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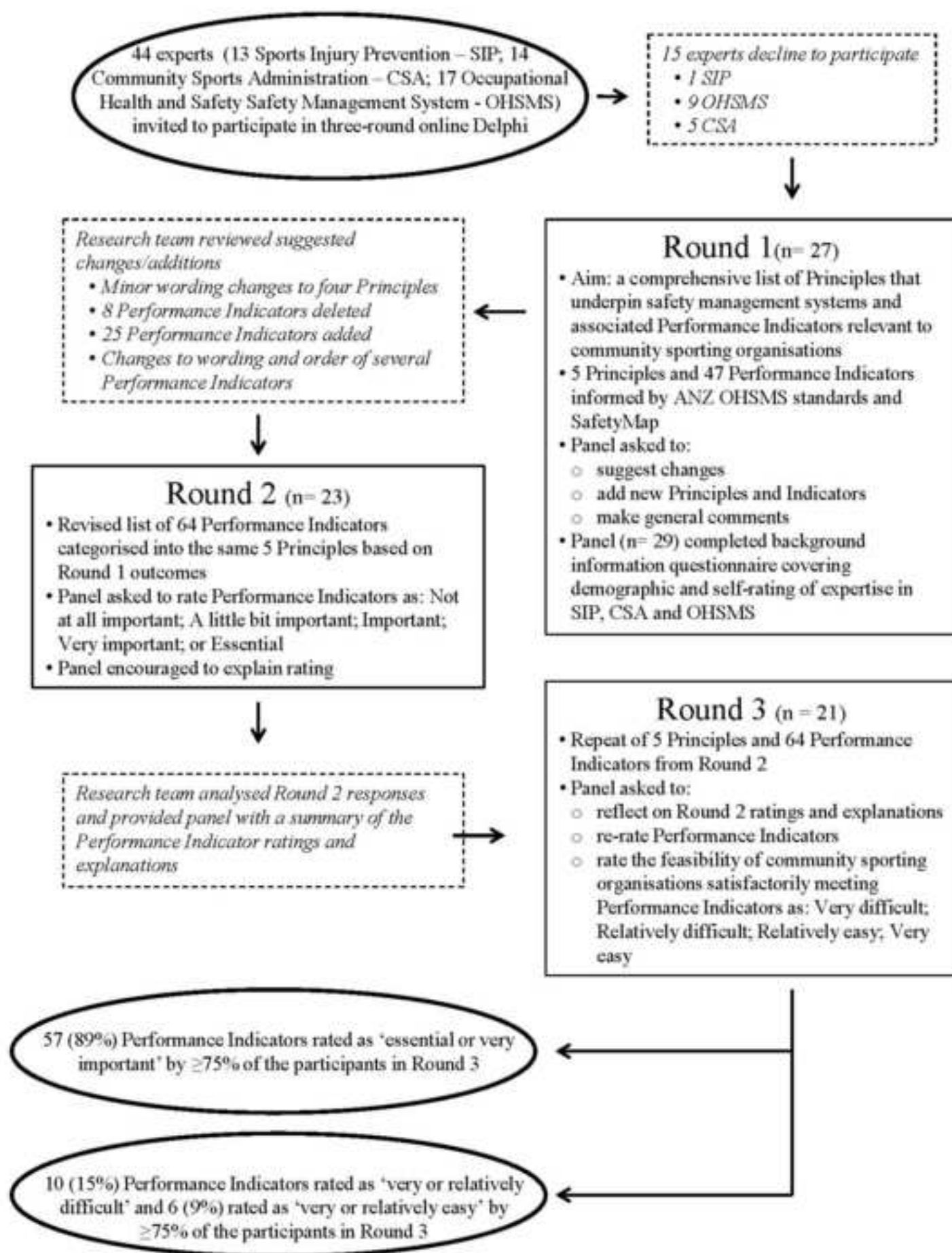Corresponding Author's Institution: Monash University

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Abstract: Despite recent interest in understanding the implementation context for sports injury prevention interventions, little research attention has been paid to the management structures and processes of community sporting organisations. This study developed expert consensus about the importance of Occupational Health and Safety (OHS) setting-related safety management system (SMS) principles and performance indicators in the context of Australian community sporting organizations, and the feasibility of these organisations meeting the requirements for the SMS performance indicators. Twenty-nine sports injury prevention, community sports administration and OHS SMS experts participated in a three-round online Delphi study by rating the importance of 64 SMS performance indicators categorised under the five principles of Commitment and Policy; Planning; Implementation; Measurement and Evaluation; and Review and Improvement. Overall, consensus agreement—define as rated as 'essential' or 'very important' on a 5-point scale by ≥75% of the participants in Round 3—was reached for 57 performance indicators. Ten (15%) performance indicators were rated as 'very difficult' or 'relatively difficult', and six (9%) were rated as 'very easy' or 'relatively easy' on a four-point scale, by ≥75% of participants. This research suggests that the guiding principles and associated performance indicators that underpin OHS safety management systems in the workplace are very relevant and applicable to community sporting organisations in Australia. However, considerable work is required to build organisational capacity to be able to develop and implement meaningfully and useful SMSs to prevent sports injuries in the most common setting in which they occur.

44 experts (13 Sports Injury Prevention – SIP; 14 Community Sports Administration – CSA; 17 Occupational Health and Safety Safety Management System - OHSMS) invited to participate in three-round online Delphi

15 experts decline to participate
- *1 SIP*
- *9 OHSMS*
- *5 CSA*

Research team reviewed suggested changes/additions
- *Minor wording changes to four Principles*
- *8 Performance Indicators deleted*
- *25 Performance Indicators added*
- *Changes to wording and order of several Performance Indicators*

Round 1 (n= 27)
- Aim: a comprehensive list of Principles that underpin safety management systems and associated Performance Indicators relevant to community sporting organisations
- 5 Principles and 47 Performance Indicators informed by ANZ OHSMS standards and SafetyMap
- Panel asked to:
  - suggest changes
  - add new Principles and Indicators
  - make general comments
- Panel (n= 29) completed background information questionnaire covering demographic and self-rating of expertise in SIP, CSA and OHSMS

Round 2 (n= 23)
- Revised list of 64 Performance Indicators categorised into the same 5 Principles based on Round 1 outcomes
- Panel asked to rate Performance Indicators as: Not at all important; A little bit important; Important; Very important; or Essential
- Panel encouraged to explain rating

Research team analysed Round 2 responses and provided panel with a summary of the Performance Indicator ratings and explanations

Round 3 (n = 21)
- Repeat of 5 Principles and 64 Performance Indicators from Round 2
- Panel asked to:
  - reflect on Round 2 ratings and explanations
  - re-rate Performance Indicators
  - rate the feasibility of community sporting organisations satisfactorily meeting Performance Indicators as: Very difficult; Relatively difficult; Relatively easy; Very easy

57 (89%) Performance Indicators rated as 'essential or very important' by ≥75% of the participants in Round 3

10 (15%) Performance Indicators rated as 'very or relatively difficult' and 6 (9%) rated as 'very or relatively easy' by ≥75% of the participants in Round 3

Highlights

- Used Delphi technique to gain expert consensus
- Principles of safety management systems considered very relevant to community sport
- Challenge for community sporting organisations to implement safety management systems

Understanding the organisational and management implementation context for sports safety in community sport

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Abstract

Despite recent interest in understanding the implementation context for sports injury prevention interventions, little research attention has been paid to the management structures and processes of community sporting organisations. This study developed expert consensus about the importance of Occupational Health and Safety (OHS) setting-related safety management system (SMS) principles and performance indicators in the context of Australian community sporting organizations, and the feasibility of these organisations meeting the requirements for the SMS performance indicators. Twenty-nine sports injury prevention, community sports administration and OHS SMS experts participated in a three-round online Delphi study by rating the importance of 64 SMS performance indicators categorised under the five principles of Commitment and Policy; Planning; Implementation; Measurement and Evaluation; and Review and Improvement. Overall, consensus agreement—define as rated as 'essential' or 'very important' on a 5-point scale by ≥75% of the participants in Round 3—was reached for 57 performance indicators. Ten (15%) performance indicators were rated as 'very difficult' or 'relatively difficult', and six (9%) were rated as 'very easy' or 'relatively easy' on a four-point scale, by ≥75% of participants. This research suggests that the guiding principles and associated performance indicators that underpin OHS safety management systems in the workplace are very relevant and applicable to community sporting organisations in Australia. However, considerable work is required to build organisational capacity to be able to develop and implement meaningfully and useful SMSs to prevent sports injuries in the most common setting in which they occur.

Key words: safety management systems, community sport, expert consensus

1. Introduction

Sports injuries are a significant public health problem (Finch and Cassell, 2006). They are common (Conn et al., 2003; Nicholl et al., 1995), costly (Cumps et al., 2008), a barrier to physical activity participation (Finch et al., 2001) and a concern for parents of young participants (Boufous et al., 2004). Many sports injuries are considered preventable (Parkkari et al., 2001) and it has been argued that their prevention should be a priority for sports administrators (Fuller, 2007), physicians and scientists (Dvorak, 2009).

Strong arguments have been made for sports injury prevention research to incorporate components of implementation research (Finch, 2009). To prevent injuries, athletes and sporting organisations needed to adopt and maintain efficacious sports injury prevention measures. Poor understanding of the implementation context may be one reason why some efficacious preventive actions have not been shown to be effective in field-based studies (Finch, 2006). The importance of understanding the implementation context to facilitate the dissemination and adoption of effective interventions has also been highlighted as a research priority in the broader injury prevention field (Finch, 2012; Rogmans, 2009; Runyan, 1998).

Ecological models of health promotion (McLeroy et al., 1988) and injury prevention (Finch and Donaldson, 2010; Hanson et al., 2005) address the issue of the implementation context by acknowledging that individual behaviour is a function of the interactions between people and their social and physical environments. The underlying assumption is that sustained behaviour changes are unlikely to occur unless the personal relationships and the social and physical environments in which people make health behaviour decisions encourage and support the desired change (Donaldson, 2009). Applying an ecological model, sports injury prevention interventions can potentially target changes in intrapersonal, interpersonal, institutional/organisational, community, and public policy factors that contribute to or could potential prevent sports injury incidents (Donaldson, 2009). Ecological approaches to injury prevention focus attention on the social and environmental determinants of behaviour, and identify appropriate interventions that target these. For example, Eime and colleagues

used an ecological framework to develop and implement a multi-level intervention targeted at individual, venue and organisational factors that influence the wearing of protective eyewear by squash players (Eime et al., 2004) .

Emery and colleagues applied similar thinking when they developed their model of hierarchical responsibility for child sport injury prevention—from the individual child participant to parents, coaches, sports organisations (clubs, schools etc) and government (Emery et al., 2006). This issue has been further reinforced in an extension of the more general RE-AIM health promotion evaluation framework (Glasgow et al., 1999) to focus specifically on planning, implementing and evaluating sports injury prevention interventions across all levels of sports delivery (Finch and Donaldson, 2010).

There is growing interest and emphasis in health promotion research on understanding the role of organisations as settings, including community sports clubs (Donaldson and Finch, 2012), for disseminating and implementing evidence-based programs to promote health and manage chronic disease(Emmons et al., 2011). However, most health promotion research (Golden and Earp, 2012) and nearly all sports injury research has only considered individual-level contextual influences such as participant and coach safety knowledge, attitudes, awareness, perceptions and behaviours (Carter and Muller, 2008; Danis et al., 2000; Finch et al., 2002; Gabbe et al., 2003; Gianotti et al., 2010; Hawkins, 1998; Iversen and Friden, 2009; Pettersen, 2002; Saunders et al., 2010; Sherker et al., 2006; Taylor et al., 2005). When studies have explored sports safety or injury prevention at the organisational level they have mainly described the injury prevention and risk management policies and practices of sporting organisations (Abbott et al., 2008; Casey et al., 2004; Donaldson et al., 2004a; Donaldson et al., 2004b; Finch and Donaldson, 2010; Finch et al., 2009; Finch and Hennessy, 2000; Otago and Brown, 2003; Otago et al., 2009; Swan et al., 2009). To the best of our knowledge, no sports injury prevention research has explored the relevance or importance of safety management systems (SMS)— defined as ―...*integrated mechanisms in organisations designed to control the risks that can affect ....health and safety....which is fully integrated .... and ...a cohesive system of policies, strategies and*

procedures that provide internal consistency and harmonisation (Fernández-Muñiz et al., 2009; Gallagher and Rimmer, 2003)—in the context of community sporting organisations. This is a significant gap in the knowledge base required to fully understand the implementation context for injury prevention interventions in the community sport setting.

Within the Occupational Health and Safety (OHS) field, understanding the management and organisational influences on safety behaviour has progressed to the point where SMSs are now considered the foremost strategy to improve health and safety at work (Frick and Wren, 2007). There are Occupational Health and Safety Management System (OHSMS) standards and associated certification processes which describe theoretically-based, systematic approaches to managing safety that lead to sustained improvement in safety performance (Standards Australia, 2001b). These standards provide guidance to develop and implement OHSMSs, and a framework and criteria to audit them (Standards Australia, 2001a). The model that underpins these standards incorporates the principles of commitment and policy; planning; implementation; measurement and evaluation; and review and improvement.

The available SMS guidance has been written to apply to all types and sizes of organizations; is generic enough to accommodate diverse geographical, cultural and social conditions; and is both widely accepted and applied in the OHS field. It is surprising, therefore, that SMSs have received very little attention in the context of preventing sports injuries in community sports organisations. Given the acceptance of the ecological model for sports injury prevention, it seems logical that safety in community sport will also be influenced by the safety management processes and systems within community sporting organisations.

As a starting point to develop an understanding of how safety is managed in community sporting organisations, this study developed expert consensus about the relevance and importance of the OHS setting-related SMS principles and performance indicators in the context of Australian community sporting organisations. A secondary aim was to explore expert opinion on the feasibility of

community sporting organisations being able to satisfactorily meet the requirements for the SMS performance indicators should they be routinely applied to sport.

2.   Methods

The Delphi technique was used to develop consensus among experts without engaging them in direct discussions (Katcher et al., 2006). This multi-stage iterative process is designed to facilitate the translation of individual expert opinion into group consensus (Hasson et al., 2000). The University of Ballarat Human Research Ethics Committee approved the study protocol which consisted of three rounds of consultation using online surveys and adhered to the fundamental Delphi principles of respondent anonymity and feedback between rounds.

2.1 Identification of experts

Identifying appropriate experts is a key challenge when using the Delphi technique (Baker et al., 2006). In this study, 44 researchers and practitioners in sports injury prevention (13 people), community sports administration (14 people) and OHSMSs (17 people) were identified and invited to participate in the study based on the authors' [AD and DB] knowledge of the invitees.

To confirm their expertise, panel members completed an online background information questionnaire. This included questions on their age, gender, country in which they were based, and five-point scales (from none to extensive) to self-rate their current involvement, qualifications, experience, knowledge and expertise in community sports administration (CSA), OHSMSs, and sports injury prevention (SIP).

2.2   Questionnaire development and survey methods

2.2.1   Round 1

Round 1 of the Delphi process was used to develop a comprehensive list of the broad principles that underpin SMSs in any context, and the performance indicators that could be used to assess adherence to these principles in community sports organisations. An initial list of principles and performance

indicators was developed by the authors based on the principles and elements of the Australian and New Zealand OHSMS Standards (Standards Australia, 2001b) and SafetyMap (Victorian WorkCover Authority, 2002). The language used for the OHS-related principles and performance indicators was modified to suit the community sport context (Otago and Brown, 2003).

The list of five principles and 47 performance indicators—Commitment and Policy (nine performance indicators); Planning (eight); Implementation (15); Measurement and Evaluation (eight); and Review and Improvement (seven)—formed the basis of the Round 1 questionnaire. Participants were asked to: decide if and how each principle or indicator should be changed; comment generally about each principle or the associated performance indicators; and suggest additional principles or indicators. Participants were advised that suggested changes or additions might be included in a revised list of principles and performance indicators developed for Round 2 and that comments might be anonymously shared with all panel members during that round.

2.2.2 Round 2

A revised list of 64 performance indicators, categorised into the same five, but slightly re-worded principles—Commitment and Policy (14 performance indicators); Planning: identifying how people get hurt and working out what to do about it (15); Implementation: making things safer (17); Measurement and Evaluation: were plans put into action in the way that was intended, and are things safer? (12); and Review and Improvement: is the safety management system working and how could it be improved? (six)—was re-circulated in Round 2. Panel members were asked to rate each performance indicator on a five-point scale—Not at all important; A little bit important; Important; Very important; or Essential—in relation to how important they thought it was as a reflection of the SMS principle it was associated with in the context of community sports organisations. They could also provide free-text comments about why they had given an indicator a particular rating. Panel members were informed that a summary of indicator ratings and any comments made in Round 2 would be circulated to all panel members during Round 3.

2.2.3   Round 3

In Round 3 (the final round), panel members received an exact copy of the principles and performance indicators circulated in Round 2, and a summary of the indicator ratings and comments from Round 2. They were asked to rate each indicator again using the same scale as previously used. This gave them an opportunity to change their rating after reflecting on the views expressed in Round 2.

Many of the comments made by panel members in Round 2 related to the feasibility of community sporting organisations being able to meet the requirements for many of the performance indicators (even if the indicator itself was rated highly). Therefore, in Round 3 panel members were also asked to rate the feasibility of community sporting organisations being able to satisfactorily meet each performance indicator on a four-point scale—very difficult; difficult; easy; very easy.

Figure 1 provides an overview of the three-round Delphi process used in this study.

[Insert Figure 1 here]

Figure 1: Overview of Delphi process used in this study

2.3   Data analysis

Data from all completed Delphi rounds and the background information/demographic survey were downloaded from the online data collector and entered into an SPSS data base. Descriptive statistics were generated for quantitative data and qualitative data was analysed for common themes.

Although opinion differs as to what should constitute an appropriate level of consensus in a Delphi process, 75% agreement has been frequently accepted and is recommended as a minimum level (Keeney et al., 2006). Therefore, for this study, an indicator was accepted as 'as an important reflection of a principle of SMSs in the context of community sports organisations' if it was rated as

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'essential' or 'very important' by ≥75% of the participants who provided a rating for that indicator in Round 3.

3. Results

Twenty-nine (72% male; mean age 48 years; 26 based in Australia, one in each of Canada, Sweden and New Zealand) of the 44 invited experts completed a background information questionnaire (response rate 66%) and are therefore considered to have participated in the Delphi. Twelve of the 13 SIP experts, eight of the 17 OHSMS experts and nine of the 14 CSA experts completed a background information questionnaire. Of the 15 invited experts who did not complete a background information questionnaire, five actively declined to participate and 10 did not respond to the initial email or any of the three follow-up emails invitation.

The panel members self-rated themselves as having considerable current involvement, experience, qualifications, knowledge and expertise in CSA, OHSMSs, and SIP. Over 50% of participants gave themselves a rating of 'quite a lot' or 'extensive' in 12 of the 15 categories with the exceptions being SIP qualifications (45%) and expertise (48%), and OHSMSs qualifications (48%) (see Table 1).

[Insert Table 1 here]

Twenty of the 29 participants (69%) completed all three Delphi rounds; five completed Round 1 only, two completed Rounds 1 and 2 only, one completed Round 2 only and one completed Rounds 2 and 3 only. As we have done when reporting a previous community sport-related Delphi study (Donaldson and Finch, 2011), only Round 3 responses (n= 21, all of whom completed Rounds 2 and 3) provided after participants had reflected upon the Round 2 responses have been reported below.

Analysis of the free-text responses provided in Round 1 resulted in: some minor wording changes to four principles; changes to the wording and order of several performance indicators; and splitting, combining, deleting and adding performance indicators such that the number of performance

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indicators increased from 47 (Round 1) to 64 (Rounds 2 and 3). A copy of the exact principles and performance indicators included in Round 1, 2 and 3 are available from the corresponding author.

Table 2 shows that consensus agreement was reached for 13 (93%) of the 14 Principle 1 (Commitment and Policy) performance indicators in Round 3.

[Insert Table 2 here]

Table 3 shows that there was consensus agreement for all 15 (100%) of the Principle 2 (Planning: Identifying how people get hurt and working out what to do about it) performance indicators in Round 3.

[Insert Table 3 here]

Table 4 shows that there was consensus agreement for 14 (82%) of the 17 Principle 3 (Implementation: Making things safer) performance indicators in Round 3.

[Insert Table 4 here]

Table 5 shows that there was consensus agreement for10 (83%) of the 12 Principle 4 (Measurement and Evaluation: were plans put into action in the way that was intended, and are things safer?) performance indicators in Round 3.

[Insert Table 5 here]

Table 6 shows that there was consensus agreement for all six (100%) of the Principle 5 (Review and Improvement: Is the Safety Management System working and how can it be improved?) performance indicators in Round 3.

[Insert Table 6 here]

Overall, consensus agreement was reached for 57 (89%) of the 64 performance indicators across the five principles in Round 3.

When asked, in Round 3, to rate the feasibility of community sporting organisations being able to satisfactorily meet each performance indicator, there were no performance indicators where either 'very easy' or 'very difficult' was the most common rating. Ten (15%) performance indicators were rated as 'very difficult' or 'relatively difficult', and six (9%) were rated as 'very easy' or 'relatively easy', by ≥75% of participants in Round 3 (see Tables 2–6).

4. Discussion

A management systems approach to preventing accidents focuses on the organisational conditions, circumstances and environments in which the accident occurs rather than the errors of individuals and has become the predominant paradigm in the field of OHS (Frick and Wren, 2007). Although sports injury prevention research has relatively recently explored the concepts that underpin risk management (Abbott et al., 2008; Fuller and Drawer, 2004; Otago and Brown, 2003), to the best of our knowledge, this study is the first to explore the applicability of OHS-related SMSs in the community sports context.

Safety management systems are proactive (as opposed to reacting to a specific accident or incident), internally integrated, and incorporate elements of evaluation and continuous improvement (Robson et al., 2007). They often build on the Plan-Do-Check-Act model of continuous quality improvement. The evidence from the OHS literature suggests that SMSs may have something to offer community sporting organisations in their endeavours to better manage the risks associated with participating in sport. A comprehensive review of the evidence of the effectiveness of OHSMS interventions concluded that most showed favourable results—including intermediate effects such as improve

employee perceptions of safety and participation in safety-related activities; decreases in injury rates and injury-related costs; and improved workplace productivity—and none showed negative findings (Robson et al., 2007). However, the methodological limitations of the available studies meant that there was insufficient evidence to recommend either in favour or against OHSMSs in the workplace (Robson et al., 2007). A recent Spanish study showed that safety management has a positive influence on safety performance, competitiveness performance and economic/financial performance suggesting that managing safety better can both protect workers and improve corporate competiveness (Fernández-Muñiz et al., 2009). In a recent editorial on the issues and challenges for OHSMSs, it was summarised that they do not necessarily improve health and safety but they are certainly a tool that can be used to achieve this goal (Hasle and Zwetsloot, 2011). Given the available evidence, if SMSs could be successfully applied in the community sports setting it is likely that they could significantly contribute to: improved participant and volunteer perceptions of safety and participation in safety-related activities; decreases in injury rates and injury-related treatment costs; decreased injury-related absence from participation; and improved individual, team and club sporting performance.

The expert panel who participated in this study agreed that the five fundamental principles and the majority of the performance indicators (61 of 67) developed for this study were important in the context of community sporting organisations. They also agreed that there were significant challenges for community sporting organisations to overcome—including reliance on a predominantly volunteer workforce; lack of financial and other resources; frequent turn-over of key personnel; and fear of over burdening administrators with bureaucracy—in order for them to be able successfully apply a management system-based approach to injury prevention. This supports the previous finding of a small Australian study which identified a number of knowledge/education, relevance/flexibility, roles/responsibility, financial, socio-cultural and support issues that needed to be addressed if OHS risk management models were to be successfully translated to the community sport context (Otago and Brown, 2003).

The expert panel agreed that few of the performance indicators could be easily achieved by community sporting organisations. This suggests that considerable work is required to build the managerial and organisational capacity of community sporting organisations to meet the requirements implicit in successfully implementing a SMS. Incorporating safety management system training into existing corporate governance or risk management training for administrators of community sporting organisation may be a feasible way of building capacity. However, the challenges may not be as great or as complex as first thought because one of the fundamental principles of SMSs is that they should be developed to be appropriate and relevant to the context in which they are deployed. Therefore, smaller community sporting organisations and those with less complicated organisational and managerial structures will need less sophisticated SMSs to meet their needs (Walker and Tait, 2004).

There are some significant limitations to this study which need to be acknowledged. Fewer than 50% of invited OHSMS experts and 62% of the invited CSA experts participated in the study compared to 92% of invited SIP experts. In addition, 12 of the 13 SIP experts compared to only three of the eight OHSMS experts and six of the nine CSA experts participated in all three rounds of the Delphi process. Therefore, almost half of the experts who participated in this study were a priori considered to be SPI experts and the opinions expressed could be associated with a biased viewpoint that was more favourable. On a more positive note, it can often be difficult to recruit and retain participants in Delphi studies (Hasson et al., 2000) yet this study achieved a 66% response rate (based on % of invited participants who completed a background survey) and 69% of these completed all three rounds. This suggests that the research topic was of considerable interest and the research methods used were appropriate for engaging with experts in the relevant fields. In addition, many of the invited CSA experts were volunteer administrators at community sports clubs who participated in this study in their personal rather than professional time. This suggests a genuine and real interest in managing safety in community sporting organisations among those who participated in this study.

5. Conclusion

If sports injuries are to be prevented at a population level, evidence-based interventions needed to be widely and sustainably implemented. It is unlikely that individual sports participants, coaches or administrators will be able to do this successfully unless surrounded by supportive, enabling and encouraging organisational environments (Finch and Donaldson, 2010). To date, despite calls for an ecological approach to understanding sports injuries and their prevention, very little research has been conducted into the safety management structures or processes of community sporting organisations. This current research suggests that the guiding principles and associated performance indicators that underpin OHS safety management systems in the workplace are very relevant and applicable to community sporting organisations in Australia. However, considerable work is required to build the capacity of these organisations to be able to develop and implement meaningful and useful safety management systems to prevent sports injuries in the most common setting in which they occur. The findings of this study can now be used to develop a valid and reliable audit tool to identify the current gaps in safety management systems in community sporting organisations as has already been done in relation to local level sports safety policies and practices (Donaldson et al., 2003). This will then enable appropriate safety management system capacity building interventions to be developed and introduced alongside other corporate governance and management training currently available to community sports administrators.

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Tables

Table 1: Experts' self-rating of their current involvement, experience, qualifications, knowledge and expertise in community sports administration, sports injury prevention and occupational health and safety management systems compared to a member of the general public (n= 29)

	Self-rating compared to that of a member of the general public in ….														
	Community Sports Administration					Sports Injury Prevention					Occupational Health & Safety Management Systems				
	CI	E	Q	K	Exp	CI	E	Q	K	Exp	CI	E	Q	K	Exp
None	24%	14%	17%	14%	14%	21%	10%	14%	7%	10%	8%	3%	14%	0%	3%
A little	10%	3%	3%	0%	7%	10%	7%	7%	10%	105	10%	10%	10%	7%	10%
Some	7%	7%	17%	10%	3%	14%	28%	34%	17%	31%	28%	24%	28%	28%	24%
Quite a lot	31%	24%	24%	28%	34%	17%	21%	21%	31%	17%	24%	24%	17%	31%	31%
Extensive	27%	52%	38%	48%	41%	38%	34%	24%	34%	31%	31%	38%	31%	34%	31%

CI = Current Involvement, E = Experience, Q = Qualifications, K = Knowledge, Exp = Expertise

Table 2: Delphi Round 3 responses to Safety Management System principle related to Principle 1: **Commitment and Policy** (n= 21)

A Community Sports Organisation should have a **Sports Safety Policy** (or its equivalent*) that:

		Importance					Feasibility			
	Consensus#	Essential	Very Important	Important	A little bit important	Not at all important	Very Easy	Relatively Easy	Relatively Difficult	Very Difficult
	%	%	%	%	%	%	%	%	%	%
Is endorsed or ratified by the organisation's highest authority (e.g. President, Management Committee)	100%	86%	14%	0%	0%	0%	33%	52%	14%	0%
Is developed in consultation with stakeholders (particularly members and governing body)	100%	48%	52%	0%	0%	0%	9%	33%	52%	5%
Is written in easy to understand language	95%	81%	14%	5%	0%	0%	5%	52%	38%	5%
Conveys an organisational commitment to safety	95%	43%	52%	5%	0%	0%	19%	43%	38%	0%
Encourages organisation-wide involvement in, and responsibility for, safety	95%	38%	57%	5%	0%	0%	5%	33%	62%	0%
Meets jurisdictional legislation (e.g. facility/venue managers, and local, state or national government legislation and policy requirements).	90%	76%	14%	9%	0%	0%	0%	24%	62%	14%
Is aligned with governing body safety requirements (e.g. state and national sporting organisations).	91%	62%	29%	9%	0%	0%	5%	57%	33%	5%
Is available and accessible to all interested parties.	86%	57%	29%	14%	0%	0%	29%	57%	14%	0%
Is reviewed and updated regularly to ensure it meets the organisation's needs.	86%	48%	38%	14%	0%	0%	0%	57%	43%	0%
Considers the safety needs of everyone involved with the organisation equally.	86%	43%	43%	14%	0%	0%	5%	33%	57%	5%
Is appropriate to the nature and size of the organisation.	81%	33%	48%	19%	0%	0%	5%	57%	38%	0%
Identifies a person (or committee) as the organisation's 'safety champion' and representative responsible for safety.	76%	43%	33%	19%	5%	0%	5%	52%	43%	0%
Is regularly and actively promoted and distributed to all stakeholders.	76%	38%	38%	24%	0%	0%	5%	57%	33%	5%
Reflects community standards and expectations.	67%	19%	48%	24%	9%	0%	0%	38%	52%	10%

*Some community sports organisations may have a risk management policy or an injury prevention policy
= Sum of Essential and Very Important
_ _ _ represents cut-off point of 75% agreement below which an indicator was not accepted as 'as an important reflection of a Principle of safety management systems in the context of community sports organisations'

Table 3: Delphi Round 3 responses to Safety Management System principle related to Principle 2: **Planning: Identifying how people get hurt and working out what to do about it** (n= 21)

A 'Community Sports Organisation should have a **sports safety planning process** that includes appropriate* procedures to**:**

		Importance					Feasibility			
	Consensus#	Essential	Very Important	Important	A little bit important	Not at all important	Very Easy	Relatively Easy	Relatively Difficult	Very Difficult
	%	%	%	%	%	%	%	%	%	%
Seek advice when needed.	95%	62%	33%	5%	0%	0%	14%	52%	29%	5%
Ensure adequate resources (money and people) are available for implementing safety initiatives.	95%	52%	43%	5%	0%	0%	0%	9%	67%	24%
Assign responsibility for implementing safety initiatives.	91%	62%	29%	9%	0%	0%	9%	52%	33%	5%
Consult stakeholders (e.g. individual members/participants, sports' governing body, facility/venue managers, local and state government etc) about safety issues.	91%	52%	38%	9%	0%	0%	0%	29%	71%	0%
Identify internal safety issues in a timely, proactive manner.	91%	43%	48%	9%	0%	0%	0%	24%	76%	0%
Ensure safety is part of the core business planning process, not an added extra.	86%	71%	14%	14%	0%	0%	0%	52%	48%	0%
Decide what to do about safety issues.	86%	71%	14%	14%		0%	0%	38%	62%	0%
Determine what an acceptable level of risk is.	86%	62%	24%	9%	5%	0%	0%	19%	48%	33%
Assess the safety implications of any new goods, services and equipment introduced to the organisation.	86%	57%	29%	14%	0%	0%	0%	38%	62%	0%
Identify external safety issues (e.g. issues identified as important by sports governing bodies, facility/venue managers, local government, community expectations etc) in a timely, proactive manner.	86%	48%	38%	14%	0%	0%	0%	19%	76%	5%
Promote and raise awareness of safety initiatives.	86%	24%	62%	14%	0%	0%	0%	71%	24%	5%
Identify timeframes for implementing and reviewing safety initiatives.	86%	19%	68%	14%	0%	0%	5%	67%	29%	0%
Assess and prioritise safety issues for action.	81%	62%	19%	14%	5%	0%	0%	38%	52%	10%
Document the safety issues and how they are to be addressed	81%	52%	29%	19%	0%	0%	5%	52%	38%	5%
Identify appropriate, measurable safety objectives and targets.	81%	43%	38%	14%	5%	0%	0%	24%	67%	9%

*'appropriate' and 'relevant' should be considered for the specific needs and context (including available resources) of your organisation. It is not meant to suggest that there is an acceptable or appropriate standard that should be met by all organisations.
Sum of Essential and Very Important

Table 4: Delphi Round 3 responses to Safety Management System principle related to Principle 3: **Implementation: Making things safer** (n= 21)

A Community Sports Organisation should have **processes to implement sports safety initiatives** that include appropriate procedures to:

	Consensus[#]	Importance					Feasibility			
		Essential	Very Important	Important	A little bit important	Not at all important	Very Easy	Relatively Easy	Relatively Difficult	Very Difficult
	%	%	%	%	%	%	%	%	%	%
Communicate safety information to internal stakeholders (coaches, participants, parents, committee members etc) regularly and in a timely manner.	95%	68%	62%	33%	0%	0%	5%	71%	19%	5%
Report to internal and external stakeholders on serious injuries and adverse events, and what was or will be done about them.	95%	57%	57%	14%	0%	0%	5%	52%	43%	0%
Involve and actively engage stakeholders in safety initiatives.	95%	48%	86%	5%	0%	0%	0%	29%	71%	0%
Easily locate and access safety documents (e.g. policies, injury records, plans).	91%	57%	62%	14%	0%	0%	14%	57%	29%	0%
Integrate safety initiatives into the everyday activity of the organisation and its members	91%	57%	33%	9%	0%	0%	0%	33%	57%	9%
Access adequate resources (people, money, equipment etc) to implement safety initiatives.	86%	57%	29%	14%	0%	0%	0%	5%	62%	33%
Identify the safety competencies and training needs of people in the organisation (e.g. coaches, first aid providers, facility inspectors etc).	86%	57%	29%	14%	0%	0%	0%	29%	57%	14%
Identify, plan and practice for potential emergency situations.	86%	38%	48%	14%	0%	0%	0%	9%	86%	5%
Provide access to appropriate safety training for people in the organisation.	81%	52%	29%	19%	0%	0%	5%	19%	62%	14%
Identify and manage situations when individuals do not comply with safety initiatives.	81%	48%	33%	19%	0%	0%	0%	29%	67%	5%
Regularly review and update safety documents.	81%	43%	38%	14%	5%	0%	0%	48%	52%	0%
Store and archive safety documents and injury records for an appropriate length of time.	81%	24%	57%	19%	0%	0%	5%	52%	38%	5%
Regularly remove and replace obsolete safety documents.	76%	33%	43%	24%	0%	0%	5%	67%	29%	0%
Report to internal and external stakeholders on safety initiatives.	71%	24%	48%	29%	0%	0%	5%	57%	38%	0%
Report to internal and external stakeholders on safety issues and plans.	57%	24%	33%	43%	0%	0%	5%	62%	33%	0%
Communicate safety information to external stakeholders (e.g. sports' governing body, facility owner/manager, local government etc) regularly	57%	14%	43%	38%	5%	0%	0%	57%	38%	5%

and in a timely manner.										
Identify and acknowledge or reward situations when stakeholders demonstrate positive safety behaviours.	38%	14%	24%	57%	0%	5%	14%	48%	38%	0%

[#]Sum of Essential and Very Important

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Table 5: Delphi Round 3 responses to Safety Management System principle related to **Measurement and Evaluation: were plans put into action in the way that was intended, and are things safer?** (n= 21)

A Community Sports Organisation should have **processes to measure and evaluate safety initiatives** that include appropriate procedures to**:**

		Importance					Feasibility			
	Consensus#	Essential	Very Important	Important	A little bit important	Not at all important	Very Easy	Relatively Easy	Relatively Difficult	Very Difficult
	%	%	%	%	%	%	%	%	%	%
Regularly inspect playing and training surfaces and environments for safety hazards.	95%	71%	24%	5%	0%	0%	9%	81%	5%	5%
Regularly inspect and test playing and training equipment to ensure it is safe.	95%	71%	24%	5%	0%	0%	5%	86%	5%	5%
Regularly inspect facilities (change rooms, toilets etc) for safety hazards.	86%	62%	24%	14%	0%	0%	14%	81%	0%	5%
Investigate, and report to internal and external stakeholders on, serious injury incidents.	86%	62%	24%	14%	0%	0%	0%	57%	38%	5%
Regularly check the qualifications, accreditations and clearances of employees and volunteers (e.g. coaches, first aid providers, team managers etc).	86%	52%	33%	14%	0%	0%	5%	57%	28%	9%
Use the information gathered from inspections, investigations, monitoring and reviewing to improve existing, and develop new, safety initiatives.	86%	48%	38%	14%	0%	0%	0%	43%	43%	14%
Analyse injury records to identify, monitor, and report to internal and external stakeholders on trends of injuries and other adverse events (near misses, hazards etc) sustained during participation in the organisation's activities.	86%	48%	38%	14%	0%	0%	0%	33%	52%	14%
Record all injuries and other adverse events (e.g. near misses, hazards etc) sustained during participation in the organisation's activities.	81%	48%	33%	19%	0%	0%	5%	33%	38%	24%
Regularly review safety plans and assess whether what was planned was actually done, and if so, how well it was done.	76%	48%	29%	24%	0%	0%	0%	29%	57%	14%
Regularly monitor compliance of stakeholders with safety initiatives.	76%	43%	33%	24%	0%	0%	0%	29%	48%	24%
Set new safety objectives, targets and review date.	71%	19%	52%	24%	5%	0%	0%	57%	38%	5%
Regularly assess achievement of targets and objectives set out in the safety plan.	67%	14%	52%	33%	0%	0%	0%	48%	48%	5%

Sum of Essential and Very Important

_ _ _ represents cut-off point of 75% agreement below which an indicator was not accepted as 'as an important reflection of a Principle of safety management systems in the context of community sports organisations'

Table 6: Delphi Round 3 responses to Safety Management System principle related to **Review and Improvement: Is the Safety Management System working and how can it be improved?** (n= 21)

Community Sports Organisation should have appropriate procedures to:

		Importance					Feasibility			
	Consensus[#]	Essential	Very Important	Important	A little bit important	Not at all important	Very Easy	Relatively Easy	Relatively Difficult	Very Difficult
	%	%	%	%	%	%	%	%	%	%
Periodically audit or review the Safety Management System as a whole, and its individual components, to ensure it is implemented and works in the way it is supposed.	86%	67%	19%	14%	0%	0%	5%	43%	38%	14%
Up-date the Safety Management System based on the information gathered from internal and external communication and consultation, safety inspections and investigations, injury monitoring and reviews of processes.	86%	62%	24%	14%	0%	0%	5%	24%	52%	19%
Investigate, and report to internal and external stakeholders on, failures of the Safety Management System.	86%	48%	38%	14%	0%	0%	5%	19%	62%	14%
Review the adequacy of the resources allocated to safety management.	86%	33%	52%	14%	0%	0%	9%	38%	38%	14%
Gather and consider feedback and comments from internal and external stakeholders about the way safety is managed.	86%	29%	57%	14%	0%	0%	9%	24%	57%	9%
Assess the appropriateness and timeliness of responses to identified safety issues.	81%	47%	33%	19%	0%	0%	5%	33%	57%	5%

[#] Sum of Essential and Very Important