ARE WE LEVELLING THE PLAYING FIELD? A QUALITATIVE CASE STUDY OF THE AWARENESS, UPTAKE AND RELEVANCE OF THE IOC CONSENSUS STATEMENTS IN TWO COUNTRIES

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APPENDIX 2: Additional detail on Methods

Data collection

Qualitative experience

The interviews were conducted by MB, who is trained and experienced in qualitative research (PhD using qualitative methodologies).

Interview schedule

The interview questions were developed by LF, CF and MB, guided by the aim of the study. The interview schedule was circulated among the research team edited according to feedback. The full schedule is provided in Table 1 below.

Table 1. Semi-structured interview schedule.

Introdu	action	
•	Over recent years, the International Olympic Co Scientific Commission has supported the develo medicine consensus statements.	
•	Since 2004, 27 consensus statements have been based guidance for the promotion of athlete heal community.	
•	The number of consensus statements continues to dissemination (where the documents have been implementation (how are the documents used a statements has not been evaluated. This project i	used, by whom and how) and nd what are the outcomes) of these
•	The project has been supported by the IOC throu IOC are not involved in the design, actual condu	
•	Information you provide will not be made know	n to the IOC in any linked format.
•	This means what you speak about will not be ide you in any way.	entifiable in any reporting or linked back to
•	There are no right or wrong answers – we are lease on athlete health is gained, managed and shared.	
	firm completion of consent form Remind parti ht to withdraw. Confirm it is okay to audio rec	
<u>Unders</u>	standing the organisation	
Warm	up questions to allow interviewee to speak on an About the participant's position, role	easy topic
	About the SMC – structure	
	About safety policies or risk management plans About concerns on athlete health	in place
1.	What is your position / role in the SMC? How is	the SMC configured?
2.	Do you have any specific concerns regarding ath	nlete health?
3.	In what ways have you been involved in Olymp	ic athlete health (games attended etc)?
4.	What do you understand a consensus statement	to be?
Aware	ness of the statements	
	ction addresses research questions:	
	1. Are stakeholders aware of the statements?	
	2. How do the Sports Medical Commissions	
	become aware of, and subsequently access, the statements?	
1.	Tell me what you know about the medical	Added as interviews progressed:
	statements? -e.g. what topics they address, where they are published, how they are developed?	Why do you think stakeholders may be unaware of these statements?

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2.	How did you first learn about the medical statements?	<u>Added as interviews progressed:</u> How do you think awareness could / should be created around the availability of the consensus statements? (show examples of consensus statements)
3.	If a new statement became available, how do yo	*
4.	How would you go about accessing a statement?	
	Can you list any of the statements you have used	
6.	Were you aware of any changes in your views of over time?	
7.		us statements? What differences might
	ity and acceptability of the statements ction addresses research questions: 3. How acceptable (in terms of usefulness/prac each of the statements to the Sports Medical Com 4. Which statements have the Sports Medical Com (medical) practices for the support of athletes an	nmissions? missions adopted or implemented to inform
1. 2.	Do you make use of these statements in your organisation / personally? Who decides if a statement is going to be helpful or needed?	Can you walk me through an example of the process you would usually use to gather information on specific athlete health topics? (eg. The type of information accessed and how) / How do you keep up to date with current best evidence?
		How do you decide if this information /
3.	{Provide list of the statements} Is the information presented in the statements useful to your organisation, or to you personally? Why	resource is valuable / of good quality ? Is there a role for the IOC in providing you with info on the management of athlete health?
	information presented in the statements useful to your organisation, or to you personally? Why or why not?	Is there a role for the IOC in providing you with info on the management of athlete health?
3.	information presented in the statements useful to your organisation, or to you personally? Why	Is there a role for the IOC in providing you with info on the management of athlete health?
	information presented in the statements useful to your organisation, or to you personally? Why or why not? {If applicable} Can you walk me through an ex statement?	Is there a role for the IOC in providing you with info on the management of athlete health?
4.	information presented in the statements useful to your organisation, or to you personally? Why or why not? {If applicable} Can you walk me through an ex statement? Are there any barriers to integration of the	Is there a role for the IOC in providing you with info on the management of athlete health? cample of the process used to integrate a statements within your organisation? (Or for you / your organisation? How could this

his se	ection addresses research questions:	
	5. Which statements have not been adopted	l or implemented by the Sports Medica
	Commissions and why;	
	6. How do the Sports Medical Commissions sh	•
	clinicians/coaches and support staff and how de	> they ensure it is used?
1.	Which statements have you used a) as an organisation, b) personally?	Are there any reasons why you prefer not to use the consensus statements? Why?
2.		Which resources on athlete health have you used a) as an organisation, b)
3.	5 5 1	personally? How was it used?
4.	using these resources? What is the current process for sharing the statements from the IOC to your organisation?	Is there a different approach you would suggest?
5.	How do you share the statements and/or the information in them with your clinicians/coaches/support staff ? How do you know this is used by them? What do you think can facilitate this process?	What is the current process for sharing these resources to your organisation?
6.	If an athlete has a problem, what is the benefit of having a statement compared to not having one?	How do you share these resources with your clinicians/coaches/support staff? How do you know this is used by them? What do you think can facilitate this process?
	 mes from the statements ection addresses research questions: 7. What are the Sports Medical Commissions have made an impact on athlete health? 	
	8. What are the important issues faced by Spo focus of future statements?	rts Medical Commissions that could be th
1.	Have the statements had an impact on athlete health (e.g injuries, burnout, training load management, athlete preparation, etc.) Why? Have you formally measured this? What type	Have the resources that you use had an impact on athlete health. Why? Have you formally measured this? What type of impact?
	of impact?	
	1 8 8	nents to achieve its objective ? sonal / society /resources/ time constraints
2.	politics / cultures / impairments)	
		ing differently?

Are there any topics that you think should be addressed in the statements? What is **missing**? What would you like to see? Are there any topics that you think should be addressed before the next Olympic Games? What advice would you give the people who designed and implemented the consensus statements about how to make it effective in the real world? 7. Would you say a consensus statement is the most effective way of reaching our goals (athlete health)? If not, what would you recommend? If yes, what can be done to help consensus statements achieve better outcomes? Closing words Are there any other things regarding the statement that you would like to comment on? Is there anything discussed that you are concerned by? Thank you for participating Remind contact details and use of results Remind withdrawal of results You can withdraw your consent to participate at any time, without giving us a reason, provided this is communicated to us before we have started to analyse the data and results

Data analysis

Rigor and Trustworthiness

A relativist approach towards rigor and trustworthiness was adopted. Quality was not judged on a set of predetermined external criteria, but was considered in a study-specific way that was contextually situated.[1,2] Accordingly, the following points were considered throughout the study design, data collection and analysis phases. To enhance quality, it was important to reflect on how the findings could contribute to understanding of the translation of knowledge for athlete health protection and whether the findings were credible, transparent and would also generate new questions within this field. A rigorous, iterative analysis process was adopted that satisfied the research team's judgement of themes that were comprehensive, well-explored and supported by the data. The inclusion of one coder not present during the interviews (CB) facilitated particular discussion around new insights and testing of assumptions. During this process, researchers also reflected upon the ways in which their personal and academic background could shape the interpretations of the data. As such, periodic discussions among the co-authors and their peers were utilised to foreground different perspectives and to examine assumptions. Furthermore, the project team purposefully included a large, multi-disciplinary research team with different strengths and expertise to ensure a robust research design, and a diverse and comprehensive understanding of the data.

Finally, we agree with Braun & Clarke (2019) and Low (2019) that there is always potential for acquiring new insights as long as data continues to be collected and analysed.[3,4] Instead, our focus was on gaining context-sensitive insights from key informants in relation to our research question.[3,5] In this study, the participants were drawn from a limited participant pool, which naturally limited the sample size.

Excerpts from the analytical framework and framework matrix are depicted in Tables 2 and 3.

Table 2. Excerpt from analytical framework

Code	Definition	Example
Awareness through sports medicine platforms	Sports medicine platforms such as SASMA or BJSM has	I mean I guess - I mean BJSM has been very good in positioning the statements and the talk that happens around it from a social media
	facilitated awareness of consensus statement.	point of view, and also with some of them and I'm just trying to think which ones if I mean this is true, things like infographics make it a lot more accessible to the person on the street and even just in terms of translating the message.
Unaware of IOC research	Lack of awareness of IOC consensus statements or IOC's role in developing consensus statements	Yeah, so until you guys got in touch, zero. Really, I hadn't considered it, didn't realise they existed and certainly haven't been presented with any Consensus Statements. We don't see what we don't look for. If we don't know it's there, then we don't go looking for it. If nobody brings it to our attention
Awareness through colleagues	Becoming aware of statements through colleagues sharing or discussing statements in a formal or informal capacity	Some of our colleagues who are doing part- time sports but are closely linked to universitieswe've got our colleagues who are studying and as soon as they see something interesting, they post it on the group. So, for now, if I don't go and search for myself, we get information from the WhatsApp group.
Formatting will depend on who the target audience is	Format, lay-out, use of language must correspond / be determined by target audience	Are you giving it to SASCOC so the administrators know what to do with it or are you giving it to SASCOC to distribute to athletes? Because if they're giving it to SASCOC to distribute to athletes that SASCOC supports then it should come in infographic or a simple key take on this. If they're giving it to SASCOC for the benefit of their medical staff then it should come like this, it should come like a research and academic document. But if they're giving it to SASCOC for the clinicians that are non- academic that are going to service the athletes then it can probably come like this.
Used if relevant at the time	Statements utilised if topical issue at the time, or according to type of patients / exposure to conditions encountered at a specific time point	You know, what I would say the way I use them is it probably depends on what's happening in my world at the moment. The most recent one that I looked at in the last fortnight was one on supplements because you may be aware, we had an Australian athlete who failed a drug test and so supplements, you know, they go up and down. Usually, they go up when there's a crisis.

Table 3. Excerpt from the framework matrix

		Document analysis (DA) and notes
	Generally limited awareness	
South Africa		DA: Consensus statements
Participant 1	•	not easily located or visible
Participant 2	-Limited awareness For now, in football I've already been interested in hamstrings and ankles. So those ones I've read a lot about.	on IOC website DA: No formal
Participant 3	-	dissemination policies from
Participant 4	<u>-Limited awareness</u> I mean, the fact that I don't know that those were on the IOC website is an important point because if they're all there, it would be so easy for people, but people don't know. Yeah. I think also, I don't think enough people know that the IOC does research and plays that role in it. I don't think that they know that they have that scientific part to them. That's important, yeah	NOCs Note: SA P2 – references mentioned here not IOC consensus statements
Participant 5	<u>-Perception that IOC only concerned with Olympic Games</u> <u>-Unaware of IOC's research</u> <i>I don't think that they go onto the IOC website and seek information there, because one of the</i> <i>things here in this country is that not everybody is aspiring to go to Olympic Games as the</i> <i>doctor</i>	Note: Awareness appears to be linked to dissemination, whether IOC is considered a source of knowledge for clinical practice, and
Participant 6	<u>-Unaware of IOC's research</u> I only learned about the consensus statements very recently. With all my travels, it's hard to say why so I actually - when I searched, I came across one, and now I'm being part of it(writing a consensus statement)	determined by topics considered to be relevant at the time
	Yeah, this is tough because you're supposed to know about these things I don't think we know it actually exists	
Participant 7	<u>-Limited awareness</u> I'm not that familiar with the consensus statements.	
Australia		
Participant 1	<u>-Limited awareness</u> I don't know a lot about the IOC medical statements, to be honest	

	You get statements about cardiac abnormalities and ECG screening and these sorts of things. But whether or not that was an IOC statement or a statement from other colleges, I'm not sure. So the IOC statements don't stand out from other ones particularly.
Participant 2	<u>-Limited Awareness</u> I'm surprised by the fact that you say this - did you say there's 27? Man, that really, you know, that surprised me because I haven't, you know, I certainly haven't come close to read
Participant 3	<u>-Unaware of IOC's research</u> Yeah, so until you guys got in touch, zero. Really, I hadn't considered it, didn't realise they existed and certainly haven't been presented with any Consensus Statements. We don't see what we don't look for. If we don't know it's there, then we don't go looking for it. If nobody brings it to our attention
Participant 4	-
Participant 5	-
Participant 6	<u>-Limited Awareness</u> <i>I think - I've seen - I might have seen something on concussion. I think I've seen something on children, I think I've seen something on women. That's about it. So, I'm not - I deliberately didn't look it up, I feel that I should go and look it up and think oh my God. So that's being honest, it's really vague and I know - I'm just trying to think what the last - it was fairly recent anyway. There was something like children or women or something or perhaps a bit of both. It was reasonably recent, like in the last couple of years</i>
Participant 7	<u>-Unaware of IOC's research</u> I mean I do, we deal with these kinds of things all the time, but I've not been aware that there's been consensus statements in the IOC

References

- 1 Burke S. Rethinking 'validity' and 'trustworthiness' in qualitative inquiry. How might we judge the quality of qualitative research in sport and exercise sciences? In: Smith B, Sparkes A, eds. *Routledge Handbook of Qualitative Research in Sport and Exercise*. Routledge 2016.
- 2 Smith B, McGannon K. Developing rigor in qualitative research: problems and opportunities within sport and exercise psychology. *Int Rev Sport Exerc Psychol* 2018;**11**:101–21. doi:10.1080/1750984X.2017.1317357
- Braun V, Clarke V. To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qual Res Sport Exerc Heal* 2019;**00**:1–16. doi:10.1080/2159676X.2019.1704846
- 4 Low J. A Pragmatic Definition of the Concept of Theoretical Saturation. *Sociol Focus* 2019;**52**:131–9. doi:10.1080/00380237.2018.1544514
- 5 Braun V, Clake V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;**3**:77–101. doi:10.1191/1478088706qp063oa