ORIGINAL RESEARCH

Individual resilience in rural people: a Queensland study, Australia

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A B S T R A C T

Introduction: This article reports the results of phase 1 of a study into community and individual resilience in rural Australians. The aim of the study was to develop, implement and evaluate a model that enhances psychological wellness in rural people and communities. The study used a critical participatory action research methodology to work in partnership with key individuals and groups in a rural community in Queensland which, anecdotally, was identified by its community representatives as having confronted and responded positively to and dealt with adversities such as drought, hailstorms and bushfire. A focus in the project was to identify vulnerable as well as resilient elements in individuals and the community, with an emphasis on identifying and then using existing individual, group and community resilience as exemplars for those who are less resilient. The study recognised that not all members of the community were resilient; clearly there are more and less resilient groups within this community. Additionally, it was acknowledged that resilience was not a steady state within an individual. Rather, an individual's level of resilience could vary over their lifetime.

Methods: A participatory action research design was chosen for this study which aimed to identify individual and community resilience factors in a community. The study is being undertaken in three phases. In phase 1 of the study (the focus of this article), 10 in-depth interviews and one focus group (with four participants) were conducted. Individuals identified by a network of community service providers as being particularly resilient were selected to participate in this phase, with the aim of identifying these individuals' perceptions of individual and community resilience. This article reports on the factors identified that impact on the individual resilience of rural people.

Results: Thematic analysis of the qualitative data surrounding individual resilience revealed three themes: images of resilience; characteristics of resilient people and shapers of resilience (environmental influences that increase personal resilience).

Conclusions: The findings of this study support existing theoretical concepts of resilience, with an added dimension not previously reported. The major finding of this study is that connection to the land, which is strongly embedded in the literature on Indigenous peoples (eg human ecology) and acknowledged as part of Indigenous culture and cosmology, may also be a factor that enhances the resilience of non-Indigenous people who have built up a relationship with the land over time. The extent of this connection and its impact on individual and community resilience was, however, not established in this study, but should also be a major focus of future research.

Key words: environment, individual, resilience, rural, wellbeing.

Introduction

This study reports the results of phase 1 of a study into community and individual resilience in rural Australians. The aim of the study was to develop, implement and evaluate a model that enhances psychological wellness in rural people and communities. The study used a critical participatory action research methodology to work in partnership with key individuals and groups in a rural community in Queensland, Australia, which anecdotally was identified by its community representatives having confronted and responded positively to and dealt with adversities such as drought, hailstorms and bushfire. A focus of the project was to identify the vulnerable as well as resilient elements within individuals and the community, with an emphasis on identifying and then using existing individual, group and community resilience as exemplars for those who are less resilient.

Literature review

People in rural communities have less access to allied health and specialist medical services[1]. Despite this restricted access, there is a paucity of research to guide the delivery of rural mental health care[2]. The limited research that has been undertaken has focussed on delineating the prevalence of mental health problems in rural/urban areas[3], rather than providing a comprehensive investigation of these problems in rural communities[2]. In addition, very little is known about the protective factors that may provide a buffer against mental health problems and promote wellbeing in rural communities.

The concept of psychological wellness[4] aligns with a growing interest in conceptual formulations that differ from those focused on illness and disorder[5]. Resilience is a psychosocial concept that could usefully be applied to enhance both our understanding of, and capacity to, positively enhance psychological wellness in community members. Chenoweth and Stehlik argued that resilience at the individual and community levels was the key to managing significant stressors present in rural communities, such as drought crisis[6<]. Indeed, it has been suggested that communities that exhibit resilience have healthier people[7].

Resilience as a concept has attracted significant interest in the discipline of psychology[8-10]. Although a myriad of

definitions of resilience have been formulated, common to most is the notion of overcoming adversity. Norman Garmezy, a pioneer in the study of resilience, defined resilience as growth and adaptation despite exposure to significant stressors[11]. Rutter suggested that resilience is a popular concept because of the wish 'to inject some hope and optimism into the dispiriting story of stress and adversity'[12].

Early studies of resilience focused on characteristics that assist individuals to thrive through adversity[13,14]. In an historical review of the construct, Tusaie and Dyer concluded that factors found to be influential in the development of resilience could be divided into intrapersonal and environmental factors[14]. Factors that were intrapersonal included cognitive factors (intelligence, optimism, creativity, humour and a belief in one's self)[15-19] and competencies (coping strategies, social skills, above average memory and educational abilities)[20,21]. Environmental factors included perceived social support[22]. The authors also emphasise the importance of recognising the dynamic, interactive nature of resilience and the interplay between an individual and their broader environment[14].

Recognising the plurality of theoretical constructs and postulated mechanisms of resilience within the literature, Polk used concept synthesis to integrate the approaches to understanding resilience[23]. Outcomes of her work indicate that resilience can be evidenced as four patterns: the dispositional pattern, the relational pattern, the situational pattern and the philosophical pattern.

Kumpfer developed a resilience framework (Fig1) in an attempt to incorporate the multiple factors influential in the development of resilience[13]. Within this framework, six major constructs were specified of which four are domains of influence and two are transactional points between two domains. The four domains of influence include the acute stressor or challenge, the external environmental context, the internal self characteristics and the outcome. The two points for transactional processes include the confluence between the environment and the individual, and the individual and

the choice of outcomes. Kumpfer provided a comprehensive review of the research that supports his framework of factors and processes that contribute to resilience[13].

A number of recent reviews support the contention that resilience is a highly complex, dynamic phenomenon composed of multiple interrelated dimensions which fluctuate over time[24,25]. In one such review, Luthar and Cicchetti[24] argued that the process of resilience is best conceptualised by the two pivotal constructs of adversity and adaptation.

Luthar and Cicchetti assert that the challenge for resilience researchers is to identify the underlying mechanisms or processes of resilience and to ensure that resilience-enhancing interventions are soundly based on both theory and prior research findings[24]. To do so, the authors contend that resilience researchers must first empirically identify vulnerability or protective factors from multiple levels of influence (community, family and individual) which may modify the negative effects of adverse life circumstances. Further, Luthar and Cicchetti argue that interventions designed to enhance resilience must carefully match goals and techniques with the 'life circumstances and everyday ecologies of the individuals served'[24, p.878-879]. This assertion that the environment is central to the functioning of individuals has particular relevance for research focusing on rural communities.

It is evident that individuals living in rural communities face life circumstances and unique ecologies which differ markedly from populations living in urban centres. Accordingly, important differences in the nature and response to stressors in rural compared with urban areas have been examined in a number of recent studies[26,27]. Thus, prior to developing programs to enhance the wellbeing of people in rural areas, a comprehensive understanding is required of the barriers and protective factors that contribute to psychological wellbeing and resilience.
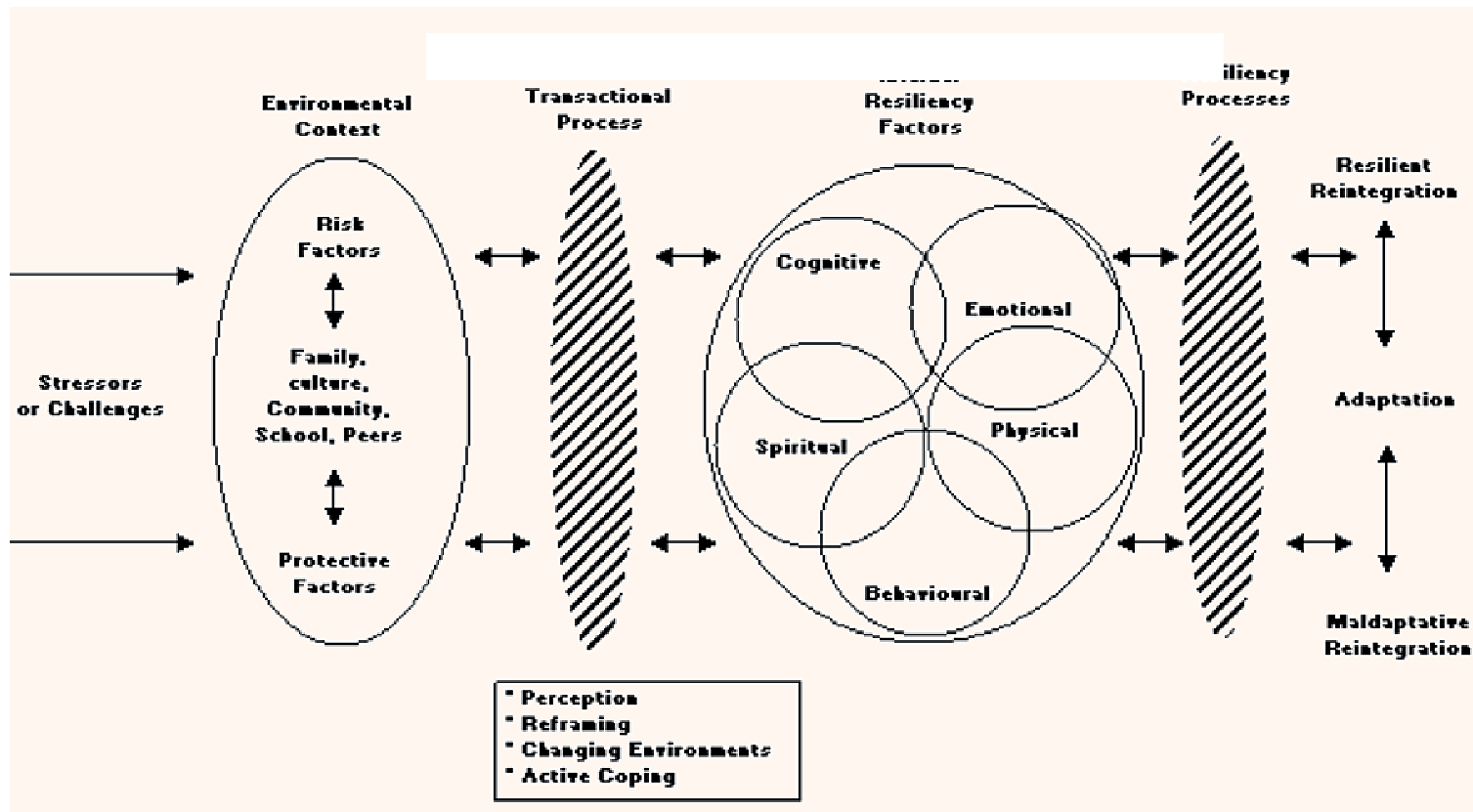
Figure 1: Resilience framework, according to Kumpfer[13], reproduced with kind permission of Springer Science and Business Media

Methods

Location of the study

This article reports on phase 1 findings of a study carried out in a medium sized rural town in south-eastern Queensland. The shire has an area of $2699 \, \text{km}^2$ and is home to approximately 10 600 multi-cultural residents, half of whom live outside the town in surrounding rural areas. The main industries in the shire are wineries and tourism, fruit and vegetable growing and sheep and cattle grazing. At the time of the study the town was experiencing an extreme drought. In the previous 2 years the town had also experienced 'black' frosts, hail storms and bushfires.

Study design

The aim of the larger study was to work collaboratively with members of this community to develop, implement and evaluate a model that enhances psychological wellness in rural people and communities. Key stakeholders in the community were identified through a formal network group that met quarterly in the community. This network group represented a wide range of health, education and welfare agencies that provided services to the community; most of these staff were also community residents and accepted as community 'members'. The study is being carried out in three phases. In phase 1, 10 interviews and one focus group were conducted with people who had been identified as 'resilient'. The aim of this qualitative phase was to explore

individual conceptions of resilience – both as an individual as well as a community characteristic. The research team did not define resilience to the participants; rather, they allowed each individual to define resilience in their own way. Phase 2 of the study involved convergent interviews[28] with 75 participants who were identified as 'resilient' by the participants in phase 1 of the study. These 'resilient' individuals were considered to be representative of the key groups within the community. Following the completion of the first two phases of the study, the data were analysed and presented back to the network group on three separate occasions. Final deliberations by the network group and the research team resulted in the design of phase 3 of the study. This involves the design of a 'resilience' toolkit which is currently being trialled and evaluated. The toolkit will be used by residents in this community to design and evaluate programs which build resilience in individuals and the community. This article reports on the findings of individual resilience in the participants who took part in phase 1 of the study. Other manuscripts will report on the findings relating to community resilience factors found in phase 1 and the findings from phases 2 and 3.

Participant selection and characteristics – phase 1

Originally, participants were purposively selected in order to participate in two focus groups. However, the original plan to have two focus groups of approximately 7-10 people per group was modified to meet community members' needs. Inclusion criteria included: a member of the community who was seen to be a community leader; a member of the community who was seen to be resilient; a resident of the community under study; their ability to give informed consent to participate in the project. A member of the research team was a community worker and a long-term member of the community. She identified and approached people who she believed met the inclusion criteria. All the people approached consented to be in the study.

In total, 14 individuals took part in phase 1 of the study, including 10 individual interviews and one focus group of four people. Participants were 8 males and 6 females who

ranged in age from 34 to 81 years and were from a diverse range of occupational backgrounds including farmers, teachers, community workers, health professional and artists. Detailed demographic data on the participants cannot be supplied as it is possible that they may be identified.

Methodological framework

The study used a critical participatory action research methodology[29]. Participatory action research (PAR) was chosen for this study as consistent with our goal to explore individual perceptions of resilience within a group of rural residents, it incorporates the principle of self-reflection that is undertaken 'collaboratively by co-participants'[29]. It also has a social goal – that is, it is directed 'towards studying, reframing and reconstructing social practice'[29]. The study was approved by both the University of Queensland and University of Southern Queensland's Human Research and Ethics Committees.

Procedure

The participants were asked three focal questions:

1. 'What do you think the term 'resilience means?'
2. '[Name of town] has been through drought, storm damage, bush fires etc. What are some of the aspects of the … community that have helped people come through these hard times?'
3. 'What is [name of town] like as a community? (probe social aspects of resilience and how these work as well as economic aspects, then access to support services such as Lifeline, any key individuals. Also problem how natural resources underpinning the agricultural economy may contribute to risks and resilience [for example, climate, weather patterns, soil quality]).

At interview, participants were asked to identify other individuals in their community whom they felt demonstrated resilience in the face of hardship. The people identified as 'resilient' by phase 1 participants were then approached to

participate in phase 2 of the study, as members of core groups in the community.

Following informed consent, each of the semi-structured interviews were conducted with two members of the research team. The interviews, which were audio taped, took on average 45 min, whilst the focus group lasted 50 min. Following completion of the interviews, the audiotapes were transcribed and checked for transcription errors.

Following the checking process, the research team members individually coded each transcript. A team meeting was held and codes were discussed. Consensus was reached on themes and sub-themes emerging from the data.

Results

All of the participants when answering question one, focused on factors that defined resilience in the individual. Three themes emerged from these data. These were: images of resilience; characteristics of resilient people; and shapers of resilience (environment influences that increase personal resilience). Each theme will be discussed separately.

Images of resilience

In answering the question 'What do you think the term 'resilience' means?' participants noted that one person's definition of resilience may be different from others'. Despite these assertions, there was a good deal of convergence within the data. A number of participants used the analogy of a rubber ball and its ability to 'bounce back' as a way to describe resilience.

> *I tend to think of resilience a bit like a rubber ball. If it's put under pressure or something it can actually spring back to its size and shape and carry on without sustaining undue damage and all that sort of thing. So that's the sort of picture I have in mind when I think of resilience – the ability or capacity to come back and continue on without sustaining too much*

> *trauma and damage and so on and keep functioning properly.*

All of the participants, when asked to explain their concept of resilience, did so by describing characteristics in people whom they believed were resilient.

Characteristics of resilient people

The participants described many characteristics that they believed were evident in resilient people (being able to move on, 'bouncing back', resourcefulness, accepting and embracing change, being positive, adaptable and flexible, being innovative creative and proactive, having goals or vision for the future, being willing to 'have a go', being 'ahead of their time', being 'tough', working hard, using humour, seeking help from others, having faith or spirituality). Importantly, they noted that these characteristics were evident at different levels through each individual's lifespan – being resilient was not a steady state.

Being able to move on despite being 'bruised and battered' was seen as an important characteristic in a resilient person. Or, as another participant along a similar vein, noted:

> *I just think it means that you go through a whole heap of whatever it is and come out the other end, you might be shaken and stirred and in bits, but at least at the end of it you can get back up.*

Others noted that the ability to 'bounce back' could be limited by the number of issues faced by the individual. For example:

> *So they're at that step and the next step is to close the gate and walk away. So I think there's a big gap now in that rebound. They rebounded perhaps after the fires and then got up again after the drought, but this second drought and all those other factors. We're seeing new people, a new kind of client coming in.*

Other participants perceived 'bouncing' in a different way. For example, this participant noted that resilience meant the ability to accept stressors, but not internalise them:

My resilience is not so much something bouncing off me, its being able to deal with something that comes to me and not letting it stay there, so to speak. So it bounces off in a respect, but not off my exterior, it bounces off my interior and then my coping mechanisms take over to put it that way. So the way I deal with things actually – I put it like a piece of hard cased steel. That means that on the inside it's soft and on the outside it's hard or its' been hardened. In this case it's the opposite. On the inside it's being toughened – it's being able to cope with the stressors and through that dealing with the stressors that have been placed in there, but the outside is still relatively soft. People think the outside is where they need to bounce stuff off, to me it's not. It's the inside that you need to bounce it off because that's where it's actually going to get. It will actually penetrate through the soft and you have to have something on the inside to be able to stop it from going further. So that's the way I look at it.

Several participants also noted that resourcefulness was a characteristic (either learnt or innate) that identified resilience in an individual. For example:

Some individuals just seem to be naturally resourceful and just able to deal with crisis, put things into perspective. Some people just have good innate skills to deal with whatever comes along.

Another participant also spoke about how these skills were learned or developed over time.

I think you have people who have an inbuilt ability to cope through having learned to cope, who've been placed in the situation where they're having to deal with things all the time so they've built up a bank within themselves of how to cope with something.

They know what works and what doesn't, what they're responsible for. They can identify what they can actually change and what they have to accept.

Accepting and embracing change in a positive way was also identified as an important characteristic. One participant commented:

Well, being resilient has a number of different sorts of aspects to it but I think basically resilience means the capacity to deal with changing situations. Not necessarily changing for the worse or for the better, but dealing with changing situations and making the most of those changes. So it's a little bit more than just being able to survive something. It's being able to survive it and take advantage of any opportunities that arise from the new situation. … the capacity of people to deal with changes and to embrace changes and to take advantage of the changes is what resilience is all about.

To deal with change and the challenges in life, it was thought that people must be positive, adaptable and flexible.

There [have] *always been people in this community prepared to have a go at something different, whether it's growing a new crop or grazing a different sort of animal or opening some sort of shop or whatever.*

Strongly related to being positive, adaptable and flexible, was the ability to be innovative, creative and proactive. In many cases, these characteristics were linked to the fact that people lived in a rural environment and it was this rural environment that created the necessity to be innovative.

There seems to be a high degree of innovation with rural people …. People invent things and come up with – you know what I am saying? … Yes, it's just a necessity. [If] *they need this, or an easier way to do things, they just do it.*

In some cases, being flexible might mean looking elsewhere such as in another community. For example:

> *It's having that ability to look out of your situation and know that here are things that can help to get you through that. It's about having … get up and go to not just stay in one place, to actually look outside of your immediate surrounds.*

Others noted that resilient people usually had goals or a vision for the future. One person noted that resilient people were often 'ahead of their time'.

> *… he's, for me, always been ahead of his time. He's been that kind of a person …* [and] *even when I speak with him now* [he is a] *little ahead of his time each time.*

Another characteristic identified by the participants was that resilient people are willing to 'have a go'.

> *They don't always succeed, but I think that doesn't really matter. It's about this preparedness to have a go.*

Several participants also believed that resilient people strongly focus on working hard and are 'tough' in the face of adversity.

> *You've got to be tough, but as you say, you've also got to be flexible enough to be able to change or accept assistance and then advice.*

In some cases, this 'working hard' was related to the different cultural backgrounds of people in the town. Several participants noted that people from one particular ethnic background worked very hard to establish themselves, and once established, continued to work hard.

> *Because of the diversity of ethnic backgrounds here and the absolute preparedness for them to work at whatever is required … they will continue on and they will keep working. Now there are 80 year olds still working on farms, still going and think*[ing] *like that … And even the young families are working 14, 16, 18 hours a day, whatever it takes.*

Resilient people were seen as hard working and tough. However, this 'toughness' did not mean that the person was insensitive or lacked a sense of humour. In fact, several of the participants believed that humour was a tool used by resilient people.

> *I think that is part of the resilience process … it becomes a humorous thing.*

Resilient people would, if necessary seek help from others. It was apparent that strong networks were seen as something that was developed by resilient people.

> *You can call on other people. They can actually prop you up the times that you are really down yourself and I think you're not always having to do it by yourself. This is that support.*

Another major sub-theme that arose was that spirituality was an important influence on building individual resilience. Some people believed that this was tied to religion, but others noted that it was a more general spirituality.

> *… so underlying everything else there was this bigger picture that God was in control that even when things went wrong this year that there was still the bigger picture that there was someone up there that cared about them and who ultimately would bring about justice and good results and things like that. This affected everything they did. It wasn't overt, but I think it was still a deep thing within them that just sustained their lives and kept that positive optimism in their lives and governed the way they raised their family and all those sort of things.*

Another influence on resilience was hope for the future. Participants believed that a sense of hope was very important.

> So they were always sustained by these great stories that gave them hope. And maybe that's a clue, isn't it, to have hope. … That hope that they can actually improve their future … by pulling together they can change their future.

One participant noted that in the town, because of all the stressors people had experienced in a short period of time (drought, bush fire, hail storm) that this was eroding peoples ability to be resilient.

> So it doesn't matter how good it is, it matters more how much you can produce. So it means that the smaller operators are losing this sense of hope. They are losing this sense of 'I can get a reward for doing a really good job'. So I think some of these sorts of factors actually begin to erode resilience.

Another noted, that once belief in the future was gone, that there was no reason for people to continue.

> It's a belief. It's a belief that it will get better and if you run out of belief and you no longer think that it can get better, then …[you're in trouble].

The participants also noted that sometimes 'being resilient' was counterproductive financially for some families. For example:

> It comes back to what you said about the controls that are put on people and the supports that are there that should support those people who are doing well, but even in the exceptional circumstances [drought relief] didn't support the ones that were doing well. [It] supported the ones that weren't doing it well. So those ones that are resilient aren't getting the support

> that they need to carry on and may well be forced … by external conditions to [leave the land].

Shapers of Resilience (environmental factors)

The participants also noted there were environmental factors that shaped a person's ability to be resilient. These were the environment, connectivity to the land, family, culture and being part of a rural community.

The environment: Some participants noted the impact of the total environment on the ability of a person to be resilient.

> I think it is cyclic – I think it's a process and I don't think – everything is interdependent so you can't have a resilient person without having something around them – an environment or wherever they may be – that's resilient as well that helps support them and they become more resilient and they feed back into a community.

Connection with the land: This study was carried out in a rural town. The participants noted that many of the people who live in the town or in the surrounding rural areas chose to live where they do because of their connections with the land. In particular, it was thought that the people who continued to farm were naturally resilient.

> …when there's no rain, they suffer and they seem to keep bouncing back. They just continually readjust the way they do things so they can come up with a better outcome later on.

Without exception, all of the participants mentioned how connection with the land enhances resilience for many people. Some participants noted that the land itself is resilient and people who have a close tie to it become part of this resilient cycle.

I mean the land itself is resilient. It's burned out by bush fires, there's nothing left, and within a matter of days even, weeks, there's a green tinge and 12 months later you wouldn't know it had happened. And I think we develop – the inhabitants have developed that same resilience. We go through it and pick ourselves up at the other end and start again.

Family: Many of the participants described how important family ties were with regard to building resilience. In some cases, the family was considered important because it allowed people to focus on the future:

The way that they have managed their operation as a family unit, bringing all the daughters and their spouses into the operation … They've got that succession planning beautifully in place and they would seem to me to be a very resilient family and they certainly haven't been given a lot of government assistance. They've just done it themselves.

Culture: The town under study was comprised of a large number of second generation Australians from a non-Anglo background. It was noted that these people's culture had influenced their ability to be resilient.

… background. It would have to play a reasonably large part, more so probably unconsciously with a lot of people because of the culture and the way people do things. Predominately it's an Italian based culture. I believe that culture plays a big part in it.

Being part of a rural community and community spirit: It was apparent that all of the respondents believed that being part of a rural community built resilience in many people. Part of the characteristics that were valued included being a valued member of the community and people knowing each other. This allowed people to build supportive networks and to provide individual care to other less resilient people.

… a rural community is the best place for you to be. … There's so much autonomy and you're not just a number in some big bureaucratic system.

I think there is such as thing as the community spirit which would help those people that aren't as gifted in that area and also the community action. And a community spirit would link up perhaps stronger people and activities with those people that aren't coping as well either.

Implications

It is clear from the responses above that, as Luthar and Cicchetti[24] contend, the unique life circumstances and everyday ecologies associated with living in a rural community are central to the resiliency of individuals in that community. The present findings concerning the influential nature of the rural environment on mental health also support recent research on mental health problems in rural communities. In their study, Judd et al[26] concluded that 'compositional, contextual and collective factors' (p. 208) are likely to influence the elevated numbers of suicide occurring in rural compared with urban areas. Similarly, Fraser et al[27] concluded that 'farming is associated with a unique set of characteristics that is potentially hazardous to mental health and requires further research' (p. 340).

The data in this study also support the work of Kumpfer[13] and other multivariate, process-based conceptualisations of resilience[12,23,25]. As in Kumpfer's model, the participants in this study believed that stressors or challenges impacted on environmental factors and internal factors resulting in resiliency or maladaptive outcomes[13]. Clearly environmental characteristics such as family, culture and being part of a rural community were both protective and risk factors. Possibly because the study was carried out in a rural community there was another environmental theme that could be added to resilience models such as Kumpfer's – that of a connection to the land.

Many of the internal resiliency factors identified by Kumpfer were also found in this study – spiritual, behavioural, cognitive, emotional and physical factors[13]. Additionally, the study findings appear to conform with those of Polk[23] who suggested that valuing close friendships and a broader social network are characteristics of resilient people. Polk also noted that a commitment to work, problem-solving and an ability to take action where necessary to deal with a situation are characteristics of resilient people[23]. Additionally, valuing self-knowledge, having a positive view of the future and finding positive meaning in experiences were also characteristics identified by both the participants in this study and Polk's[23].

The concept of resilience being like a 'rubber ball' or 'bouncing ball', is also borne out in previous definitions of resilience. In particular, Block and Kremen[30] and Rutter[12] noted that resilience in the individual can be seen along a continuum, with individuals who are highly ego-resilient at one end and individuals who are ego-brittle at the other. Rutter[12], unlike Block and Kremen[30], argued that individuals may move along this continuum during their lifetime, often in response to changing environmental circumstances. Whereas individuals may respond well to a particular stressor, they may succumb to another. These concepts, along with the concept of strength in the face of adversity[31], appear to fit the concept of the participants of resilience being like a 'rubber ball', and that each person had the capacity to be, or not to be, resilient at various stages of their life.

Conclusion

The findings of phase 1 of this study confirm previous work on internal resiliency factors as well as factors in the environment that influence individual resilience. Importantly, the participants in this study confirmed that resilience is not a steady state in an individual. Rather, the ability to be resilient varies within each person over the lifespan.

An interesting outcome of the study is that connection to the land, which is strongly embedded in the literature on Indigenous peoples (eg human ecology) and acknowledged as a part of Indigenous culture and cosmology, may also be a factor that enhances the resilience of non-Indigenous people who have built up a relationship with the land over time. The extent of this connection and its impact on individual and community resilience was, however, not established in this study, but should be a major focus of future research.

Acknowledgements

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