Emergency preparedness in fitness facilities: bridging the gap between policy and practice

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Abstract: Fitness facilities are an important contributor to economies through preventative health policies of governments. Therefore, it is crucial that they are capable of ensuring the health and safety of their users during emergency situations under relevant work health and safety (WHS) legislation. This study aimed to analyse emergency response preparedness in fitness facilities in Australia and develop evidence-based strategic recommendations, using a mixed methods approach. An onsite observational audit tool and in-depth interviews were conducted at a sample of regional and metropolitan fitness facilities. The results showed that fitness facilities showed a lack of operational emergency response practices that requires an integrated approach to risk management by fitness facility operators. This gap between policy and practice has significant implications for all stakeholders involved in fitness service provision, including government agencies, academia and industry governing organisations.

Keywords: fitness facilities; risk management; safety; emergency preparedness; emergency response; policy development; observational audit; fitness industry.


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This paper is a revised and expanded version of a paper entitled ‘An evaluation of emergency plans and procedures in fitness facilities in Australia: implications for policy and practice’ presented at the 5th International Disaster and Risk Conference, Davos, Switzerland, 24–28 August 2014.

1 Introduction

Over the last decade the numbers of fitness facilities, their employment and operating profits have increased significantly (Australian Bureau of Statistics, 2009). In 2007–2008, fitness facilities contributed $873 million to the Australian economy and provided savings in direct healthcare costs estimated up to $108 million through their positive impact on physical inactivity and associated diseases (Deloitte Access Economics, 2012). In 2011, there were 21,514 fitness instructors employed in the sport and physical recreation occupation group (Australian Bureau of Statistics, 2012). This is the largest employment category in this group with a 56% increase since 2006. Furthermore, in 2013–2014, an estimated 3.2 million Australian adults exercised at a fitness facility, which is the second most popular type of physical activity after walking for exercise. This reflects more than a 38% increase over the last decade, despite decreasing participation rates in other forms of traditional organised sports (Australian Bureau of Statistics, 2007, 2015).
Despite the increasing use of services provided by the fitness industry, obesity and excess weight associated with physical inactivity remains a preventative health challenge. For example, in Australia, three in five adults and one in four children are overweight or obese. These statistics are associated with physical inactivity and health risk factors such as cardiovascular diseases, diabetes, hypertension and certain cancers (Australian Bureau of Statistics, 2012). This has prompted the government to develop national preventive health policies and initiatives that promote physical activity and exercise as a cost effective measure to decrease preventable diseases associated with physical inactivity (Commonwealth of Australia, 2010; Department of Health, 2016).

As people are becoming more health conscious, fitness facilities with their accessibility and flexible hours are becoming an increasingly significant part of busy lifestyles (Hajkowicz et al., 2013). Along this line, fitness facilities are no longer places for only the young, already fit and healthy. Older people are also utilising fitness facilities and many of these are unaccustomed to formal exercise and have hidden or existing cardiovascular diseases or other major risk factors for chronic illnesses. In 2012, fitness facilities experienced the highest increase in clients among the 45–54 year age group (27%) and 11% of their clients were referrals by medical or allied health services (Fitness Australia, 2012). Consequently, the emerging health challenges of the fitness facility users raises questions relating to the emergency preparedness of these fitness facilities and their capacity to respond to and recover from emergency situations, not only for the health and safety of the users, but also for the broader health system and community.

Australian emergency management agencies (National Governors Association, 1979) and businesses (Queensland Government, 2014) have been utilising the prevention, preparedness, response and recovery (PPRR) model as a comprehensive approach to managing emergencies. The PPRR emergency cycle model was developed more than three decades ago in 1978 as a comprehensive emergency management (CEM) system that originated in the work of the State Governors Association in the USA (Queensland Government, 2014). The PPRR sequence of elements describes the treatment categories to mitigate a certain risk and one must always have risk management strategies for a certain risk that fall under each and all of these categories. It also assumes that treatments are inevitably linked and always should follow the same order in the PPRR cycle. However, the selection of treatments needs to be based on criteria including but not limited to the efficiency (cost versus benefit), effectiveness (impact) and feasibility (resources) according to the level of a risk (Cronstedt, 2002). Therefore, it is notable that the PPRR model has been criticised for its reactive, limiting and forced approach to emergency management that shifts the focus from the appropriateness of a treatment to finding the appropriate category for a treatment (Cronstedt, 2002).

Since 1996, the then peak body in Australian emergency management, the national emergency management committee, has endorsed the Australian and New Zealand standard for risk management (Emergency Management Australia, 2004). This modern day proactive and more flexible approach to managing risks comprises five steps:

a. establishing the context (rules, regulations, legislation)
b. identifying the risk (hazards and associated risks)
c. analysing the risk (likelihood and consequences of risks)
d. evaluating the risk (tolerance level of risk)
e treating the risk (control the risks) with the most viable and appropriate option based on a cost-benefit analysis that entails understanding of the dynamics of the socioeconomic and psychosocial systems (Standards Australia, 2009).

In this regard, the risk of emergency situations at a fitness facility can be best managed by having appropriate emergency plans and procedures as part of the overall risk management program of the facility (Sekendiz, 2014; Sekendiz et al., 2014a).

1.1 Regulation of emergency preparedness in the fitness industry

An emergency plan can be described as a written set of clear instructions that outlines what workers and others at the workplace should do in an emergency (Safe Work Australia, 2012). There are no specific mandatory industry standards or codes of practices that require utilisation of emergency plans in fitness facilities in Australia. However, under the Work Health and Safety (WHS) Act of 2011 (Commonwealth [Cth]) fitness facility owners and operators have a primary duty of care to ensure facility visitors, clients and all types of workers or employees are not exposed to a risk to their health and safety. Under section 43 of WHS Regulations of 2011 (Cth) this includes ensuring that an emergency plan is prepared and maintained for the workplace and that this plan is executed in the event of an emergency. The plan should provide emergency procedures, testing of these procedures and information, training and instruction to relevant workers about the procedures. According to the emergency plans fact sheet by Safe Work Australia (2012), which provides general guidance relating to emergency plans under WHS Regulations, the types of emergencies to plan for include fire, explosions, medical emergencies, rescues, incidents involving hazardous chemicals, bomb threats, armed confrontations and even natural disasters. While an emergency plan should be simple and easy to understand, it must also provide:

- emergency procedures, including an effective response to an emergency, evacuation procedures, contact details for local emergency services, notifying emergency service organisations, medical treatment and assistance, communication system between the responsible emergency response officers and all the other people at the workplace
- regular testing of the emergency procedures
- information, training and instruction to relevant workers in relation to implementing the emergency procedures.

Emergency plans, or a summary of the key elements within emergency plans, should also be readily accessible by workers or on display in the workplace for quick and easy reference at all times.

Provision of first-aid equipment and first-aid facilities is also covered under the WHS Regulations (division 3). Such equipment must be accessible by all workers in a workplace for use when it is needed. Workplaces must also have an adequate number of workers or persons trained to administer first-aid at the workplace. The contents of the first-aid kits and risk assessment considerations for the installation of automated external defibrillators (AEDs) for medical and cardiac emergency preparation are outlined in the First Aid in the Workplace Code of Practice (Safe Work Australia, 2016). Failure to meet
these WHS requirements is a criminal offence with penalties ranging from $6,000 for individuals to $30,000 for body corporations.

Previous research in Queensland highlighted that, assessed against industry best practices and national WHS requirements for emergency preparedness, many fitness facilities do not meet these requirements (Sekendiz, 2014; Sekendiz et al., 2014a). It was found that more than one quarter (27%) of fitness facilities did not provide in service training on emergency plans for their employees (Sekendiz, 2014). Of the fitness facilities with an onsite AED (19%) only 60% had staff currently certified in CPR and AED use and only 37% of the fitness facilities properly revised and practiced their emergency plans and procedures (Sekendiz et al., 2014a). In support of these findings, a nationwide study found that more than one quarter (27.4%) of fitness professionals in Australia were not aware of the emergency evacuation plans and other emergency procedures in their facilities (Sekendiz et al., 2014b).

Low compliance with emergency training, plans and procedures in fitness facilities can hamper their response capability when an emergency situation occurs. This can have a negative impact not only on the resilience of the fitness industry, but the community who depend on its services to keep physically active and healthy. The purpose of this study was twofold. The first aim was to analyse emergency response preparedness in fitness facilities in Australia. The secondary aim was to identify strategies from the perspective of fitness professionals to ensure they are fully aware of the legal requirements to meet their duties for the health and safety of fitness facility users.

2 Methods

This study was approved by the Bond University Human Research Ethics Committee (RO: 1676). The research design consisted of a mixed methods approach to integrating quantitative and qualitative data collected in two stages as outlined below.

2.1 Stage 1 – onsite observational audits

As part of the Australian Fitness Industry Risk Management (AFIRM) project (LP120100275) an onsite observational audit tool (AFIRM-OAT) was developed and piloted to quantitatively explore information as to current health and safety practices relating to the layout, operating procedures and conditions of fitness facilities (Gray et al., 2015). The items in the AFIRM-OAT were developed based on review of literature, the American College of Sports Medicine’s fitness facility standards and guidelines (American College of Sports Medicine, 2012) and relevant Australian WHS law, regulations and codes of practice.

A multidisciplinary panel of experts in injury prevention, risk management, legal liability, occupational health and safety and sports science was established to ensure the content and face validity of the AFIRM-OAT. The final AFIRM-OAT contained 83 items comprising six main sections:

a environment (22 items)

b cardiovascular/motorised equipment (19 items)

c weight-pin-loaded machines (14 items)
d free/plate-loaded weights (14 items)
e emergency situations (nine items)
f procedures (five items).

A convenience sampling plan was used to recruit 11 fitness facilities, based on the research team members’ locations across Australia, extending across seven metropolitan and regional cities in New South Wales, Queensland, South Australia and Victoria, to conduct the pilot audits. Adopting the definition of Australian Bureau of Statistics (2001), all fitness facilities were classified as small businesses based on their employee numbers (range = 5–19). This study used the AFIRM-OAT items relevant to the ‘emergency situations’ section (Table 1).

Table 1 The AFIRM observational audit tool (AFIRM-OAT) items for emergency situations

| 1 | Is there an appropriate first aid kit accessible by all staff that is complete and clearly identified? |
| 2 | Are emergency exits clearly signed? |
| 3 | Does the facility have fire protection, extinguishers and hose reels? |
| 4 | Is fire equipment marked with a location and identification marker? |
| 5 | Are all fire extinguishers accessible and clear from obstruction? |
| 6 | Does fire equipment have maintenance records kept showing when the last test was performed and when the next is due? |
| 7 | Is there an emergency response plan clearly displayed to patrons for the facility? |
| 8 | Are emergency/fire evacuation procedures clearly displayed? |
| 9 | Are emergency telephone numbers clearly displayed? |

2.2 Stage 2 – in-depth interviews

In-depth interviews were conducted with 60 fitness staff from 20 fitness facilities including the audited fitness facilities in this study that were selected according to the convenience sampling method described in stage 1. Participation in the in-depth interviews was voluntary and anonymous. The aim of the in-depth interviews was to gain an understanding of the fitness professionals’ perceptions of how their facility management, and fitness industry governing organisations could ensure their facility staff has knowledge and awareness of legal requirements in the fitness industry in order to enhance emergency preparedness and health and safety of their clients. The findings were used to understand the results of the AFIRM-OAT and develop evidence-based strategies that can help fitness facilities comply with WHS requirements for emergency preparedness.

2.3 Data analysis

The quantitative data obtained from the AFIRM-OAT were analysed using descriptive statistics with IBM SPSS Statistics 20. Data are presented as the number and percentage
of the audited facilities. The qualitative interview data were transcribed and analysed thematically by categorising the responses according to themes (Braun and Clarke, 2006).

3 Results

3.1 Onsite observational audit

Most of the audited fitness facilities showed compliance with structural emergency response practices such as having an appropriate first aid kit (36%), accessible fire extinguishers (91%), fire protection, extinguishers and hose rails (100%) and clearly signed emergency exits (91%) (Figure 1). However, there was a lack of operational emergency response practices evident in the fitness facilities. Most of the fitness facilities did not clearly display their emergency response plans (73%), emergency evacuation procedures (55%), or emergency telephone numbers (91%). Moreover, almost half of the facilities did not have maintenance records on their fire equipment (45%) showing regular inspection and testing of each item of equipment for readiness for action.

Figure 1  Results of the AFIRM observational audit tool (AFIRM-OAT) audits for emergency situations

3.2 In-depth interviews

Based on the answers given to the demographic questions, 40% of the interviewed fitness staff were female, 17% (n = 10) were facility managers, 32% (n = 19) had supervisory roles within their units and 52% (n = 31) were fitness instructors and personal trainers. All of the fitness facility managers were qualified and had a certificate 4 in fitness (n = 2), an associate diploma or diploma (n = 2), a bachelor’s degree (n = 5), or a PhD (n = 1). Most of the fitness supervisors and other staff had minimum both certificate 3 and certificate 4 in fitness (96%, n = 48) and had a bachelor’s degree (32%, n = 16) mostly in areas related to their current roles.

The thematic analysis of the in-depth interviews showed that all of the fitness staff believed in the importance of ongoing training and professional development in the
industry in order to keep abreast with changes on a daily basis and learn new skills. In this regard, they have indicated that there was a need for more professional development opportunities for fitness staff at their facility in order to ensure their knowledge of legal requirements in the fitness industry. The interviewees suggested that the professional training at their facilities could be in the form of inductions and regular training. The fitness staff also stressed the importance of transparency and to be able to regularly discuss legal issues and updates at staff meetings as a standard item on the agenda. In this regard, some fitness staff stressed the importance of accountability and keeping the lines of communication open within their organisations:

“Communication, so we’re all on the same page, a level of formality behind it. Make everyone accountable, say ‘read this, sign this, you have now signed this, if you do not abide by this, here are the ramifications.’”

“I think the best thing to do is hold meeting with everybody and try for example to have a seminar for staff to talk these issues, to see if everyone is on the same level. Try to give them the option to study something. Just do some research to put together, to put everyone on the same level. This could help.”

“Monthly newsletters, discussions, because personal training managers, managers they have meetings all the time, every three months sort of thing with head office, everyone gets together. This is the new exercise program, why not something like that relating to risk management. Not just for the personal training managers, not just for the personal trainers, but also your fitness instructors, your receptionist staff.”

The interviews with the fitness staff also indicated a need for online and face-to-face professional development courses on legal requirements in the fitness industry offered by the fitness industry governing organisations. Furthermore, the fitness staff stressed a need for the industry governing organisations to conduct more frequent audits and visits to small businesses to ensure legal requirements are met in the fitness industry. In this regard, some of the comments made by the fitness staff were:

“The auditing in gyms isn’t very frequent so you don’t get regular visits by whomever to make sure that your gym is up to standard, it’s very sporadic. In retail, I know you are always having 12 monthly check-ups to see how your workplace is going. I don’t know how you would implement that, it would be pretty hard cause there is a lot of private business out there and you would also have to check individual personal trainers, but probably need that 12 monthly audit or assessment, whatever you call it.”

“I’m a fan of audits, not in the sense that you take away the licenses or you can then give a bonus, but in a sense that what’s measured is what gets done.”

“I’ve just renewed my membership after two years. You get the massive info pack through the post. ...It’s all good and well sending out emails and post, but who actually reads that? We are all in the industry for a reason; we are all pretty active and more practical than sitting and reading, most probably. So if somebody came and talked to us, that would be more proactive, than if you were sent an e-mail or a letter.”

“Maybe visit. Look I think quarterly and yearly updates and every other industry, whether you’re an accountant or lawyer, if you’re registered with an organisation they have to not only just give you updates but take you through that process. I’m not sure that an email gets read all the time and I’m not sure that it gets out to the point, if it’s not enforced.”
4 Discussions

National strategies for emergency management recognise that businesses play a fundamental role in supporting a community’s resilience to emergencies as they provide resources, expertise and many essential services on which the community depends (Council of Australian Governments, 2011). In this respect, fitness facilities in Australia are unique businesses that are increasingly important in improving the health of the people in Australia. However, the results of this study signal a lack of implementation of emergency policies and practices in fitness facilities in Australia.

The observational audits showed that the majority of participating fitness facilities was equipped for emergency situations with accessible fire equipment, first aid kits and emergency exits. However, a lack of operational emergency risk management practices was uncovered that can be an impediment to successful emergency response. For example, emergency response plans (73%), emergency evacuation procedures (55%) and emergency telephone numbers (91%) were not clearly displayed in most of the audited fitness facilities. Besides, almost half of the fitness facilities did not have maintenance records on their fire equipment to ensure that such equipment can work safely and properly when needed in an emergency. These observations suggest a lack of emergency response planning and training in the fitness facilities. Indeed, according to a nationwide study more than one quarter (27.4%) of fitness professionals were not aware of the emergency plans and procedures in their facilities (Sekendiz et al., 2014b).

It is crucial for fitness facility operators to acknowledge that emergency equipment alone does not save lives. Appropriately and adequately trained staff prepared for all kinds of emergencies is critical to handle such situations professionally and successfully. As the in-depth interviews in this study suggested, training for emergencies at fitness facilities could be in the form of staff inductions and regular training during staff meetings. According to the WHS guidelines, employees must be adequately trained in emergency procedures that should also be made part of an induction program for new employees (Safe Work Australia, 2012). Arrangements for training and instruction of employees must also be set out in the emergency plan itself. The training should include practicing evacuations, identifying assembly points, location of emergency equipment, first aid arrangements and how to safely shut down machinery. Fitness facilities that operate 24 hours should also ensure that all members are regularly trained in emergency plans and procedures in order to be able to safely respond to emergencies during non-supervised hours.

Fortunately, emergency situations occur rarely; however, they can occur at any time without notice and result in severe or catastrophic consequences. Therefore, fitness facilities must be prepared at all times for all kinds of emergency situations not only limited to fire-related incidents, but including medical and cardiac emergencies, rescues, incidents involving hazardous chemicals, terrorist attacks and even natural disasters by having a comprehensive emergency action plan that is regularly revised and rehearsed by all staff members. A summary of emergency plans and procedures should also be clearly displayed and readily accessible in fitness facilities in order to ensure a non-delayed, timely and coordinated response to an emergency situation. Otherwise, fitness facility owners and operators would not only be putting the health and safety of their clients and employees at risk, but exposing themselves to the risk of legal liability for breaches of their WHS duties and the professional standard of care expected of them (Sekendiz et al., 2014a, 2014b).
Some of the fitness professionals interviewed in this study indicated that their facility checked currency of insurance of staff as one of the strategies they used to ensure compliance with legal requirements. Many fitness facility owners and operators perceive insurance as the most important risk management practice and ultimately they may believe that as long as they have insurance, they are covered for the costs of all legal liabilities (Sekendiz, 2014). However, having insurance can create a false sense of security, as most liability insurers do not offer protection against criminal liability such as breaches of WHS requirements. Some insurers have started offering policies that purport to indemnify officers against criminal penalties; however, the effectiveness of such policies is questionable given the complicated nature of indemnity and public policy considerations (Leggatt, 2013).

In the case of Hillman v. Ferro Con (SA) Pty Ltd and Anor (2013) at the Magistrates Court of South Australia, issues related to a plea of guilty and insurance claims for fines imposed by a WHS prosecution were discussed. The WHS prosecution of the defendants (Ferro Con and its director Maione) was due to a fatal accident that had arisen from a failure to maintain a reasonably safe working environment by not having a site-and task-specific risk assessment to control the foreseeable risks to their employees. When the defendants applied for a reduction of their fines based on their stated contrition, cooperation with the government workplace health and safety authorities and early guilty pleas, the court contended that such a decision would also require an indication of genuine regret and remorse and an intention to change their ways. In contrast, Maione had claimed against Ferro Con’s general insurance policy, which was seen as an unwillingness to take responsibility for the consequences of their actions and therefore their application for a reduction of their fines was declined [Hillman v. Ferro Con (SA) Pty Ltd and Anor, (2013), p.20].

Notwithstanding the WHS legislation in other Commonwealth countries such as the UK and New Zealand, insurance of criminal penalties is not specifically prohibited and does not create an offence for an insurer or an insured under current Australian WHS law. However, Section 272 of the WHS Act (2011) states that any term of a contract which seeks to modify the operation of the act is void. Viewed in this light, it would be in the best interest of fitness facility operators to not rely on insurance and rather ensure to have comprehensive emergency response plan and procedures that can prevent costly prosecutions for breaches of their WHS duties in the first place.

A limitation of this study was that the AFIRM-OAT did not include questions specifically about cardiac emergency preparedness including utilisation of AEDs in fitness facilities. This was mainly because there are currently no laws or regulations in Australia mandating utilisation of AEDs in fitness facilities (Sekendiz and Quick, 2011). However, prompted by a Queensland-based study that showed a lack of utilisation of AEDs in fitness facilities increasingly used by clients at higher risk of exercise induced cardiovascular events (Sekendiz, 2014; Sekendiz et al., 2014a), industry major organisations have recommended that fitness facilities and professionals carefully conduct their risk assessments in order to identify their need to install AEDs, which can also protect them against the risk of legal liability by adhering to highest professional standard of practice (Fitness Australia, 2015b; Lyndon, 2015).

Overall, the findings of our study signal a gap between fitness industry practices and the provision of information and training relating to emergency risk management strategies by the government and other agencies. The findings also suggest that the WHS
legislation that regulates emergency plans and procedures at workplaces has not been fully comprehended in the fitness industry. There are a number of possible explanations for this. First, as many fitness facilities in Australia operate as small and medium sized businesses (Fitness Australia, 2012), they may have not yet given emergency risk management issues sufficient priority. Second, training materials in emergency risk management as part of the WHS framework may not have been sufficiently made known to the industry, due to a major focus on the large higher risk businesses by WHS regulators (Champoux and Brun, 2015). Finally, as indicated by the interviews in this study, relevant industry governing organisations need to develop more practical strategies such as professional development courses and regular audits directed towards increasing their awareness-raising efforts to better support the needs of fitness facility operators.

Fitness service providers need to understand the risks that they face. Getting a business ready for an emergency situation should include developing an emergency response plan that is regularly revised and practiced. Planning starts with establishing the context of the organisation with regard to the relevant laws, regulations, code of practices and industry best practices relating to the assessment and management of risks. According to the national WHS compliance and enforcement policy (Safe Work Australia, 2011) priority should be given to encouraging and assisting compliance through information, guidance, education and advice to the business operators. A first step toward this goal was taken in 2011 with the establishment of the government funded AFIRM Project that resulted in the identification of key health and safety issues in the industry and the production of a risk management manual for the Australian fitness industry (Keyzer et al., 2014; Dietrich et al., 2014).

In response to the outcomes of the AFIRM Project, on 20 May 2015 the major fitness industry organisation fitness Australia published new Business Principles and Guidance for Fitness Businesses that included a number of principles relevant to this study as outlined below (Fitness Australia, 2015a):

- fitness businesses recommending and/or programming fitness related activities must ensure that necessary personnel hold relevant professional credentials and have appropriate experience
- fitness businesses should undertake a periodic risk assessment of operations and have documented risk management procedures
- fitness businesses must maintain a safe working environment that meets WHS laws and standards
- fitness businesses should ensure that all personnel working in the fitness business are trained to identify and address risks and maintain a safety first attitude
- fitness businesses should develop ongoing monitoring and reporting measures designed to ensure the successful implementation of and ongoing compliance with, these principles.

The development of these principles represents a promising start towards the recognition of the importance of the issues raised in this study by a major fitness industry lead body. They reinforce the need for educating fitness professionals to strengthen emergency risk management in fitness facilities by developing sector-wise strategies that should involve the government agencies, academia and the fitness industry major organisations.
5 Conclusions

Our study indicates that fitness facilities in Australia may not be well prepared for the possibility of an emergency situation. Emergency response capability is crucial for fitness facility owners and operators to ensure the health and safety of their clients and employees by minimising the potentially catastrophic effects of medical emergencies, natural or man-made disasters such as fire, explosions and incidents involving hazardous chemicals. It is also crucial to ensure that they can satisfy their legal obligations under the WHS legislation in order to prevent the risk of high cost prosecutions and associated liability cases. Better emergency preparedness not only impacts a business itself, but the community more widely. This research has significant implications for the industry and government agencies and points to the need to:

a. develop better emergency risk management policies and programs
b. further education of fitness facility managers, staff and participants
c. reconsider what necessary implementation support needs to be provided to fitness facilities to help them comply with and adopt as routine, emergency risk management procedures.

Acknowledgements

This research study was funded by an Australian Research Council (ARC) Linkage Grant LP120100275 and industry partners Fitness Australia and Sports Medicine Australia.

References

American College of Sports Medicine (2012) ACSM’s Health/Fitness Facility Standards and Guidelines, Human Kinetics, Champaign, IL.


Hillman v. Ferro Con (SA) Pty Ltd (in liquidation) and Anor (SAIRC 22, 2013).


