

# **The Koo Wee Rup (KWR) Men's Shed: Human Health and Environmental Sustainability Evaluation**



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## OVERVIEW

*The purpose of this document is to provide a summary of the research conducted by Deakin University, in 2015, on the Koo Wee Rup (KWR) Men's Shed. This research formed the basis of an Honours thesis by Laura Ayres.*

## RESEARCH BACKGROUND

Numerous public health experts believe health promotion practice has the capacity to reduce the impact of environmental sustainability challenges. (1-5) However, to date, health promotion has been very slow to respond to these challenges. (2, 6, 7) Health and environmental sustainability benefits have been identified in some health promotion initiatives, but there is limited empirical evidence outlining the effectiveness of these programs on both human health and environmental sustainability. (8-13)

## RATIONALE

To address this literature gap, this study evaluated an Australian health promotion program that has a health and environmental sustainability agenda; the KWR Men's Shed (i.e. located at Kooweerup Regional Health Service (KRHS), south-east of Melbourne in the rural Cardinia Shire). This research was part of a larger study at Deakin University, Australia, that aimed to investigate the contribution of health promotion towards addressing environmental sustainability challenges that impact on human health in Australia, Canada and the United Kingdom.

## AIM AND RESEARCH QUESTIONS

The overarching aim of this study was to investigate the impact of the KWR Men's Shed on human health and environmental sustainability. This aim was addressed using the following research questions tailored to both men's health and environmental sustainability.

## **A) Men's health**

1. To what extent has the KWR Men's Shed influenced the physical, social and mental health of men who participate in the program?
2. Are the strategies used for the KWR Men's Shed both sufficient and appropriate to promote the multiple dimensions of health for its participants?

## **B) Environmental sustainability**

1. To what extent has the Men's Shed positively influenced environmental sustainability at KRHS?
2. To what extent has the KWR Men's Shed positively influenced human-environmental relationships?
3. Are the strategies used for the KWR Men's Shed both sufficient and appropriate to promote environmental sustainability?

## **DESIGN AND METHODS**

A qualitative case study approach was used to evaluate this Men's Shed. (14) A purposeful sample of thirteen Shed participants (all retired, aged 60 +) and eight KRHS staff members (i.e. health promotion, sustainability and nursing staff) were included in the study. Data collection was predominantly conducted over two consecutive days in June 2015 and included two separate, semi-structured group interviews - one with Men's Shed participants (n=12) and one with KRHS staff (n=5); semi-structured individual interviews with four Shed participants and three staff members; and documentation relating to the strategies used by KRHS - including its Environmental Sustainability Policy and Men's Shed Induction Pack. All collected data was primarily analysed using thematic analysis (15-17) and guided by some of the principles of Stake's case study analysis approach such as description, analysis and interpretation. (8, 18)

## MAJOR FINDINGS

The study found that the KWR Men's Shed has fostered a number of human health and environmental sustainability benefits for Shed participants, and unexpectedly the wider community. KRHS have also used a number of strategies, that were widely sufficient and appropriate (6), to help foster human health and environmental sustainability benefits at the Shed.

### Health benefits

Among individual health benefits to male participants, social and mental health benefits were primarily described by both participants and staff, and included developing a sense of purpose, increased self-confidence, mateship and social connectedness, and informal support. These individual health findings were generally consistent with previous Men's Shed studies. (19-26) In comparison, physical health benefits were less apparent in the KWR Men's Shed, but included some physical activity from manual-type labour, nutritional exposure from the Community Garden and cooking classes, and regular health check-ups from KRHS nurses. Since existing studies have generally reported more social and mental health benefits for participants, it is likely that physical health is not a large focus of most Men's Sheds. (19-26)

### Environmental sustainability benefits

The KWR Men's Shed also has an array of activities - such as recycling, organic gardening, composting, water saving, habitat protection and worm farming - that have promoted both environmental sustainability and positive human-environmental relationships among Shed participants. Although some of these activities are somewhat evident in grey and peer reviewed literature on Men's Sheds (24, 27-31), to date, subsequent benefits have not been documented.

Additionally some staff members suggested KRHS's Eco House building, which is situated next to the Men's Shed and provides environmental information and demonstrations to the community, has helped further encourage environmental awareness within the Shed. The Eco House is also the office base for KRHS's Health Promotion and District Nursing staff.

## **Community benefits**

In addition to fostering individual health and environmental sustainability benefits for Men's Shed participants, the Shed has also benefited the wider community via its awareness raising activities and inclusiveness of all ages, genders, disabilities and backgrounds. The KWR Men's Shed appeared to be a focal point of the community. Not only were all community members welcomed at the Shed, but some Men's Shed participants actively encouraged the wider community to improve their health and be involved in environmental sustainability practices via several awareness raising activities. (6) Some of these activities included preventing family violence with school students, promoting dementia awareness, advocating against unsafe coal and gas mining, and organising worm farming workshops.

## **Core strategies**

A socio-ecological approach, which underpins the Ottawa Charter for Health Promotion (6), was considered the core strategy for the Shed by KRHS staff. From analysing reported health and environmental sustainability strategies in relation to the Ottawa Charter, Table 1 (i.e. next page) demonstrates that the KWR Men's Shed addresses all five action areas of the Charter. (6) The notion of Men's Sheds addressing areas of the Ottawa Charter is not a new finding. (32) Morgan et al. (32) previously suggested that Men's Sheds meet several action areas of the Ottawa Charter via a gendered approach to mental health. However, this study suggests that KRHS's approach was more encompassing as it utilised all action areas to support both human health and environmental sustainability. (6)

**Table 1: Ottawa Charter Action Areas evident in the KWR Men's Shed**

<b>REORIENT HEALTH SERVICES</b>	<b>DEVELOP PERSONAL SKILLS</b>	<b>STRENGTHEN COMMUNITY ACTION</b>	<b>CREATE SUPPORTIVE ENVIRONMENTS</b>	<b>BUILD HEALTHY PUBLIC POLICIES</b>
<b>HEALTH EXAMPLES</b>				
Health promoting Hospital	Cooking classes	Family violence prevention	Non-clinical environment	Shed's Code of Conduct
Health promoting nurses	First aid courses	Dementia awareness	Variety of activities	
			Disability friendly areas	
<b>ENVIRONMENTAL SUSTAINABILITY EXAMPLES</b>				
Environmental sustainability practitioners	Environmental workshops at Eco House	Advocating against unsafe coal and gas mining	Community Garden	KRHS Environmental Sustainability Policy
		Community worm farming workshops	Eco House	

(6)

The Shed's community involvement and benefits suggest that this program may also be an example of systems thinking. From utilising the Ottawa Charter - which is also a systems thinking framework (6, 10, 33) - this study has shown that the KWR Men's Shed was creating positive changes at multiple levels; including among individuals, workplaces, schools and wider communities. Table 2 also supports this systems thinking notion as it illustrates

positive human health and environmental sustainability changes this Men's Shed was creating within each system of Bronfenbrenner's ecological systems theory. (34, 35) Please note that further information about systems thinking frameworks - including their purpose and background - can be found in Appendix 1.

**Table 2: KRHS's Men's Shed strategies in relation to Bronfenbrenner's ecological systems theory**

SYSTEMS LEVEL	SHED EXAMPLES
<p><b>Microsystem</b> (i.e. individual level)</p>	<p>Range of individual health and environmental sustainability benefits to Men's Shed participants including:</p> <p><b><u>Health</u></b></p> <ul style="list-style-type: none"> <li>• <i>Social and mental health benefits:</i> Socialisation, sense of purpose, improved self-confidence and social support</li> <li>• <i>Physical health benefits:</i> Physical activity via manual-type labour, nutritional activities and medical check-ups</li> </ul> <p><b><u>Environmental sustainability</u></b></p> <ul style="list-style-type: none"> <li>• Increased skills and knowledge around environmental sustainability; pro-environmental attitudes</li> </ul>
<p><b>Mesosystem</b> (i.e. family, workplace and community level)</p>	<ul style="list-style-type: none"> <li>• Men's Shed participants' wives were involved in Shed activities and reportedly experienced similar benefits to men</li> <li>• Shed helped promote health and environmental sustainability within KRHS and the wider community - e.g. recycling, and dementia and family violence awareness</li> </ul>

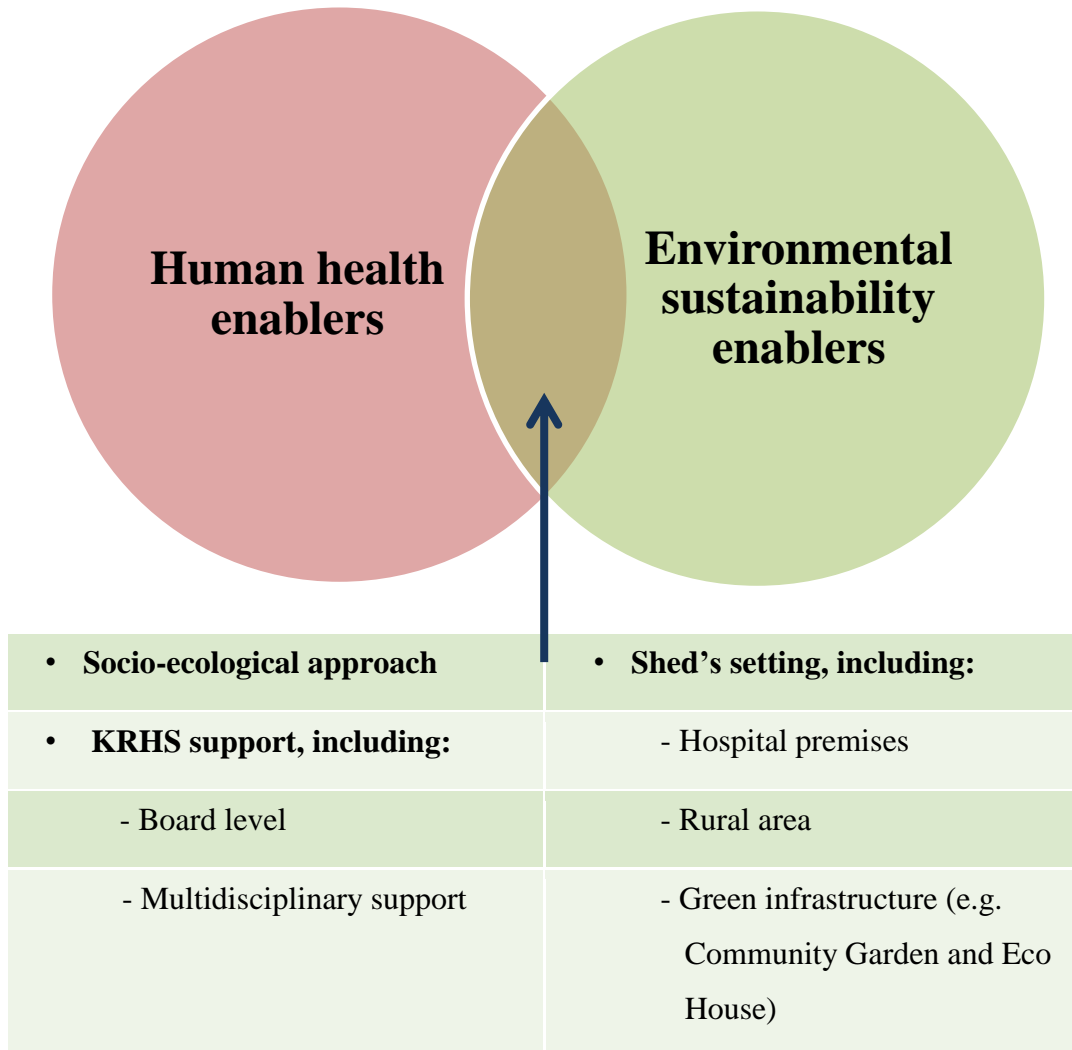


<p><b>Exosystem</b> (i.e. economic, political, education, government and religious systems)</p>	<ul style="list-style-type: none"> <li>• School mentoring programs had fostered health and environmental sustainability benefits for students and local schools</li> <li>• Shed had been involved in advocacy initiatives, such as Lock the Gate, that were targeted to the community and local governments</li> <li>• Shed's partnerships with local churches had helped further promote health and environmental sustainability within the community</li> </ul>
<p><b>Macrosystem</b> (i.e. overarching beliefs and values of the community)</p>	<ul style="list-style-type: none"> <li>• Shed was helping to influence positive health and environmental sustainability at an individual, workplace and community level</li> </ul>
<p><b>Chronosystem</b> (i.e. change or consistency overtime in an environment)</p>	<ul style="list-style-type: none"> <li>• Since the Shed opened in 2009, it had reportedly helped influence positive health and environmental sustainability changes within the community</li> <li>• Further evaluation is needed to determine the long term impact of the Shed</li> </ul>

(10, 34, 35)

Additionally, this study revealed key characteristics that simultaneously promoted both human health and environmental sustainability at the Shed. These characteristics are illustrated in Figure 1 and included a socio-ecological approach; support from KRHS - such as its Board and multidisciplinary staff; and the setting of the Shed being on a rural Hospital premises with green infrastructure. As this research area is still largely under-explored (10, 19), the success of the KWR Men's Shed suggests that these enablers, or similar enablers, may be needed to effectively promote both human health and environmental sustainability in rural and regional Sheds, and perhaps other health promotion settings. (36, 37)

**Figure 1: Enablers that simultaneously promoted health and environmental sustainability at the KWR Men's Shed**



## EVOLVEMENT

Despite the numerous health and environmental sustainability benefits of the KWR Men's Shed, there were some areas for evolution. Firstly, the Shed could arguably have a larger focus on physical health - such as promoting physical activity and nutrition for men, and subsequently other community members. (6, 38) Secondly, although most activities and areas were disability friendly, a community bus with lift access would further enhance the inclusive nature of the Shed. (6, 34) Finally, whilst it was reported that some Community Garden produce was currently wasted, the suggested development of a co-op partnership and 'rustic

store' revealed that the KWR Men's Shed was continually evolving its environmental sustainability agenda. (6, 34)

## CONCLUSION

In summary, this research has revealed that the KWR Men's Shed has fostered a number of human health and environmental sustainability benefits for Shed participants, and unexpectedly the wider community. As well as adding to the evidence-base for Men's Sheds, this study has important implications for health promotion practice. The underpinning strategies of the KWR Men's Shed, such as its socio-ecological approach, could be used in other rural and regional Men's Sheds, and possibly other health promotion programs for the dual promotion of health and environmental sustainability. The Shed's community involvement and benefits suggest that this program may also be an example of systems thinking. However, further research is needed to explore the environmental sustainability benefits of peri-urban Sheds and systems thinking in environmental sustainability and health promotion practice.

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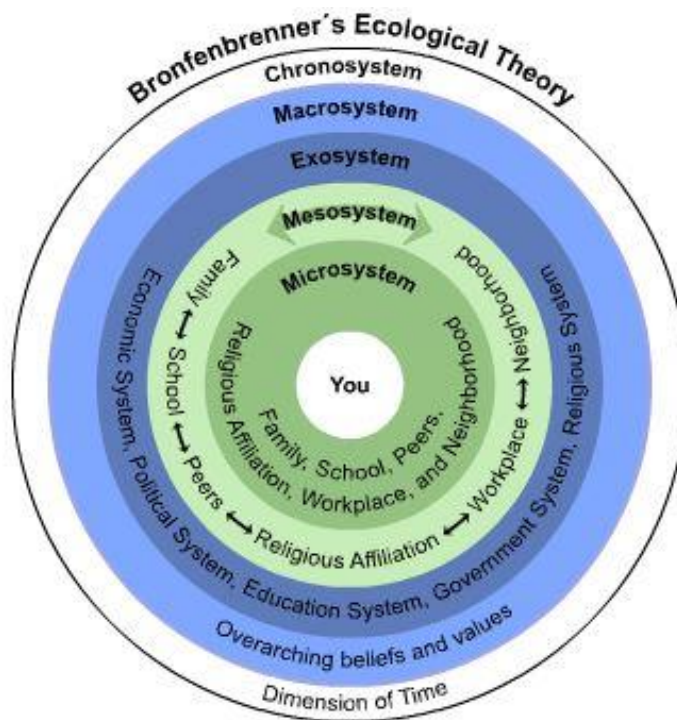




***Bronfenbrenner’s ecological systems theory:***

Similarly, Bronfenbrenner’s ecological systems theory outlines the multiple dimensions of an environment and its impact on individuals. (34) Although the theory is derived from developmental psychology, it has guided health promotion practice. (10, 43, 46) As illustrated in Figure 3, this theory consists of five environmental systems; including microsystem (i.e. individual level), mesosystem (i.e. family, workplace and community level), exosystem (i.e. economic, political, education, government and religious systems), macrosystem (i.e. overarching community beliefs and values) and chronosystem (i.e. change or consistency overtime in an environment). (10, 35, 47)

**Figure 3: Bronfenbrenner’s ecological systems theory (48)**



***Modern systems thinking approach:***

More recently, some public health researchers have utilised a more sophisticated systems thinking approach, with extensive causal loop diagrams and mapping, to address obesity. (42, 49) However, it was beyond the scope of this Honours research to fully engage with this more complex approach. Thus the Ottawa Charter and Bronfenbrenner’s ecological systems theory were the primary systems thinking frameworks used for this research.