

All-Around: Elite Gymnasts' Perspectives on Creating a Healthy Culture



Heather Bolton¹, Daniel Rhind²

^{1,2} School of Sport, Exercise and Health Sciences, Loughborough University, Leicestershire, UK.

ABSTRACT: The need to create healthy cultures within Gymnastics has been demonstrated by a series of high profile cases which are illustrative of unhealthy cultures. The present study interviewed 6 international level gymnasts to explore their perceptions as to what constitutes a healthy culture. Inductive thematic analysis highlighted the need to adopt a socio-ecological approach which recognizes the influences of factors at the individual (i.e., developing ability and achieving personal goals), interpersonal (i.e., supportive peer relationships and effective coach-athlete relationship) and institutional (i.e., sense of community and a focus on developing psychosocial skills) levels. The findings from the present study can be used to inform coaches and national governing bodies on the importance of these factors, especially when considering the prioritisation of gymnasts' psychological wellbeing in the context of elite sport.

KEYWORDS: satisfaction, gymnastics, coach-athlete relationship, psychological wellbeing

There are many benefits that derive from participation in sport, such as good health, personal growth, and enjoyment [1]. These should all be facilitated by a healthy culture which contributes to a positive athlete experience [2] and performance [3]. Recent high profile cases, investigations and empirical evidence have illustrated how toxic cultures can facilitate experiences which jeopardise athlete well-being. Research is therefore merited into the perspectives of elite athletes regarding what they think constitutes a healthy culture.

Early work in sport psychology focused on the concept of athlete satisfaction [4]. For instance, in 1997, Riemer and Chelladurai highlighted how athlete satisfaction was influenced by 5 key factors: performance, leadership, the team, the individual, and the organization. They noted that intrinsic satisfaction relates to the self and is achieved directly through factors such as personal goal attainment, personal growth, and individual performance. Extrinsic satisfaction, on the other hand, is mediated through external aspects such as training and instruction, friendship, and belongingness.

The focus of researchers therefore broadened to consider the influence of the relationships which athletes have with those around them in the context of sport. One key relationship is that between the athlete and their coach [5]. Jowett (2005) [6] described the coach-athlete relationship as fundamental for the coaching process, as it will contribute to achieving desired sporting outcomes, such as satisfaction and high performance levels. The key to achieving these outcomes is through fostering an effective coach-athlete relationship, which can be attained through support, compassion, collaboration, and kindness [7]. In contrast, when such characteristics are not in place, ineffective and unhealthy relationships can develop (8). Conceptual models have been developed to explain the dynamics within the coach-athlete relationship and to understand what contributes to a good quality partnership. Based on Kelley and Thibaut's (1978) theory of interdependence [9], Jowett (2007) created the 3+1Cs conceptual model and stated that the relationship between a coach and athlete relates to how they support one another through their thoughts, feelings, and behaviours [10]. This mutuality, Jowett explained, is the basis to the coach-athlete relationship. Jowett's model explains that this interdependence between the coach and athlete can be measured through three key constructs: closeness, commitment, and complementarity. Closeness refers to the respect and trust that the coach and athlete have for each other and the overall feelings the coach and athlete experience within the relationship. Commitment regards the motivation from both the coach and the athlete towards maintaining their relationship and highlights their cognitive thought processes. Complementarity refers to the shared, cooperative behaviours that the coach and athlete present and, overall, concerns behavioural aspects of the interdependence. The presence of these constructs between a coach and an athlete is understood to account for a good quality relationship. It is also important that the quality of such relationships is maintained over time (11-14). A supportive network of relationships can represent part of a healthy culture which promote athlete well-being (15-17, 24).

Research is now required which captures the experiences of elite athletes. Much of the research to date has employed quantitative methods using questionnaires and cross-sectional designs. There is a need to explore athlete experiences in more depth

All-Around: Elite Gymnasts' Perspectives on Creating a Healthy Culture

through employing qualitative methods, such as interviews (18). This enables richer data to be generated which can reflect athlete's day-to-day experiences (19).

The present study focused on the sport of gymnastics. In the aftermath of national investigations in countries including the United Kingdom, United States of America and Australia into abusive and toxic cultures (25), it is now timely to explore what could constitute a healthy culture. Sport specific research is merited because different sports will likely have different cultures (20). Elite gymnasts can specialize at a relatively young age and can develop relationships within the sport which are similar to that between a child and their parent/guardian (21). Gymnastics involves a high volume of training hours and ensures that athletes will spend a lot of time within this context (22-23). By highlighting what helps to create a healthy culture, the present study can yield important insights for gymnasts, coaches and governing bodies through informing policy, education and practice. The present study therefore posed the question: What do elite gymnasts believe helps create a healthy culture?

METHODS

Participants Interviews were conducted with 6 elite gymnasts (3 female and 3 male) who were all above 18 years of age (Mean age = 20.33). The participants were purposively sampled through existing links with the research team. All gymnasts competed internationally. Further details are withheld to maintain anonymity. They are referred to in this paper as athletes 1-6.

Interview Guide

As the aim of the research was to explore gymnasts' subjective experiences, a qualitative approach was most appropriate to use, as this method allows researchers the opportunity to gain a deep understanding of an individual's experience in relation to the relevant context [26]. Qualitative research involves the exploration and analysis of language, rather than the quantification of data seen in quantitative research, which consequently allows researchers to discover patterns and build theories from the data [27].

The interview guide was informed by related research (2, 12). The interviews were semi-structured to allow for flexibility and exploration into the varying topics that arose, which provided the opportunity for the research to lead to the uncovering of useful data that otherwise may not have been extracted using structured interviews [28]. The interviews lasted for an average of 55 minutes and they were audio-recorded and subsequently transcribed, with the participants' permission.

Procedure

The study obtained ethical approval through the Ethics Approval Human Participants Sub-Committee and, before collecting any data, participants completed an informed consent sheet, were made aware that their personal details would remain anonymous and confidential, and were informed that they could end the interview at any time. Interviews were conducted via Microsoft Teams. The research team approached their personal contacts within the sport of Gymnastics and invited them to participate. Those who were interested in participating were provided with the participant information sheet to understand the purpose and aims of the study. Interviews were then arranged for a mutually convenient time. The fact that the interviewer was already known to the participants was viewed as a strength of the approach because it helped to build rapport and to relax the participants.

Data Analysis

Thematic analysis was selected as the method of data analysis, as it allows for the researcher to understand and compare those experiences through the identification of common themes found across the data [29]. Thematic analysis involves identifying key pieces of information and creating codes to highlight patterns that emerge from the data, which can be used to compare to existing theories and concepts and generate new ideas [30]. This method of analysis was selected in order to identify the factors which facilitate healthy cultures from the gymnasts' perspectives.

To begin the analysis, the six interview transcripts were examined thoroughly and coded in order to recognise important patterns across the data which would later be used to form the general themes [31]. Both deductive and inductive analyses were utilised with the aim to explore the data in relation to existing literature and also uncover new ideas [30]. The codes were then sorted in to categories that would later become the identified factors. The general themes were decided by ordering the factors into an ecological structure.

While the use of thematic analysis for this present study provides benefits, such as the ability to explore personal accounts and compare the data, some issues, such as researcher bias, may arise. During the analysis, the interpretation of the data may be influenced by the researcher's preconception surrounding the topic of concern, thus affecting the trustworthiness of the researcher [32]. To overcome this potential bias, the researcher discussed the finalised themes and sub-themes with the other author to challenge assumptions and play the role of a critical friend [33].

RESULTS

Several factors were found to constitute a healthy culture from the gymnasts' perspectives. These were categorized using an ecological model in terms of their applicability to the individual, interpersonal and institutional levels. Table 1 summarises the three main themes and the sub-themes that each of them contain. Each of the participants commented on all

All-Around: Elite Gymnasts' Perspectives on Creating a Healthy Culture

Table 1. Factors which facilitate a healthy culture

Theme	Subthemes
Individual level	Developing ability Achieving Goals
Interpersonal level	Supportive peer relationships Effective coach-athlete relationship
Institutional level	Sense of community Developing psychosocial skills

Each of these factors are now discussed and illustrated with participant quotes.

Individual level

These factors were those which related directly to the gymnasts. This theme contained two sub-themes and those were developing ability and achieving goals. Having a feeling that one was developing abilities over time was viewed as being part of a healthy culture. One gymnast discussed the importance of having a sense of progress:

I just wanted to get better and just see that; I never wanted to stall and never wanted to fall behind everyone else. I never wanted to win gold. I just liked being the best. It didn't bother me having a medal. I just liked being better. (Athlete 6)

Another gymnast described that he eventually lost interest in the sport because he was not learning new skills and was therefore stagnant at the same level of gymnastics:

I'd lost interest over the past sort of probably six months before that just cause I, I'd go to gym and we wouldn't do anything. We'd just sort of do our normal like routines and no like upgrades and anything like that. So I just didn't care anymore. (Athlete 2)

The following quote is an example of achieving goals, and the gymnast felt that a healthy culture enables this to happen: Yeah, I had a goal on every piece that I wanted to reach, so for example on vault it was my Tsuk, on bars it was my giants, on beam it was to have a flighted element, and on floor I wanted to get my twist in a routine, and once I had achieved all that, I felt as though like I'd done what I really wanted to do. (Athlete 1)

Gymnasts therefore perceived that a healthy culture would be one in which they could continue to develop their ability as well as facilitating them achieving their goals.

Interpersonal level

The factors at the interpersonal level were supportive peer relationships and an effective coach-athlete relationship. Gymnasts highlighted the key role played by their peers in creating and sustaining a healthy culture. For example: My relationship with my teammates helped the positive experience because some things in gymnastics, it is a tough sport and you know, every day you get told do this do that you know. You know, not shouted at, but like, you know, stern words every session and the only people that really get that is your teammates because they go through it with you. So, I think definitely the relationship with my teammates was a positive experience. (Athlete 1)

My friends that I've made, like I know they're lifelong friends. The time you spend with them as well, like, it's crazy! Yeah, I'd say the people, you guys just know each other so well, like you form such a good bond, like, you just get to know everything about them. (Athlete 4)

Interpersonal relationships in general were a common discussion point for the participants as, despite gymnastics being an individual sport, support from others was seen as a key contributor to doing well, enjoying the sport, and enjoying a healthy culture. The importance of interpersonal relationships was also highlighted in relation to the coach:

You hear about people who literally come out of gymnastics, and they just hate the sport and everything about it because their coach was so horrible. Like, just put them off from the entire sport. Um, yeah, luckily my coach definitely cultivated my love for it. (Athlete 4)

My coach, that was sort of what, what drove me to, well, get better at gymnastics, just that basic encouragement like saying well done saying maybe try this next or try that, and just basically showing that they cared or were interested or invested in my actual gymnastics. (Athlete 5)

A lack of engagement from the coach can also lead to a negative culture being experienced: The coach-athlete relationship was noted as an important contributing factor to gymnasts' satisfaction, as participants not only discussed the impacts that came from a good coach-athlete relationship, but also commented on ways in which their coaches negatively affected their satisfaction. One athlete discussed how the decline in engagement and unenthusiastic attitudes from their coach wore off on them, which led to them falling out of love with the sport:

She'd sit down the whole time. She wouldn't be up around, like helping. She would just sit there and we just did our things. And that was really when I stopped it because I, I was falling out of love with it in the same sort of way she was, she wasn't showing

All-Around: Elite Gymnasts' Perspectives on Creating a Healthy Culture

interest, that's pretty much what led me to deciding to stop it... It really did take away, without the motivation and the feedback, from it. (Athlete 2)

The significance of interpersonal relationships, both in terms of peers and the coach, were frequently mentioned by all participants. Indeed, the very manifestation of a healthy culture may be best seen and experienced through a gymnast's interactions with those around them within the context of the sport. Such interactions and relationships help to fuel the nature of the culture and the extent to which it is experienced as healthy or unhealthy.

Institutional level

The institutional level factors concerned having a sense of community and a broader focus on the development of psychosocial skills across the organization. The customs associated with gymnastics, such as the long and frequent training sessions, mean gymnasts spend a lot of time with their teammates and coaches, often similar amounts of time as they would spend with their own families. Therefore, the community that is created in a gymnastics environment is perceived to play a critical role in shaping a healthy culture. One gymnast explained:

They're like family ... I know 'cause I've been there for so long, because I was there so much, I knew everyone there, like my coach was my main one, but there's other coaches that would help me out like everyone was there ... I still go back and I still know everyone there. It's more like the home away from home aspect that it was. It's just going somewhere to become, like ... I was more comfortable there than I was at school, like it was, it was at the time, it was the best place for me to be and so just, yeah. As I said, just a comfortable place for me to be, away from home. (Athlete 2)

My mum became a coach as well. She became a family friend of my coach and I was sort of pulled in to that as well, which was never a bad thing... my mum would help with the gardening at theirs and I'd be babysitting their kids... it was a very friendly environment in that sense. (Athlete 3)

Gymnasts participate in the sport to learn and improve their gymnastics capabilities, but along the way they also learn psychosocial skills that can be applicable to other aspects of their life. Participants perceived that this was an important factor at the institutional level that help to create a healthy culture. One gymnast explained:

You were given responsibility within the gym and that definitely grew my confidence massively, and I think that's definitely helped me come out my shell, be more confident and able to talk to different people. Um, that social environment that they created, it was one that I thrived in. (Athlete 3)

Yeah, it helped my social interaction and confidence... Being in a gymnastics environment has massively increased that for me, and it only got more prominent the longer I stayed in the sport... That's probably where most of my growth came from, from being around the people, being in the sport. (Athlete 2)

The results demonstrated that the institutional level has a key influence in creating a healthy culture through providing a sense of community and promoting the broader development of gymnasts beyond performance.

DISCUSSION

The aim of the present study was to explore the factors which elite gymnasts perceive to facilitate a healthy culture. The findings emphasise the need to adopt a holistic approach which recognizes the influence of factors at the individual, interpersonal and institutional levels. Each main theme included two sub-themes: individual level (i.e., developing ability and achieving goals), interpersonal level (i.e., supportive peer relationships and effective coach-athlete relationship) and institutional level (i.e., sense of community and developing psychosocial skills).

The findings support those of previous research which has highlighted that a range of factors shape an athlete's experience (2). This study also supports the body of literature which evidences the importance of close relationships in sport (5, 7, 12). Through adopting a qualitative approach, the present study was able to explore a broader range of factors (28). It builds on the extant literature to illustrate how these factors combine to create the salient culture. It also highlights how influences at various levels interact. As a result, efforts to create healthy cultures in gymnasts also need to be equally multi-levelled and have elements which target the individual, interpersonal and institutional levels.

There are limitations associated with the present study which could be overcome through future research. Firstly, retrospective interviews were used with the participants looking back over their careers. Which this affords them the opportunity to reflect on their experiences, this is vulnerable to memory and recall bias. Research which captures gymnasts current experiences is therefore merited such that these can be tracked over time. Furthermore, the present study focused on the gymnast perspective. There is clear scope for similar studies to be conducted to capture the perceptions of other key stakeholders such as coaches, parents and management staff. Finally, the identified factors are perceived to help create a healthy culture. The extent to which each factor has a role to play can be further investigated. For example, interventions could be developed, implemented and evaluated to establish whether manipulating each of these factors can indeed have an impact on gymnast's perceptions of the salient culture.

The present study has provided an insight into the factors which influence a healthy culture. The knowledge of these factors can be used to inform and educate coaches and national governing bodies, so that the well-being of gymnasts is prioritised in the sport. The learning and understanding of the factors could be implemented in the coaching courses and exams that coaches are required to

All-Around: Elite Gymnasts' Perspectives on Creating a Healthy Culture

undertake, and national governing bodies could highlight the importance of these factors in coaching and participation guidelines. Alongside this, the factors may be particularly important to consider with regards to the recent national reviews of gymnastics cultures in the United Kingdom, United States of America and Australia. To use a gymnastics phrase, a healthy culture, and the factors which facilitate this, are 'all-around' gymnasts. Through recognizing this, we can start to work towards implementing strategies which have a positive impact on athlete experiences.

REFERENCES

- 1) Wankel, L. M., & Berger, B. G. (1990). The Psychological and Social Benefits of Sport and Physical Activity. *Journal of Leisure Research*, 22(2), 167-182.
- 2) Riemer, H. A., & Chelladurai, P. (1998). Development of the athlete satisfaction questionnaire (ASQ). *Journal of Sport and Exercise Psychology*, 20(2), 127-156.
- 3) Chelladurai, P., & Riemer, H. A. (1997). A classification of facets of athlete satisfaction. *Journal of sport management*, 11(2), 133-159.
- 4) Hodge, K., Lonsdale, C., & Jackson, S. A. (2009). Athlete engagement in elite sport: An exploratory investigation of antecedents and consequences. *Sport Psychologist*, 23(2).
- 5) Coakley, J. J. (1990). *Sport in society: Issues and Controversies* (4th ed.). CV Mosby Company.
- 6) Jowett, S. (2005). The coach-athlete partnership. *The Psychologist*, 18(7), 412-415.
- 7) Jowett, S., & Cockerill, I. M. (2003). Olympic medallists' perspective of the athlete-coach relationship. *Psychology of Sport and Exercise*, 4(4), 313-331.
- 8) Gould, D., Guinan, D., Greenleaf, C., Medbery, R., & Peterson, K. (1999). Factors affecting Olympic performance: Perceptions of athletes and coaches from more and less successful teams. *The Sport Psychologist*, 13(4), 371-394.
- 9) Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York, NY: Wiley.
- 10) Jowett, S. (2007). Interdependence analysis and the 3+ 1Cs in the coach-athlete relationship. In S. Jowett & D. Lavallee (Eds.), *Social psychology in sport* (pp. 15-27). Human Kinetics.
- 11) Canary, D. J., & Stafford, L. (1994). Maintaining relationships through routine and strategic interaction. In D. J. Canary & L. Stafford (Eds.), *Communication and Relational Maintenance* (pp. 3-22). San Diego, CA: Academic Press.
- 12) Rhind, D. J., & Jowett, S. (2010). Relationship maintenance strategies in the coach-athlete relationship: The development of the COMPASS model. *Journal of applied sport psychology*, 22(1), 106-121.
- 13) Davis, L., Jowett, S., & Tafvelin, S. (2019). Communication strategies: The fuel for quality coach-athlete relationships and athlete satisfaction. *Frontiers in Psychology*, 10(2156).
- 14) Jowett, S., & Nezelek, J. (2012). Relationship interdependence and satisfaction with important outcomes in coach-athlete dyads. *Journal of Social and Personal Relationships*, 29(3), 287-301.
- 15) Jowett, S., & Ntoumanis, N. (2004). The coach-athlete relationship questionnaire (CART-Q): Development and initial validation. *Scandinavian Journal of Medicine & Science in Sports*, 14(4), 245-257.
- 16) Lorimer, R. (2009). Coaches' satisfaction with their athletic partnerships. *International Journal of Coaching Science*, 3(2), 57-66.
- 17) Jowett, S., & Don Carolis, G. (2003). The coach-athlete relationship and perceived satisfaction in team sports. In R. Stelter (Ed.), *XIth European Congress of Sport Psychology Proceedings* (Vol. 11, pp. 83-84). Copenhagen, Denmark: Det Samfundsvideenskabelige Fakultets.
- 18) Ironson, G. H., Smith, P. C., Brannick, M. T., Gibson, W. M., & Paul, K. B. (1989). Construction of a Job in General scale: A comparison of global, composite, and specific measures. *Journal of Applied Psychology*, 74(2), 193-200.
- 19) Hopf, C. (2004). Qualitative interviews: An overview. *A companion to qualitative research*, 203(8).
- 20) Rhind, D. J., Jowett, S., & Yang, S. X. (2012). A comparison of athletes' perceptions of the coach-athlete relationship in team and individual sports. *Journal of Sport Behavior*, 35(4), 433-452.
- 21) Stirling, A. E., & Kerr, G. A. (2009). Abused athletes' perceptions of the coach-athlete relationship. *Sport in Society*, 12(2), 227-239.
- 22) White, R. L., & Bennie, A. (2015). Resilience in youth sport: A qualitative investigation of gymnastics coach and athlete perceptions. *International Journal of Sports Science & Coaching*, 10(2-3), 379-393.
- 23) Dowdell, T. (2011). Characteristics of effective gymnastics coaching. *Science of Gymnastics Journal*, 2(1), 15-24.
- 24) Jowett, S., O'Broin, A., & Palmer, S. (2010). On understanding the role and significance of a key two-person relationship in sport and executive coaching. *Sport & Exercise Psychology Review*, 6(2), 19-30.
- 25) UK Sport. (2020, August 25). The Whyte Review: the review into complaints of mistreatment in gymnastics. <https://www.uksport.gov.uk/news/2020/08/25/independent-review-into-gymnastics-begins>
- 26) Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and limitations of qualitative and quantitative research methods. *European Journal of Education Studies*, 3(9), 369-387.

All-Around: Elite Gymnasts' Perspectives on Creating a Healthy Culture

- 27) Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian & New Zealand Journal of Psychiatry*, 36(6), 717-732.
- 28) Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management*, 8(3), 238-264.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.