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CONTEMPORARY VIEWS AND PROVOCATIONS



## Generalizability in qualitative research: misunderstandings, opportunities and recommendations for the sport and exercise sciences

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### ABSTRACT

Generalisation in relation to qualitative research has rarely been discussed in-depth in sport and exercise psychology, the sociology of sport, sport coaching, or sport management journals. Often there is no mention of generalizability in qualitative studies. When generalizability is mentioned in sport and exercise science journals it is often talked about briefly or highlighted as a limitation/weakness of qualitative research. The purpose of this paper is to provide a detailed discussion of generalisation in order to dispel any misunderstandings or myths about generalizability in qualitative research and offer guidance about how researchers might consider generalisation. It is emphasised that it is a misunderstanding to claim that qualitative research lacks generalizability. It is highlighted that statistical types of generalizability that inform quantitative research are not applicable to judge the value of qualitative research or claim that it lacks generalizability. Reasons as to why researchers might consider generalizability in qualitative research are then offered. It is emphasised that generalisations can be made from qualitative research, but just not in the same way as quantitative results are. To help guide how generalisation might be considered, four different types of generalizability are presented: naturalistic generalisation, transferability, analytical generalizability and intersectional generalizability. Practical strategies are also offered for considering generalizability when seeking to publish qualitative research or reflect on already published work. The paper concludes with a set of recommendations to support high quality and rigorous qualitative research for scholars – including journal editors and reviewers – in relation to generalizability.

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Generalisation is a term ordinarily discussed in relation to quantitative research. Generalizability is also often used to define quantitative research in positive ways. It is said that when properly applied quantitative methods can produce reliable results from a representative sample of participants that can be applied to a wider population or different contexts. Given that, the results from good quantitative research can be viewed as useful and beneficial. For instance, health policy-makers can confidently apply results from quantitative studies to the general population so that hopefully numerous publics can benefit. Likewise, quantitative research is often deemed of use to sport organisation leaders, sport psychologists, physical activity groups and sport coaches as they are provided with a seemingly generalizable and objective base on which to plan programmes and apply for funding.

Generalisation is not however a term ordinarily discussed or explicitly engaged with in qualitative studies published in the sport and exercise sciences. That is not to say that there is a complete absence

of talk or engagement about generalisation in our journals (Smith and Sparkes 2016, Sparkes and Smith 2014, Loy 2015). A careful examination of the qualitative literature across the sport and exercise sciences will find various examples in journals of researchers briefly mentioning generalizability. For example, some researchers productively call for more attention to generalizability in qualitative research (e.g. Darnell *et al.* 2017). Occasionally in the literature authors also note how their qualitative study might be generalizable (e.g. Black and Holt 2009, Allen-Collinson and Hockey 2010, Hayhurst 2016, Horrocks *et al.* 2016, Kuklick *et al.* 2016, Hurley *et al.* 2017, Shirazipour *et al.* 2017, Sparkes and Brighton 2017).

Notwithstanding the various journal articles that mention generalizability briefly, it remains that there is a lack of detailed discussion on generalisation and its meaning and use in relation to qualitative research in sport and exercise science journals. The purpose of this article therefore is to fill that gap by discussing generalisation in detail in relation to qualitative research. In focusing on that possible marker of quality as part of a list of on-going criteria for judging the goodness of qualitative research (Schinke *et al.* 2013, Sparkes and Smith 2014, Smith and McGannon 2017), I hope to dispel any understanding that a limitation/weakness of qualitative research is that it cannot be generalizable and stimulate further debate on generalizability. A complementary goal is to offer an expanded vision of generalizability by providing a detailed resource for researchers to consider generalisation in qualitative research. As part of that goal, a set of recommendations that journal editors, reviewers, researchers and policy-makers might consider when thinking about generalizability are offered.<sup>1</sup>

## Misunderstandings

A close inspection of the literature will reveal that authors of qualitative articles engage with generalizability in different ways. As noted, many articles do not mention generalisation at all, whilst others briefly note that their qualitative study might be generalizable. Many researchers however, especially in sport and exercise psychology, talk about generalizability as a limitation or weakness of qualitative research. For instance, in the literature one can find numerous articles in which it is stated in the limitation section that a weakness of the qualitative research produced is a lack of generalizability.<sup>2</sup> Such researchers might assume it is correct to name generalizability as a limitation of their qualitative research. But is it really a limitation? Is it a myth that qualitative research always lacks generalizability and a misunderstanding to suggest that in an article?

Qualitative research does lack generalizability *when* it is understood *only* through one particular type of generalizability, that is, *statistical-probabilistic generalizability*. Whilst the 'statistical generalizability model is almost never fully realised, even though the research community usually acts as though it is' (Polit and Beck 2010, p. 1457), that type of generalisation is normally sought through statistical sampling procedures and has two functions: (1) it allows the researcher to feel confident about the representativeness of their sample, and (2) such representativeness allows the researcher to make broader inferences. For such reasons, statistical-probabilistic generalizability is sensibly and commonly applied to *quantitative research*.

Yet, to apply statistical-probabilistic generalizability to *qualitative research* is problematic. Firstly, the ontological and epistemological assumptions that inform much qualitative research are different from the assumptions that underpin post-positivist quantitative research. Often the qualitative researcher believes that reality is multiple and dependent on them (i.e. the researcher, participants and various people). They frequently as well believe that knowledge is constructed and subjective, rather than discovered independently from researchers and found in an objective way (Lincoln *et al.* 2017). Given these understandings about what 'is' and 'is not' qualitative research, statistical-probabilistic generalizability does not fit with the ontological and epistemological assumptions of much qualitative research. Thus, the application of statistical-probabilistic generalizability to qualitative work makes little sense.

Secondly, when qualitative research is understood through statistical-probability generalizability it is as if that type of generalisation has been overgeneralized, as it were, to be the goal of all forms of research. Yet, statistical-probabilistic generalizability is not a meaningful goal for qualitative research. Qualitative research is about examining people's lives in rich detail, and to achieve that goal, small

numbers of people are often chosen through purposive or purposeful sampling strategies (e.g. maximum variation and/or criterion-based purposeful sampling) (Braun and Clarke 2013, Sparkes and Smith 2014). Rich knowledge and small samples purposefully chosen are thus unique *strengths* of qualitative research, *not weaknesses*. As Lewis *et al.* (2014) commented:

Qualitative research *cannot* be generalised on a statistical basis – it is not the prevalence of particular views or experiences, not the extent of their location within parts of the sample, about which inferences can be drawn. Nor, of course, is this the objective of qualitative research. Rather, the value of qualitative research is in revealing the breadth and nature of the phenomena under study. (p. 351)

Accordingly, if a researcher states that a weakness of their qualitative research is a lack of generalizability, and by which they *only* mean statistical-probability generalisation, they would be correct! But they have also misunderstood qualitative research. For reasons highlighted, statistical-probability generalisation is neither applicable to qualitative research nor a goal of it. Researchers should then avoid applying statistical-probability generalizability to qualitative research and making judgements about it through that type of generalisation. When that line of logic is followed not only does any foundation built on statistical-probability generalizability to base a claim that qualitative research lacks generalizability fall apart. Rather than understanding qualitative research as always lacking generalizability, openings are created in which generalizable becomes intriguing to consider.

According to various scholars (e.g. Sandelowski 1997, Yardley 2008, Green and Thorogood 2009, Lewis *et al.* 2014, Sparkes and Smith 2014, Hayhurst 2016, Kuklick *et al.* 2016, Shaw and Hoerber 2016, Darnell *et al.* 2017), generalisation should be a legitimate concern for qualitative researchers. In other words, as Wolcott (1995) put it, 'we cannot escape the nagging question of generalisation' (p. 132). Being concerned about generalizability does not however require sacrificing detailed and rich understandings of human beings, social life and materiality. Using generalisation doesn't either necessitate that one must adopt post-positivism, and believe that generalisations are final, objective and divorced from context rather than provisional, subjective and contextual. Nor does it mean that one should adapt, or even parallel, the methods of quantitative research by attempting to imitate the kinds of random samples drawn on in that work. Qualitative researchers must still ensure that the epistemologies (e.g. constructionism) and ontologies (e.g. relativism) they commit to guide the process and product of qualitative research, including how generalisation is dealt with and communicated. With these points in mind, why might a qualitative researcher be concerned with generalizability?

One reason to consider generalizability is that much is at stake for qualitative research when we ignore generalisation. For instance, ignoring generalisation can give the impression that qualitative researchers don't need to care about generalising. But we do need to care, or at least have a position on generalizability. That is because dominant forms of truth shape our disciplines in ways that at times shut down and/or police particular forms of knowledge, such as that produced by qualitative research. As part of that shaping, when we ignore generalizability the assumption that quantitative results are only generalizable and that quantitative methods are thus the most desirable will continue to prevail or remain unchallenged. It is likewise important to engage with generalizability because, as Shaw and Hoerber (2016) suggested, researchers, journal editors and reviewers may (continue to) believe that a limitation of qualitative research is a lack of generalizability and then use that as a rationale to critique, demean or reject qualitative research (see also Greenhalgh *et al.* 2016). We also know that policy-makers in government, sport coaches and sporting organisations can, at times, fail to take the findings of qualitative studies seriously. An important factor contributing to that failure is the often cited but false charge that the results are not generalizable (Green and Thorogood 2009). Thus, if we want researchers, organisations, government and so on to make appropriate and fair judgements about qualitative research, and want them to use our work, we need to be engaged with generalizability. One way to accomplish such engagement is to dispel any myth in research articles, conversations and so forth that a weakness or limitation of qualitative research is that it always lacks generalizability. Another way for qualitative researchers to engage is to make claims to their results being useful, at whatever level, when appropriate (Kay 2016).

Secondly, generalizability is a legitimate concern because qualitative research *can be and is* at times generalizable. Given that possibility of generalising, opportunities are opened for researchers not typically considered. For example, we can productively consider if generalizability is appropriate for a particular study, reflect on how qualitative research might be generalizable, and deliberate on ways to engage with audiences to demonstrate how generalisation is possible. To help with all that it can be useful to think through what *kind of relationship* the qualitative research findings might have to the *multiple and different types of generalizability* that can be drawn on beyond the statistical-probability type (Green and Thorogood 2009). As Collingridge and Gantt (2008) comment, 'generalizability is not limited to probability sampling theory. There are different ways of understanding generalisation' (p. 392). Thus, rather than simply stating that generalizability is not an issue in qualitative research, or claiming it is a limitation, researchers can be intrigued with the possible kind of relationship the study results may have to different types of generalisation.

### Opportunities to generalise: from generalizability to generalizabilities

There are different types of generalizability available to consider for researchers who choose to think about what kind of relationship their qualitative study results may have to generalizability. One type of generalisation for consideration is *naturalistic generalizability* (Stake 1978, 1995). In that type of generalisation, which is sometimes also referred to as representational generalisation (Lewis *et al.* 2014), generalizability is reached on the basis of recognition of similarities and differences to the results with which the reader is familiar. That is, naturalistic generalizability happens when the research resonates with the reader's personal engagement in life's affairs or vicarious, often tacit, experiences. For example, when an elite athlete encounters research on how sport organisations generate stress for its athletes in certain ways, do the findings reverberate with their personal sporting organisational experiences, do they feel as if the research was about them, and/or are the data and results recognisable in terms of what they have witnessed? Or does the research neither 'ring true' to their experiences nor speak to them? If the latter happens this does not mean that the research is 'invalid' or 'not useful'; an opportunity is presented to explore different responses to research (Smith and Sparkes 2011). If the former happens though, it might be suggested that the research displays naturalistic generalizability. In other words, the research bears familial resemblances to the readers' experiences, settings they move in, events they've observed or heard about, and people they have talked to. To enable naturalistic generalizability the researcher is required to provide audiences with enough detail of the participant's lives through adequate 'evidence' (e.g. interview quotations, observation field notes and/or visual material), enough contextual details, and richly layered theoretical expressions of a reality to help readers reflect upon these and make connections to their own lives. Examples of research from the sport and exercise sciences connecting with naturalistic generalizability can be found in Black and Holt (2009) in their coaching research and Sparkes and Brighton (2017) in their disability research.

Another type of generalisation that a qualitative researcher might seek is *transferability* (Tracy 2010), which is sometimes also referred to as inferential generalisation (Lewis *et al.* 2014) or case-to-case generalisation (Chenail 2010). Before offering a definition, it is important to note that what is meant by transferability here is *not* what Lincoln and Guba (1985) meant by transferability. Lincoln and Guba's idea of transferability was underpinned by epistemological foundationalism in the form of procedures or method to sort out trustworthy from untrustworthy interpretations of reality. Following that, transferability was about 'fittingness', 'defined as the degree of congruence between sending and receiving contexts' (p. 124).

In contrast to how Lincoln and Guba (1985) defined it, the idea of transferability here is underpinned by the epistemological assumption that knowledge is constructed and subjective, reality is multiple, created and mind-dependent, and methods cannot provide theory-free knowledge. Transferability is also different here in that it is defined as occurring whenever a person or group in one setting considers adopting something from another that the research has identified. The question then is not 'If Context A and Context B are congruent and fit', but rather 'To what extent are these results transferable to other

settings?' For example, a physical educator, sport community leader, or health policy-maker reading a qualitative report on how to promote active lifestyles might want to know: 'Is this something I can apply to my physical education class, local community group, or country to encourage active lifestyles?' When readers feel as though this can be the case – when they believe that research overlaps with their own situation and/or they can intuitively transfer the findings to their own action –, then the research can be said to generalise through transferability.

To facilitate that type of generalizability, according to Tracy (2010), like naturalistic generalizability researchers 'create reports that invite transferability by gathering direct testimony, providing rich description and writing accessibly and invitationally' (p. 845). She notes that transferability can also relate to evocative storytelling. That is because stories have the power to create in readers the idea that they have experienced the same thing in another arena (Papathomas 2016). In that sense, creative analytical practices (Richardson and St Pierre 2017), like creative non-fiction (e.g. Smith, McGannon, and Williams 2015, Erickson *et al.* 2016, Williams and Gibson 2017), ethnodrama (e.g. Cassidy *et al.* 2015, McMahon 2016; McMahon, McGannon and Zehntner 2017), docudrama (e.g. McMahon *et al.* 2017), and A/r/tographic inquiry (e.g. McMahon, MacDonald and Owton 2017), may be particularly useful for realising transferability and, related, *generativity*. As described by Barone and Eisner (2012), generativity occurs when research invites people into an experience and moves them to act upon what they have read or seen performed. Although they did not explicitly connect with transferability, examples of the generative potential of research and transferability can be found in Carless and Douglas (2010), Smith *et al.* (2015), and Hurley *et al.* (2017).

For those researchers who wish to think about what kind of relationship their qualitative study results may have to generalizability, a further type of generalisation they might seek can be broadly termed *analytical generalization* (Chenail 2010, Polit and Beck 2010, Lewis *et al.* 2014, Simons 2014). Sometimes also known as vertical generalizability (Stephens 1982) and idiographic generalizability (Sandelowski 2004), analytical generalisation can occur in differing ways, that is, through *concept generalization* and *theoretical generalization*. For example, analytical generalisation can happen when the researcher generalises a particular set of results to an established concept or theory, thereby displaying in their research concept generalizability or theoretical generalizability. Research might also produce analytical generalizability when a new concept or new theory is constructed that later makes sense and has significance in other research, even if the contexts or populations are different. Or, the researcher might re-examine established concepts and theories in a study through a different methodology and, in turn, produce new conceptual and theoretical understandings of a topic. When that occurs, and the researcher or other researchers show the value of such concepts or theories in other research, then again it can be said that the work generates a form of analytical generalisation.

Thus, in analytical generalisation it is the concepts or theories that are generalizable, not the specific context or populations. Moreover, conceptual or theoretical generalisations are not viewed as fixed, immutable, or to be asserted with absolute certainty. Rather, analytical generalisations are perhaps better understood as fluid ideas (Atkinson 2017) for making sense of the world and people's lives. Importantly too, as Darnell *et al.* (2017) suggested, qualitative data often drive conceptual construction and theorisation. Illustrations of analytical generalisation can be found in Allen-Collinson and Hockey (2010), McGannon and Spence (2010), and Kuklick *et al.* (2016). Other examples of work examining ideas through a different methodology and, in turn, producing new conceptual and theoretical understandings of a topic (i.e. emotion) can be found in Phoenix and Orr (2014), Smith *et al.* (2016), Tamminen *et al.* (2016), Tamminen and Bennett (2017), and Bennett *et al.* (2017).

Another type of generalizability is what Fine, Tuck and Zeller-Berkman (2008) termed *intersectional generalizability*. They defined intersectional generalisation as work that digs deep and respectfully with a community over time to record the particulars of historically oppressed and/or colonised peoples/communities and their social movements of resistance. That type of generalizability is also about producing 'work that tracks patterns across nations, communities, homes, and bodies to theorize the arteries of oppression and colonialism' (Fine *et al.* 2008, p. 174). In such ways, then, intersectional generalizability connects with community-based research (see Schinke and Blodgett 2016), feminism (see Cooky 2016)

and indigenous research (see Norman and Hart 2016). It also connects with and recognises theoretical generalizability as well as what is termed *provocative generalizability*. For example, in terms of theoretical generalisation the research team can glean theoretical lessons about social oppression and forms of resistance moving from one context to another. For Fine *et al.*, provocative generalizability, perhaps not unlike generativity (Barone and Eisner 2012), provokes readers and audiences to rethink ‘the possible’, and asks researchers to ‘move their findings toward that which is not yet imagined, not yet in practice, not yet in sight’ (p. 169). A rare example of intersectional generalizability being discussed in the sport and exercise sciences can be found in Hayhurst’s (2016) work on sport for development and peace and her call for transnational, multi-sited, postcolonial feminist research.

### Opportunities to generalise: some challenges and practical strategies

Even though qualitative research can generalise without having to rely on statistical or probabilistic evidence, there are still challenges for researchers who believe that generalizability can be a meaningful goal for qualitative research. One challenge relates to ‘reader generalizability’. Whereas in cases of probabilistic-statistical generalizability the expectation is for the researcher to be responsible for establishing generalizability, *the reader* in qualitative types of generalizability is often called on to be actively involved in making generalisations. For example, to facilitate naturalistic generalizability or transferability thick descriptions and rich interpretations of the research are needed so that the readers themselves can discern what is similar and different to their own situations (Chenail 2010, Sparkes and Smith 2014).

Generalisation then relies on the ability of the researcher to render studies on meaningful topics, presented in depth, and with interpretive richness. But whilst they might seek to facilitate certain generalisations through a well crafted qualitative report, the onus is also placed on the audience to engage with the report, and then either support or reject the results as generalizable to them. From this perspective, therefore, researchers and readers ‘both share a responsibility when it comes to assessing the value of a particular set of qualitative research findings beyond the context and particulars of the original study’ (Chenail 2010, p. 6). With that responsibility for producing generalizable research placed on not simply the researcher but also on appropriate readers, researchers are left in a situation where they cannot predict with any certainty if research is generalizable. Accordingly, how might researchers practically proceed with the issue of generalizability whilst recognising there is no longer a God’s eye view that guarantees absolute methodological certainty, that no one person has the final word on a particular study’s generalizability, that knowledge is contingent, and that the researcher is historically and locally situated within the very processes being studied?

One strategy to consider is to make no claim or reference to generalizability for a specific project in the final report. A researcher might do that because they are not confident generalising from their study at the time of writing. That candour does not though preclude that later readers might say the results resonated with them or can be transferred to their workplace, for example. However, with an increasing emphasis on rigour in research and assessment exercises, and the still too common belief that qualitative is limited because it lacks generalizability, the risk – in *some* spaces – of this strategy is that the research is deemed of ‘low value’ and ‘poor’ when there is no mention at all of generalizability. That risk should not drive a researcher to making over inflated claims in order to evade such judgements and satisfy possible reviewers. Research can still be of great merit without being generalizable, and is publishable in many spaces.

If considering generalizability for certain purposes, another strategy to adopt is to use a clear yet hedging style of prose in relation to generalisation (Chenail 2010). That hedging strategy involves the researcher explicitly highlighting to the reader in the report that the research offered *might*, that is it has the *potential*, to be generalizable in certain ways (e.g. transferability). To suggest to the reader that the work might be generalizable, the researcher can offer carefully worded reflections about their research results. They also can name the type of generalisation selected, justify why that particular types of generalizability is appropriate for the research, describe the process and outcome of the criteria for judging quality, and gauge their level of confidence on the results’ potential generalizability. In this artful and informed way, the researcher suggests to audiences that their qualitative study has potential

value beyond its contextual confines, or in a phrase, to be generalizable in a certain way(s) (Chenail 2010). One benefit of that strategy is that readers are reminded that the research does not offer the final word on generalisation. At the same time, the strategy could have the benefit of provoking the reader to think with the results, not just about them. In so doing, readers might reflect on how generalizable the research is or isn't.

Of course, with a hedging strategy there is the danger of leaving oneself open to critiques about claiming 'potential' without providing 'the evidence'. One could respond to such a critique by arguing that the issue of 'can a study be generalizable or can't it' is a conceptual not an empirical question. Moreover, one can respond legitimately by problematizing 'what is evidence' and accurately pointing out that 'evidence' is a contested term (see Denzin 2009). Such issues recognised, when we move outside our offices and engage with different groups of researchers, policy-makers, sport organisations and so on, conversations about the potential of generalisation can often return quickly back to an empirical question about evidence. That challenge is difficult to ignore when, as various scholars remind us (Wolcott 1995, Yardley 2008, Green and Thorogood 2009, Lewis *et al.* 2014, Kay 2016, Darnell *et al.* 2017), one wants their work to be useful and make a difference. Thus, another way to consider responding to the 'potential' issue is to 'evidence' after the research has been published how others have responded to the results and later show the 'evidence'. Of course, one cannot assume that the 'evidence' will support research generalizability. Further, it must be recognised that if generalizability is 'evidenced' that 'evidence' would be produced some time after publication. That 'evidence' might need to be captured in future work to convince some audiences.

A third strategy is to gather the 'evidence' that the work is generalizable *before* seeking publication and to highlight in the final report that the research has demonstrated a certain type(s) of generalisation. That does not mean the researcher should exaggerate claims or suggest generalizability with absolute certainty; we should be cautious over claims to generalise. That noted, and guided through the whole research by an aligned epistemology and ontology (Onwuegbuzie and Poht 2016, Levitt *et al.* 2017), a researcher can highlight to readers that based on the 'evidence' gathered the results of the study display a certain type(s) generalizability. As way of illustration, in their qualitative work on the impact of being in a care home in England on the health, well-being, and physical activity of 20 people with spinal cord injury (SCI), which was underpinned by ontological relativism and epistemological constructionism, Smith and Caddick (2015) foregrounded the issue generalizability. Specifically, they suggested that the research on SCI displayed naturalistic generalizability. That claim was based on what over 100 people with SCI who were living in or had lived in a care home, or were family members who intimately knew someone in that situation, had voluntarily said after reading a report written for the funder. That group of people all said that the results overlapped with their own experiences of being in a care home or resonated with what they witnessed. As such, when it came to publishing the work they originally submitted to the funder in a journal later, Smith and Caddick felt they could legitimately make claims about generalizability in article.

Whilst there are benefits of suggesting that a certain piece of qualitative work displays generalizability via 'evidence', one challenge or drawback is that the research is likely to be published in a journal much later than traditionally the case. That is because inviting responses to an initial research report can take time. For instance, Smith and Caddick (2015) submitted their article for peer-review to a journal nearly one year after delivering the report to the funder and collecting responses to it in order to gain a sense of generalizability. In addition to journal publication time delay, researchers need to be aware that the research might not end up being generalizable to some or even all readers. When the researcher sets out to examine the generalizability of the research, and they learn it doesn't generalise in a certain way with people, there is an ethical responsibility to report that in the research. That honesty can come at a cost to the research. For instance, some readers might interpret the limited or lack of generalizability as the result of 'poor' research, thereby questioning the value of it. Alternatively, when people disagree with the research or feel it doesn't generalise, the researcher might view these insights as an additional source of understanding about a topic. They might use people's views of the research



as a practical opportunity to acknowledge and/or explore with them contradictions, differences, gaps in knowledge, and alternative experiences.

The strategies offered within this section for thinking about generalisation should not of course be considered inflexible or final; each can be adapted. The strategies are options and starting points for how researchers might consider generalizability in a practical manner when seeking to publish qualitative research or re-reflect on already published work. The three strategies shared are also not the only ones that a researcher might use (see also Goodman 2008, Chenail 2010, Lewis *et al.* 2014). For instance, another strategy is to synthesise, such as through a qualitative meta-synthesis (see Williams and Shaw 2016), findings from multiple qualitative studies to extend the generalizability of any one of the research studies identified (Chenail 2010). In that strategy, the researcher locates, critically appraises and synthesises multiple qualitative studies that deal with the same topic (e.g. doping in sport) to infer a certain type(s) of generalisation about a subject matter or research question and reach enhanced understandings in relation to generalizability.

Finally, the strategies offered should not ideally be considered half way through a project or bolted on at the end. As Chenail (2010) advised, it is 'important for researchers to start thinking about the generalisation process at the beginning of their research' (p. 6). This doesn't mean that one has to finalise or settle on a strategy at the very beginning. Thinking about generalizability at the very start of a project does however require that researchers have an expanded vision of generalizability. That involves the researcher being familiar with different types of generalizability, the possible strategies to approach generalisation, and the challenges or risks that go with each strategy. They also need to be reflexive throughout the research on the issue of generalisation and view generalising as a process.

## Conclusions and recommendations

Within the sport and exercise sciences the question of generalisation in relation to qualitative research has received little detailed discussion within our journals. This paper helps to fill that gap. In the paper it has been argued that statistical types of generalizability that inform quantitative research are unsuitable to use for qualitative research and to judge the value of it. These arguments were put forward because qualitative research is informed by ontological and epistemological assumptions, logics and goals that are different to quantitative research informed by post-positivism or neo-realism (Lincoln *et al.* 2017, Smith and McGannon 2017). However, such assumptions, logic and goals do not mean that qualitative researchers should ignore generalizability. As was suggested, much is at stake when we avoid engaging with debates on generalizability or letting myths about generalizability go unchallenged. It was moreover highlighted that we should be intrigued with generalizability since qualitative inquiry can produce work that can be generalised. Rather than use a statistical type of generalizability, it was suggested that what qualitative researchers might seek are other types of generalizability. These could include one or more of a combination of naturalistic, transferable, analytical and/or intersectional generalizability. Other types of generalizability that a researcher might choose include flexible generalizability (see Goodman 2008) and process generalizability (see Simons 2014). Finally, the paper offered three strategies for how a researcher might practically engage with generalizability when seeking to publish qualitative research. By detailing all these points, it is hoped that the paper offers an 'expanded vision of generalizability.'

In seeking an expanded vision of generalisation, I do not wish to suggest that all qualitative researchers must seek or establish generalizability. The research they produce could offer benefits that go beyond generalisation or which cannot be captured through a certain type of generalizability. Accordingly, not every qualitative study must achieve generalizable results or seek the same type of generalizability to be of high quality. But at the same time, as Ruddin (2006) states in relation to qualitative research, 'You can generalise stupid!' (p. 797). In saying this, the point is that generalisations can be made from qualitative inquiry and these are different from those aspired to in quantitative research (Ruddin 2006). Qualitative research results can be generalizable, but just not in the same way as quantitative results are (Braun and Clarke 2013).

Furthermore, I hope this paper is a useful resource for sport and exercise scientists to help stimulate conversations we could have in different contexts about issues like generalizability. As conversational analysts (see LeCouteur and Cosh 2016), discursive analysts (see McGannon *et al.* 2017), and narrative analysts (see Papatthomas 2016) all highlight, conversations help constitute our realities and do things. Given that conversations are constitutive and action-orientated, if a qualitative researcher feels inclined to apologise for their work lacking (statistical-probability) generalizability, they should not only reflect on how their epistemological and ontological assumptions that guide their whole research are aligned with how they talk about generalizability. They also need to reconsider the possible realities being created and actions when they offer an apology, especially within the current social and political climate framed within an audit culture (see Sparkes 2013, Giardina 2017). For example, if a researcher feels compelled to apologise for their research lacking generalizability they might (inadvertently) provide a justification for others to reject qualitative inquiry or to demean it in contexts like a promotion committee review. By apologising they could likewise position qualitative research as inferior to quantitative research. In so doing, the researcher might inadvertently reinforce a hierarchy of methods and, within power relations, any understanding an editor or reviewer might hold about qualitative research being sub-standard, a second-class science, a low priority, and/or not worthy of inclusion in journals.

Rather than apologising then, or even adopting a tragic or defensive discourse, an alternative conversation could focus on the unique strengths of qualitative research. For instance, when appropriate a researcher could point out that a distinctive strength of qualitative research is how it can produce naturalistic, transferable, theoretical and/or intersectional generalisations. If appropriate, they might also highlight how that research achieved impact and made a difference in society (Kay 2016). Furthermore, a conversational, discursive and narrative analyst would remind us that conversations are embedded in every day forms of talk and interaction (with oneself and others), as well as situated in certain institutional settings and practices (McGannon and Smith 2015, LeCouteur and Cosh 2016). Given the interactional, occasioned, constitutive and action orientated nature of talk and discourse, qualitative researchers cannot then only have conversations amongst ourselves or simply speak with like-minded people. We need to connect with students from across the sport and exercise sciences when teaching (see Knight 2016). To name just a few groups, we need to also engage with our critics, doubters and supporters from other disciplines.

Likewise, to achieve some influence and positively promote good qualitative research, our conversations need to extend into contexts that traditionally have been dominated by those who are more quantitatively orientated. For instance, university qualitative researchers might seek to actively lead a themed research group, be a Head of Research or Head/Dean of a School/Faculty, or volunteer to serve on grant panels, promotion committees, or ethical boards. Further, and is being done, we might develop memorandum of understandings with external organisations of influence, invite policy-makers to our research table, engage with local communities, mentor natural and social scientists, and/or initiate and run an interdisciplinary research project. When doing such things, rather than remaining in the confines of our office or repeatedly saying we are 'too busy', conversations about generalizability (and so on) can be initiated and directed in ways that can help enable qualitative research to flourish. Make no mistake – none of that is easy, straightforward, or always feasible (see Bochner 2014). I have, though, over recent years witnessed various qualitative researchers doing such things, with positive affects.

It must equally be said that qualitative researchers seeking to actively promote high quality qualitative research, and discuss generalizability, can be helped by supportive natural scientists and more quantitatively orientated social scientists. That is especially so when people are willing to listen, are intellectually curious, feel no need to police fields and want to do the best research to make a difference. Indeed, whilst very much aware of the problems with the audit culture and the somatic crisis that works in and through the lives of many academics (see Sparkes 2013), I was heartened by a recent conversation with several eminent scholars from medicine, health psychology, epidemiology and engineering who described themselves as '100% quantitative'. When asked why they thought there was some resistance to qualitative research, all responded in these terms: 'It is largely mediocre researchers who don't get

qualitative research or see little value in it. The best scientists appreciate the value of good qualitative research and want more of it when appropriate given the questions asked’.

Grounded in the arguments detailed and the contemporary literature, plus again (Smith and McGannon 2017) inspired by Dunnette’s (1966) critique of fads, fashion and folderol in psychology research, the following summaries and recommendations for doing qualitative research are offered in relation to generalizability:

- (1) Statistical types of generalizability that inform quantitative research are not applicable to use for qualitative research and to judge the value of it. That is because qualitative research is informed by different epistemological and ontological assumptions, logics and goals to quantitative research. Researchers need to be aware and respectful of the differences in underlying epistemologies, ontologies, goals, approaches, methodologies and methods that inform research when dealing with generalizability.
- (2) Qualitative research can be generalizable, just not in the same way as quantitative research.
- (3) Because qualitative research can be generalizable, and good qualitative research need not always display generalizability, it is a mistake to write in a journal article that a weakness or limitation of qualitative work is its lack of generalizability.
- (4) We should not restrict ourselves to just one particular type of generalizability – namely, statistical-probability – and impose that type onto all research. There are various types of generalizability that might be used in qualitative research in beneficial ways. These types include naturalistic generalizability, transferability, analytical generalizability and intersectional generalizability. Each of these types of generalisation offers something very different – but highly useful – to what generalizability in quantitative research can provide, thereby uniquely adding to our knowledge and research abilities.
- (5) Rather than apologising for qualitative research lacking statistical-probability generalizability or bemoaning to friends that we are misunderstood, researchers can consider engaging with different groups by showing them the value of qualitative research and debating issues around generalizability. Whilst certainly not easy or always applicable, we can have the courage and take the time to take leadership positions, engage with scholars who are different to us across our institutions, take the time to educate and speak truth to those in power.
- (6) Journal reviewers, editors and policy-makers should not dismiss qualitative research on grounds of generalizability. They need to appreciate the view held by numerous scholars that generalizability is not limited to statistical-probability sampling theory. There are different types of generalisation, and therefore different ways to generalise. Neither type is inherently better or worse than another; each has different purposes and differing outcomes, which are tied to the underlying assumptions and methodology employed.
- (7) Without overstating things, and working in alignment within the ontological and epistemological assumptions that guide ones work, when a researcher seeks generalizability they could consider suggesting to readers that their research might be generalizable or ‘gather the evidence’ to support a type(s) of generalizability. Qualitative researchers should not though be obliged to always seek generalizability. The research produced can still offer great benefits without it being generalizable.

It is hoped that this article acts as a resource to help guide future work and/or expands conversations about generalisation in relation to qualitative research. As an invitation to developing research, I hope too that this article enables researchers – including editors and reviewers – to avoid some common misunderstandings and/or misuses of generalizability in qualitative research. Without then getting carried away, and equally remaining optimistic, the capacity of the sport and exercise sciences to make a contribution to the world does not lie in a researcher, journal editor, reviewer and so on policing its activities, but in nurturing its pluralist potentials. When we can envision multiple forms of inquiry and types of generalizability, multiple means of achieving meaningful action can be realised.

## Notes

1. In laying out these goals, I certainly appreciate that for some researchers the various points raised about generalizability are 'old hat'. For these researchers I hope the paper is an opportunity to productively expand on what is said in it, thereby further expanding visions of generalizability. At the same time, whilst points here may be well known to *some*, a close examination of the sport and exercise sciences literature, numerous conversations with colleagues, many debates witnessed at academic conferences, countless meetings with government policy-makers and sport organisation leaders, a check at what is said on social media (e.g. twitter) by new and established researchers who share editorial journal decisions or reviewer comments, the debates that occurred in the *British Medical Journal* (BMJ) on qualitative research (Greenhalgh *et al.* 2016) and the various responses to it on the BMJ website and social media, and in my experience of handling and reviewing over 1500 papers (see Endnote 2), would together strongly suggest that the points here very much need to be said and amplified.
2. Given my motivation to stimulate conversations about generalizability and/or an expanded understanding of it, I purposefully avoid singling out articles for critique. I should also note that, as the former editor of *Qualitative Research in Sport, Exercise and Health*, and formerly an editorial board member of the *Sociology of Sport Journal*, plus currently an associate editor of *Psychology of Sport and Exercise* and *Psychology of Sport, Exercise and Performance Psychology*, an editorial board member of 7 other journals (e.g. *International Journal of Sport and Exercise Psychology*), and ad hoc reviewer for numerous other journals, I have handled and reviewed over 1500 papers in the last 10 years. In my experience at least, it is common to find researchers stating in their submitted manuscript for possible peer-review that a limitation/weakness of their qualitative research is a lack of generalizability.

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No potential conflict of interest was reported by the author.

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