes’ experience and seek to maximize coaches’ and athletes’ development and performance.

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