Evaluation of a community radio station in Tulikup, Bali: Indonesia

Dane Anthony Waters
*Edith Cowan University*

Follow this and additional works at: https://ro.ecu.edu.au/theses_hons

Part of the Public Health Education and Promotion Commons

**Recommended Citation**
https://ro.ecu.edu.au/theses_hons/1154

This Thesis is posted at Research Online.
https://ro.ecu.edu.au/theses_hons/1154
Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.

- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author’s moral rights contained in Part IX of the Copyright Act 1968 (Cth).

- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.
Evaluation of a community radio station
in Tulikup, Bali: Indonesia

Dane Anthony Waters
Bachelor of Health Science (Honours)
2008
Abstract

Community-oriented radio can be a valuable tool to mobilise communities and contribute to making positive social changes throughout the world (Dagron, 2001). Heartline Bali FM is a community-oriented radio station, which since development, has sought to positively impact the people within the community it serves. Located in the rural Balinese village of Tulikup, Indonesia, the station has responded practically to the health and social needs of the community through radio and other social development strategies since its establishment in 2003. In 2004, a base-line needs assessment was conducted within the village to help inform the radio station of the health and social needs of the community that it needed to address (Pepall, Jaya, & James, 2006). In 2007 an evaluation of the three-year community development project was conducted using community appropriate research methods to measure the social changes.

The methodology used for evaluation was a multi-faceted approach aimed at continuing the community empowerment process that the project had sought to develop. It Incorporated an evaluation tool called the Most Significant Change (MSC) technique and series of community radio indicators that are used for evaluating community-oriented radio stations. The MSC technique is a dialogical, story based evaluation tool which has been proven effective when evaluating social development programmes throughout the world, particularly in developing countries (Davies & Dart, 2005). MSC aims to explore community-wide beliefs of significant changes that projects have made within communities, and as such sought to determine significant changes within Tulikup brought about by Heartline Bali FM through their on and off-air social development programs. To maintain research rigour the MSC was complimented with a series of community-oriented radio indicators that were developed to guide evaluation of radio stations which aim to empower communities through health and social development community strategies. Indicators explored all areas of the community radio station with a focus on determining
the level of involvement from the community with the operation of the station. Using the indicators acted as a form of triangulation with the MSC technique.

In 2004, the majority of the community were negative towards the radio station. There was widespread distrust existing towards the station as the majority Hindu community were unaware of the intentions of the station, which consisted of mainly Christian staff. Through a range of community-relevant social development programs the station has shown that their intentions are only to have a positive impact on the well-being of the community. Within three years, Heartline now has community-wide acceptance with people believing the station provides a valuable contribution to the community and hope that it would continue to do so.

The station is committed to positively impacting the community in community-relevant ways. In the past this focus has been through many health promotion programs, providing information regarding local health issues such as HIV/AIDS, dengue fever and diarrhoea prevention. A recent survey by the Department of Nutrition Polytechnic of Health Denpasar found that over 50% of the community were living below the poverty line so raising the economic status of the community has also been a focus (Kusumajaya, 2006). A number of off-air community development programs have been implemented which aim to increase the economic level of the community. By using radio as a conduit, Heartline has aimed to influence the social situation/networks of the community and strengthen social capital.

The radio station has been able to positively and significantly impact many individuals throughout the community through a range of community development activities. Since the radio station is now a trusted source within the community, this provides a valuable opportunity to now impact the community on a community-wide basis.

Key Words: Qualitative, Evaluation, Most Significant Change, Community radio indicators
USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
Copyright and Access Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

(i) incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education

(ii) contain any material previously published or written by another person except where due reference is made in the text; or

(iii) contain any defamatory material.

Signed. 

Date 22/12/2008...
Acknowledgements

An extended thank you to Dr Ross James for all his assistance throughout the entire research process. Thank you to Jill Darby of Edith Cowan University for her supervision throughout. Thank you to Dr Colleen Fisher for her guidance through the planning stages of the research project.

I am extremely grateful for the financial and practical support that Health Communication Resources (HCR) provided me with throughout the entire process.

A special thank you to Mahanatalindo and the staff at Heartline Bali FM for all the assistance they provided me during the research and for making me feel so welcome during my time there.

Thank you to I Gst Gde Wiratama and I Kadek Gunawan for their extremely valuable assistance with linguistic and cultural interpretation throughout the research period.

Most importantly I would like to acknowledge and thank all of the participants involved with the study. I appreciate their willingness to openly share their thoughts and opinions.

Finally I would like to thank my family and friends for their ongoing support.
<table>
<thead>
<tr>
<th>Chapter 1</th>
<th>Introduction</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Aim and Objectives</td>
<td>3</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>Literature Review</td>
<td>4</td>
</tr>
<tr>
<td>2.1</td>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>2.2</td>
<td>Health Promotion</td>
<td>4</td>
</tr>
<tr>
<td>2.3</td>
<td>Community Development</td>
<td>5</td>
</tr>
<tr>
<td>2.4</td>
<td>Community Empowerment</td>
<td>6</td>
</tr>
<tr>
<td>2.5</td>
<td>Social Capital</td>
<td>7</td>
</tr>
<tr>
<td>2.6</td>
<td>Health Promotion or Community Development?</td>
<td>8</td>
</tr>
<tr>
<td>2.7</td>
<td>Advocacy</td>
<td>9</td>
</tr>
<tr>
<td>2.8</td>
<td>The Impact of Radio</td>
<td>9</td>
</tr>
<tr>
<td>2.9</td>
<td>Case Studies</td>
<td>11</td>
</tr>
<tr>
<td>2.10</td>
<td>Radio Approaches to Health Promotion and Community Development</td>
<td>12</td>
</tr>
<tr>
<td>2.11</td>
<td>Approaches to Evaluation</td>
<td>14</td>
</tr>
<tr>
<td>2.12</td>
<td>Approaches to Community Radio Evaluation</td>
<td>15</td>
</tr>
<tr>
<td>2.13</td>
<td>Summary</td>
<td>16</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>Methodology</td>
<td>17</td>
</tr>
<tr>
<td>3.1</td>
<td>Introduction</td>
<td>17</td>
</tr>
<tr>
<td>3.2</td>
<td>Community Structure</td>
<td>17</td>
</tr>
<tr>
<td>3.3</td>
<td>Village Leadership</td>
<td>18</td>
</tr>
<tr>
<td>3.4</td>
<td>Tulikup</td>
<td>19</td>
</tr>
<tr>
<td>3.5</td>
<td>Research Team</td>
<td>21</td>
</tr>
</tbody>
</table>
3.6 Ethical Issues ................................................................. 21
3.7 Methods ............................................................................. 22
3.8 Most Significant Change Technique ................................. 23
3.9 Community Radio Indicators ........................................... 27
3.10 Sampling - Community Participants .................................. 28
3.11 Field Observations .......................................................... 31
3.12 Existing Written Documentation ...................................... 31
3.13 Data Collection .............................................................. 32
3.14 Research Rigour .............................................................. 33
3.15 Reliability ........................................................................ 34
3.16 Triangulation ................................................................... 34
3.17 Summary ........................................................................... 35

Chapter 4 Findings and Discussion ........................................ 36
4.1 Introduction ....................................................................... 36
4.2 Most Significant Change Analysis ..................................... 36
4.2 Most Significant Change ..................................................... 39
4.3 Information/On-air Programs ............................................ 40
4.4 Social Development/Off-air Projects ................................. 41
4.5 Community Radio Indicators ............................................ 42
4.6 Indicators Summary .......................................................... 50
4.7 Standing within the Community ........................................ 51
4.8 Community Partnerships ................................................ 51
4.9 Community Empowerment .............................................. 52
4.10 Social Capital ................................................................. 53
4.11 Limitations ....................................................................... 54
4.12 Summary ........................................................................... 54

Chapter 5 Recommendations and Conclusion ....................... 55

Chapter 6 Lessons Learnt ....................................................... 58

References .............................................................................. 60

Appendices ............................................................................. 65
List of Tables

Table 1  Interview schedule .......................................................... 29
Table 2  Community Radio Indicators-Programming Indicators ....... 42
Table 3  Journalist-Programmers (JP) Indicators ......................... 43
Table 4  Listener Learner Indicators ........................................... 44
Table 5  Community Integration Indicators ................................. 46
Table 6  Station Management Indicators .................................... 48
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Bali</td>
<td>2</td>
</tr>
<tr>
<td>Figure 2</td>
<td>East Bali</td>
<td>2</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Social Change and Development</td>
<td>8</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Indonesia’s Geographic Political Structure</td>
<td>17</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Banjar Structure in Tulikup, Bali October 2007</td>
<td>19</td>
</tr>
<tr>
<td>Figure 6</td>
<td>MSC at Radio Station HLB FM</td>
<td>26</td>
</tr>
</tbody>
</table>
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD</td>
<td>Community Development</td>
</tr>
<tr>
<td>DNPHD</td>
<td>Department of Nutrition Polytechnic of Health Denpasar</td>
</tr>
<tr>
<td>ECU</td>
<td>Edith Cowan University. Perth, Western Australia</td>
</tr>
<tr>
<td>HCR</td>
<td>Health Communication Resources</td>
</tr>
<tr>
<td>HLB</td>
<td>Heartline Bali FM</td>
</tr>
<tr>
<td>HP</td>
<td>Health Promotion</td>
</tr>
<tr>
<td>MSC</td>
<td>Most Significant Change</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Government Organisation</td>
</tr>
<tr>
<td>PM &amp; E</td>
<td>Participatory Monitoring and Evaluation</td>
</tr>
<tr>
<td>PSA</td>
<td>Public Service Announcement</td>
</tr>
</tbody>
</table>
**Indonesian terms**

Banjar  communal organisations/divisions within Indonesian societies. Banjars consist of the married men within the area which meet to discuss a range of banjar related issues

Desa  Village

Kades  Village leader and government representative

Klian adat  banjar representative who is responsible for all things relating to the “village” and traditional ceremonies. This includes occasions such as weddings and Hindu ceremonies.

Klian dinas  banjar representative to the Kades and is involved with anything to do with civil administration, for example, obtaining documents for passports, job applications

Pasar  Local market

Puskesmas  Health centre/clinic
Chapter 1 Introduction

Radio is a valuable tool for promoting participatory communication and development throughout the world, particularly in developing countries (Dagron, 2001). Heartline Bali FM is a community radio station established in a rural Balinese village to positively impact the community it serves through participatory communication and community development strategies. This dissertation presents the findings of an evaluation of the radio station and its community development focussed approach. Culturally appropriate research methodology was utilised to evaluate the principles of community development and support the established community radio/development project.

1.1 Background

Heartline Bali (92.2 FM) is a radio station that was established in May 2003 in Tulikup, Bali, Indonesia. Tulikup is a rural traditional desa (village) located in the Gianyar district in East Bali (see Figures 1 and 2). The radio station was developed with the aim to have a positive impact on the health and social needs of the community and its neighbours. Radio coverage extends over most of the eastern half of Bali (Pepall, 2004). Heartline Bali is one of four Indonesian owned and operated radio stations which form the Heartline Network.

Since development, Heartline Bali has sought the assistance of Health Communications Resources (HCR), an Australian non-government organisation (NGO) that provides specialist training and consultancy to serve community radio programming, promoting health and community development (Health Communication Resources, 2005). In June 2004 Pepall conducted a health and social needs assessment of the community (Pepall, 2004). She found that many people were not aware of the radio station in the community. Those who were aware stated their distrust towards the radio station as it had majority Christian staff within a Hindu community. The report made a number of recommendations that focussed on advising the radio station on how to effectively promote health and
community development to the community. The present evaluation is of the radio station and its community development activities during the three years since the radio station received these recommendations.

Figure 1. Bali taken from Bali (Daly & Lyon, 2003)

Figure 2. East Bali taken from Bali (Daly & Lyon, 2003)
1.2 Aim and Objectives

The primary aim of this research was to evaluate the impact Heartline Bali FM has made on health and community development in Tulikup, Bali during the period of June 2004-June 2007. The evaluation explored the community’s perception of Heartline Bali FM and the impact it has achieved within the region.

The objectives of the research were:

(1) To evaluate the community’s awareness of Heartline Bali FM within the community

(2) To explore the changes that Heartline Bali FM has made within the community between June 2004- June 2007

(3) To explore the impact Heartline Bali FM has made on social capital within the community.

(4) To engage in a participatory research process to ensure community development principles are continued and encourage future planning.
Chapter 2    Literature Review

2.1 Introduction

This chapter seeks to outline the literature reviewed during the preliminary stages of planning for the evaluation. The review explores the principles of health promotion and community development and how these can be implemented through radio. It is followed by exploring literature with regard to methodologies for evaluation of social development programs, particularly when evaluating programs in developing countries and within different cultures.

2.2 Health Promotion

Health promotion has largely been directed by the Ottawa Charter. It defines health promotion as a “process of enabling people to increase control and improve their health” (World Health Organisation, 1986, p.1). The definition is significant as it incorporates the idea of a continual process in changing the quality of people’s health. Health tends to be associated with decreasing disease, however the World Health Organisation defines health as “physical, mental and social well-being not merely the absence of disease or infirmity” (World Health Organisation, 1946). The definition has largely not been changed since 1946. It is a holistic definition that encourages health services to acknowledge the many factors which influence health. As there are many different factors in the definition of health, approaches to health promotion can be significantly different by addressing these different areas of health. Health Promotion aims to implement strategies that maximise people’s quality of life through addressing these factors of health (Moodie & Hulme, 2004).
2.3 Community Development

Terms such as empowerment, sustainability, development, equity, participation and local ownership are often used to describe community development (Fitzpatrick & Ako, 2007; Ife, 2006). Academics agree these terms make up the core principles of community development and its practice, however the concept of community development extends over numerous academic fields, and as such there is no universally accepted definition (Campfens, 1997). It generally involves positively influencing (developing) communities through practical strategies defined by community need (Ife, 2006).

Tom Kelly suggests that community development is a values-based way of working with people (Kelly cited in Andrews, 2007, p. 27). Kelly describes community development as being:

Concerned first and foremost with poverty and power. It is concerned with giving people- particularly the poorest- the knowledge, skills, opportunity so that they can control their own lives (Andrews, 2007, p. 27).

The United Nations consider giving people the opportunity to have maximum decision making and control over their lives as a basic human right. (United Nations, 1948). Community development involves empowering people to ensure this basic human right is met, while working on a community-wide basis (Ife, 2006). Empowerment occurs by mobilising communities’ knowledge and resources to provide a positive influence for the community. This approach has a number of benefits for the community. Communities are aware of the factors that affect them, and the knowledge they provide proves valuable while seeking to develop solutions. If community members are involved in the process individuals and then communities can build a sense of ownership towards the approach, ensuring the sustainability (Hubley, 2004b). Having community members involved in, or
more significantly leading community development projects, ensures that individuals
develop the self-belief that they have control over their own quality of life (lfe, 2006).

As communities differ around the world, the factors that influence them differ too.
Communities need to determine what factors influence them and seek to create solutions
that improve community conditions. A community development project in Bangladesh
may appear completely different to a community development project in Ghana
(Campfens, 1997). It is therefore essential to mobilise community knowledge when
developing and implementing community development programs.

2.4 Community Empowerment

Community empowerment is an important principle of community development. Empowerment in its broadest form is “...the process by which disadvantaged people work together to increase control over events that determine their lives” (Laverack, 2004, p. 46) Empowerment is both a strategy and an outcome for community development work. Literature suggests that a five-point continuum offers a simple representation of this dynamic and complex concept. Categories of personal action, the development of small mutual groups, community organisations, partnerships and, social and political action define these five stages (Laverack & Wallerstein, 2001).

Personal action refers to the common definition of empowerment. It is a belief within individuals to determine what issues personally affect them and to take action to address these. The development of small mutual groups is the next stage as individuals begin to develop social relationships to increase skills and increase opportunities. Community organisations are developed when small groups come together in order to socialise and address their concerns (Laverack, 2004). Partnerships are then developed between organisations to again increase more opportunities to address concerns. Community
empowerment culminates with social and political action to create social change. This is the end of the continuum.

Community empowerment is an aim for community development (Ife, 2006). When empowered communities mobilise and engage in social and political action (as referred to in the continuum), the community itself will drive and therefore strengthen any community development strategies. Having a drive and sense of ownership will engage individuals and groups within the community to positively impact the well-being and quality of life of people.

2.5 Social Capital

In recent years the term social capital has attracted significant interest from social researchers and commentators (Hawe & Shiell, 2000; Lin, 2000). The concept has extended over a number of academic fields resulting in debate about the definition of social capital (Baum, 2007). Broadly speaking social capital refers to “connections among individuals- social networks and the norms of reciprocity and trustworthiness that arise from them” (Putnam, 2000). Although varied, definitions generally incorporate a relational element and a material element centred on trust and reciprocity (Hawe & Shiell, 2000). They explore the relational and material benefits (and consequences) that result from residing in formal and informal social organisations and networks. Depending on the environment there are many different factors which can influence social networks and organisations. Consequently this is where social researchers have found it difficult to universally define social capital (Moore, Shiell, Hawe, & Haines, 2005).

Even with the ongoing debate, there is growing evidence that social structures can have a positive influence over people’s quality of life through their involvement in social networks, individuals and collectively groups (Hawe & Shiell, 2000; Putnam, 1993). Benefits (and consequences) differ depending on the social environment and the norms and reciprocity commitment that exist. Evidence from Murray suggests that social capital
can significantly help in the process of community development (Murray, 2000). As communities are made up of social connections it seems appropriate that social capital will influence community development.

2.6 Health Promotion or Community Development?

Health promotion and community development are two approaches which are very closely linked (Adams, Witten, & Conway, 2007). They both entail processes of enabling people to improve their own quality of life. While health promotion programs may seek to improve the health of people, a community development program seeks to improve the social environment. The aim for both approaches is to produce social changes to influence people and improve quality of life. This is achieved through enabling community members by empowering and equipping them with knowledge and skills to improve their situation (Adams et al., 2007). Health promotion programs generally address individual behaviours and social determinants whereas community development addresses community-wide issues. Health promotion programs should seek to work on a community wide basis so there are significant linkages between the two concepts. Using a combination of strategies through health promotion, community development and also advocacy, communities can aim to make positive social changes (James, 2007). Figure 3 represents how these three strategies can complement each other to bring about social change and development. With these close links, successful programs generally incorporate aspects of all three approaches (James, 2007).
2.7 Advocacy

Advocacy is an approach which can work in conjunction with health promotion and community development approaches to bring about social change and development (Chapman, 2004). Advocacy generally works in addressing many “upstream” factors which impact communities (Moodie & Hulme, 2004). It can involve promoting and lobbying community-relevant social justice and equity issues. For example an advocacy approach could lobby a government to address its public health policy within a community. This could be achieved through a number of strategies. One strategy is advocacy through the use of mass-media. Within mass-media, radio is commonly used for social change and development throughout the world, particularly in developing countries.

2.8 The Impact of Radio

Radio is a leading form of media for promotion of health and community development throughout the world (Dagron, 2001). It has been used in many programs that have had
significant positive and sustainable results in improving people’s quality of life (Avian and Pandemic Influenza Resource Link, 2006; Metcalf, Harford, & Myers, 2007). Radio can be used to inform, educate, advocate and promote social learning and dialogue (James, 2007). These actions of radio (for example, inform, educate and advocate) align themselves appropriately with the actions for health promotion outlined in the Ottawa Charter, and as such, situate radio as an appropriate tool for health promotion and community development (World Health Organisation, 1986).

Radio has been shown to be an appropriate form of media for health communication in developing countries (Dagron, 2001; James, 2007; The Communication Initiative, 2007). Radio is significantly cheaper to access through lower costs of receivers and is less complex to produce and broadcast when compared to other forms of mass media, such as television (Hubley, 2004b; Tabing, 2004). Radio, therefore, is considered a cost-effective way of reaching a large amount of people. It allows programs to be community relevant, developed and broadcast with a community focus and, thus, ensures many community development principles are transferred through radio (Fraser & Restrepo-Estrada, 2002).

Locally developed radio programs are conduits for community empowerment and are used to have significant impact on community members (Fraser & Restrepo-Estrada, 2002; Tabing, 2004). Strategies such as talk-back programs allow for community involvement, and since being oral in nature, do not marginalise those who are illiterate (Beaman, 2006; Jackson & James, 2002). This further adds to the appropriateness of radio for developing countries.

The significant impact radio can have in improving the health and well-being of people in developing countries is highlighted by the following examples in Madagascar and Ethiopia. These radio programs effectively promoted health and the improvements made have been found to be sustainable.
2.9 **Case Studies**

**Madagascar**

In January 2007 an evaluation was published into the contribution of radio programming to the achievement of the Millennium Development Goals in Southern Madagascar (Metcalf et al., 2007). The report documented the success of radio in assisting in increasing knowledge and awareness within communities on topics including HIV/AIDS, family planning, environmental issues and gender inequality. It also demonstrated the increase in uptake of health services within the different regions as the result of the radio influence (Metcalf et al., 2007). Radio was shown to have assisted with increasing the number of literacy classes within the community, provided information which led to the development of a number of new environment strategies and increased awareness about poverty issues. Significantly, the community was also empowered to develop strategies to address poverty (Metcalf et al., 2007). This evaluation highlighted the wide range of outcomes that are possible through radio.

**Ethiopia**

In 2002 a serial radio drama program was produced and broadcast in Ethiopia in all of its major languages (Population Media Center, 2005). The aim of the program was to raise awareness of reproductive health including issues around HIV/AIDS and women’s lower status, family planning, marriage by abduction, and education of daughters. In 2004 it was reported that 63% of new clients seeking reproductive health services were listening to at least one of the Population Media Center programs (Population Media Center, 2005). Twenty six percent of new clients seeking reproductive health services reported that the radio programs were the motivating factor for them seeking health services (Population Media Center, 2007). These radio programs also assisted in delivering a significant positive change in reproductive health. For example, the fertility rate in Amhara fell from 5.4 to 4.3 children per woman and demand for contraceptives increased 157%.
Media Center, 2007). This evaluation recognised that the success of these radio programs was assisted by the extensive coverage they received by the other mass-media in Ethiopia. For any successful health promoting radio programming, there must be support from the wider community with supportive initiatives and supporting off-air programs. Due to the success of the radio programs new initiatives focussed on youth populations have since started.

2.10 Radio Approaches to Health Promotion and Community Development

James has identified four tools that are used to promote health and community development through health promoting radio programming: these are: enter-education, social marketing, interactive radio instruction and participatory radio (James, 2007). These tools can work in association with one another to meet the objectives of health promoting radio programming.

*Enter-education*

Enter-education is a term that describes the merging of entertainment and education and incorporates Bandura’s theory to motivate social change and development (Egger, Spark, Lawson, & Donovan, 2002; Nutbeam & Harris, 2004). As the name suggests it provides an entertaining way of delivering education and can involve radio drama, songs, spots, interviews, variety programs, quizzes and competitions (Egger et al., 2002). If people enjoy the messages, the chances of recalling the education messages are increased (Moodie & Hulme, 2004). They will be also more inclined to continue listening to further radio programs (James, 2007).
**Social marketing**

Social marketing is a tool which incorporates advertising techniques to deliver social messages and as such, often focuses on the costs of changing to healthy behaviours. If listeners can understand the perceived threat while also weighing up the perceived costs of changing a behaviour this may encourage social change and development (Nutbeam & Harris, 2004). Perceived costs may include prices of the intended health behaviour (for example the costs of protection, such as condoms with regards to HIV/AIDS) or may be as simple as time (for example the time difference between obtaining treated drinking water from alternative sources compared to drinking readily available untreated water). If the listener is able to understand and accept the perceived costs of changing or not changing, they may be encouraged to change their behaviour.

**Interactive Radio Instruction**

Interactive Radio Instruction (IRI) (James, 2007) is a valuable educative and community development tool for health promotion that incorporates participation as a feature and can be tailored for individual communities. IRI teaches listeners particular positive behaviours and encourages them to respond orally in order to increase recall (Nutbeam & Harris, 2004). For example, people could repeat instructions they have received via the radio out loud while listening. Listeners are also encouraged to write to the radio station with questions and feedback with regard to topics discussed and aired in IRI programs. This facilitates participation in the process (Fraser & Estrada, 2001).

**Participatory Radio**

Participatory radio is the essence of community development through community radio (Fraser & Estrada, 2001). Participatory radio is a form of media advocacy that encourages listeners to be active in radio programming (Tabing, 2004). Thus, participatory radio provides another avenue for community empowerment and allows individuals in the
community to be heard (Fraser & Restrepo-Estrada, 2002). The engagement in social
dialogue allows for community members to develop a sense of ownership for community
radio stations and their programs (Buckley et al., 2007). Community radio stations need
this involvement and ownership to be sustainable (Fraser & Estrada, 2001). Participatory
radio can involve interviews within the community with individuals through talk back
radio. This involvement allows relevant community issues to be discussed and aired.

2.11 Approaches to Evaluation

Literature suggests that when evaluating community development projects methodology
must reflect community development principles in order to maximise the effect that they
have (Barr, 2005; Van Vlaanderen, 2004). Community development is a continual process
with evaluation a significant part of this process. It is appropriate that the same principles
of community development continue into the evaluation. As participation is an essential
outcome of community development, there is increasing literature calling for
methodology to ensure participation is included in the evaluation methodology (Hubley,
2004a; Parks, Gray-Felder, Hunt, & Byrne, 2005).

Social development workers and researchers have encouraged innovative ways to
incorporate community development principles into their programs. However it appears
that this has not been carried over into evaluation techniques (Byrne, 2007). Evaluative
research is a complex process but must be community relevant and appropriate (Adams et
al., 2007) Participatory research/evaluation is an essential part of the community
development process (Titterton & Smart, 2006). If a program spends time empowering
individuals and enhancing their self-efficacy this will be minimised when “outsiders”
(people who have not been involved in the process) are brought in to evaluate. This would
disempower community members, particularly marginalised members, as they may
develop the belief that you still need to be educated to conduct adequate evaluations (Ife,
2006). Those who are fortunate to have an educated background can be brought in to
help guide and facilitate the process, however participation of community members is essential to ensure the results from community development projects are not minimised.

When conducting research in the community of Tulikup, Pepall found that a participatory methodology was needed due to the environment (Pepall, James, & Earnest, 2006). Pepall implemented a Rapid Participatory Appraisal (RPA) to complete her Social and Needs Assessment of the community in June 2004 (Pepall, James et al., 2006). Responding to literature and previous research in Tulikup, a participatory evaluation method is considered essential to continue the community development process.

2.12 Approaches to Community Radio Evaluation

While there is considerable literature about the positive influences of community radio, there appears to be a lack of literature about methodologies for evaluating community radio stations (The Communication Initiative, 2007). Evaluations have successfully measured the positive changes specific radio programs have achieved, however these tools cannot be as easily utilised when evaluating the effectiveness of entire radio stations, as this evaluation intended. Community-orientated radio stations have previously been evaluated through the use of indicators to make judgements of the effectiveness of the station (James, 2004). A methodology/tool needs to be developed to help evaluate radio stations, not just for some of the programs they deliver. This project developed and trialled an evaluation tool which would help evaluate entire radio stations. The approach incorporated a community relevant approach to evaluation, which measured positive social changes, while also incorporating the community radio approach through indicators and therefore providing a thorough evaluation of the radio station. A thorough evaluation was considered necessary to assist the radio station for future planning.
2.13 Summary

The literature review explored definitions of health promotion and community development and the elements of these terms. Radio is an important tool for health promotion and community development strategies, particularly in diverse cultures. It showed the techniques that radio can implement to have a significant effect on the well-being of communities. Lastly it explored the approaches to implementing evaluations of community development programs throughout the world. Social commentators believe that it is essential to implement participatory techniques when trying to evaluate community development programs. Unfortunately while there is considerable evidence on measuring the benefits of specific radio programs there seems to be a lack of tools to measure community-orientated radio stations.
Chapter 3 Methodology

3.1 Introduction

In developing the research methodology an understanding of the community was required so that the methodology would be designed to be community-relevant for structures within Tulikup, Bali. Hence, the beginning of this chapter begins by giving a brief overview of the community structures that exists. It was considered necessary to tailor an evaluation methodology which would continue the community development/empowerment project that Heartline Bali FM had initiated. For this to occur, the research methodology needed to be flexible and work within the community while still maintaining research rigour. The research methodology consisted of a multi-faceted methodology incorporating a combination of key-informant interviews, nominal group process groups and observations that combined a tool called the Most Significant Change (MSC) technique and a series of community radio indicators. This approach was considered to be community-appropriate as it evaluated Heartline Bali FM and its impact on the community of Tulikup, Bali.

3.2 Community Structure

Bali is made up of many communal organisations called banjars (Warren, 1993). These are divisions within villages and cities whereby the married men meet and discuss community issues relevant to their particular banjar. A banjar controls almost all community activities in their area such as weddings and the Hindu ceremonies which are common in Bali. Decision are made by consensus of all the married men in the banjar. Banjars have two types of leaders, a Klian dinas and a Klian adat (Warren, 1993). Banjars are ideally
autonomous from the government, however in reality they are the most important link to the government via the village leader, the Kades (Pepall, 2004).

### 3.3 Village Leadership

The Kades is the village leader, a civil servant who is the government representative for the village. The Kades is located at the village office, the main government building within the village. A Klian dinas is the banjar representative to the Kades and is involved with anything to do with civil administration, such as obtaining documents for passports, job applications etc (Warren, 1993). A Klian adat is responsible for all things relating to the “village” or everything of a “traditional” nature (Pepall, 2004; Warren, 1993). This involves occasions such as weddings and the many Hindu ceremonies. Within the banjar the Klian dinas and adat can either be represented by an individual who acts in both positions or by two separate people who fill the separate roles.

The Kades and village government is directed by the village *Badan Permusyawarahan Desa* (BPD). In Tulikup the BPD has approximately 15 people who act as a parliament for the village. The Kades then reports to the Camet, who is the leader of the district. An overview of the community structure is outlined in Figure 4.

![Figure 4. Indonesia’s Geographical Political Structure](Pepall, 2004)
3.4 Tulikup

In Tulikup there are seven banjars (see Figure 5). There are seven Klian dinas's, with three also filling the role of Klian adats (Pepall, 2004). Some banjars have multiple Klian adats for different regions within the banjar. Community members view the opinion of the banjar leaders as being representative for all of the community members in their banjar. It is believed they have a solid understanding of the community beliefs within their banjar (Pepall, 2004). On a number of occasions community members declined to share their opinions but requested the researcher interview the banjar leader as their views would be the same.

Tulikup is split into two main cultural-religious sections, Kaja (facing the mountain or north) and Kelod (facing away from the mountain or south). Each region has a Bendesa whose function is like a high priest (Pepall, 2004). They oversee all religious and traditional activities.

A recent survey by the DNPHP of the Tulikup community indicated that 56.1% were living below the poverty line of 500,000 Rupiah a month (approximately $2 Australian a day June 2008) (Kusumajaya, 2006). The main industries in Tulikup are brick-making, farming and civil service.
Figure 5: Banjar Structure in Tulikup, Bali, October 2007.
3.5 Research Team

The research team consisted of the primary researcher (Dane Waters) and two cultural and linguistic interpreters. Before the primary researcher arrived, Heartline Bali staff were requested to find an appropriate interpreter for the research period to ensure consistency for interviews. On arrival two interpreters had been found. It was considered appropriate to continue with two interpreters, following Pepall's lead, after she used two interpreters in her Health and Social needs Assessment in 2004 (Pepall, 2004). Interpreters assisted in translating from Bahasa Indonesian/ Balinese to English while also providing cultural insights as they were from the local region. Before the commencement of research interpreters were trained in research principles and protocols associated with the research.

3.6 Ethical Issues

Conducting research in developing countries delivers different ethical implications to conducting research in developed countries. As such ethical considerations needed to be thoroughly reviewed before the commencement of research. Voluntary informed consent of participants is essential for any form of research (Liamputtong & Ezzy, 2005). Researchers in developed countries show informed consent through signed consent forms. However this is not practical or appropriate in some cultures in other parts of the world (Barrett & Parker, 2003). Within this evaluation it was considered that seeking written consent from participants would not always be appropriate. As the research sought to increase community participation the research needed to be able to access all community members. If written consent was required it was considered that this may marginalise community members who were illiterate. As interviews were often conducted in the field, seeking written consent was also not considered practical. Barrett and Parker suggest that within the Indonesian culture, verbal consent is valued even higher than written consent (Barrett & Parker, 2003). They believe that health research practice
developed in different cultures cannot and should not be applied in other cultures. This was taken into consideration through the planning.

In 2004 Pepall conducted a Social and Needs Assessment of Tulikup and acknowledged the barriers of written consent (Pepall, 2004). She required verbal consent to indicate permission to participate in the research. To ensure all participants provided verbal consent, she required the interpreters to sign documents stating that each participant provided informed consent before the commencement of the interviews. Interpreters were also required to sign documents stating that they will uphold the principles of confidentiality for the research. This same approach was used during the present evaluation.

Before the commencement of data collection each potential participant was provided verbal information with regards to the purpose of the research and their rights as a participant to be protected from any harm. They were informed of the right to withdraw from the research at any stage without penalty or prejudice. Once informed they were required to provide verbal consent before the commencement of the research. Interpreters were required to sign documents that all participants provided verbal consent before commencement of interviews and that they would uphold the principles of confidentiality (see Appendix 1 and 2).

Ethical approval was approved by the Faculty of Computing Health and Science (CHS) of Edith Cowan University (ECU) before the commencement of the research.

### 3.7 Methods

After taking into consideration the community structures and consultation with a research reference group a multi-faceted methodology was developed. It consisted of a qualitative tool call the Most Significant Change Technique and a series of community radio
indicators. The approach was considered the most appropriate considering the context. The following will outline each method.

3.8 Most Significant Change Technique

The Most Significant Change (MSC) technique is a qualitative, dialogical based research tool used to measure impact. It has been proven effective in social development projects around the world, particularly in developing countries, so was considered valuable for the present evaluation (Davies & Dart, 2005). MSC is considered a simple form of data collection and analysis whereby the researcher acts as a facilitator to measure the impact of projects, while being flexible and encouraging community participation (Davies & Dart, 2005). It encourages participation by exploring participants’ views about significant changes brought about by particular projects in communities. Stories/testimonies of change are collected and are then used in a process to analyse and determine the most significant change within the community.

MSC can suitably adapt to the environment, if needed, by allowing key-informants to be used in developing an understanding of community perception. It was considered appropriate for this evaluation as the research period was relatively short (Davies & Dart, 2005). MSC begins by asking community members what they believe is the Most Significant Change in the community. The inquiry was initially considered to be a relatively simple question.

“What do you believe is the most significant change in Tulikup over the past three years brought about by Heartline Bali FM?”

The question incorporated individuals’ opinions on change while also defining the time period of three years. Literature suggests when developing the questions they must include a “most significant change” in order to give participants power in deciding their belief of most significant change (Davies & Dart, 2005). Literature also suggested that the
approach needed to be culturally appropriate (Davies & Dart, 2005). So before the official research began, the research team ran two pilot interviews with two participants that had a solid understanding of English and Bahasa Indonesian, and also the social structures within Indonesia. One source also had a solid understanding of public health and social research methodology. The question was considered complicated for the culture, as there was a fear the direction of the question may have been lost in the translation from English to Balinese.

To ensure quality data collection, it was considered that the question needed to be simplified to be able to still reach those in the community who may have been less literate. Breaking the question down into a series of smaller questions was considered more appropriate for the community (see Appendix 3)(Baum, 2007). Collectively the more limited questions explored the same information from the initial question. These questions were:

1. Could you please explain your position in the community? Job, position in the community etc?
   This question was used to gain an understanding into the participant’s background which aided the understanding of the testimonies. This is a technique used to ensure research rigour (Davies & Dart, 2005). During the analysis stage community members could identify the validity of the source (see MSC analysis, p. 23).

2. Have you seen any changes in the community because of Heartline Bali FM in the last three years?
   This question acknowledged any changes within the community because of HLB. A weakness of MSC is that 80-90% of reporting is positive (Davies & Dart, 2005). It was considered that this question would be more neutral in its approach and therefore be open to negative answers as well as positive. This proved to be effective with negative
responses received. This question also stated the time frame that was being intended to be measured, which was integral in the initial question.

(3) Out of all of those changes what would you consider to be the most significant? The participant was now required to make a personal judgement on what they believed to be the most significant change. This was an important stage of the MSC process (Davies & Dart, 2005).

After the pilot stage of interviews it was found that the Tulikup community largely spoke Balinese. Once in the field the translator believed that people did not always understand the word *significant*. In Bahasa Indonesian and Balinese in the past there has not been a word that means *significant*. There now is a word that was created in Indonesian to cover the English word *significant*, however this word has largely been reserved to those who have been educated and have a solid understanding of the English language. With the discretion of the interpreters and the present researcher, the questions were slightly altered to make sure participants understood the meaning of the question as it was an important part of the research process. Generally the alternative phrase would ask about the “influence” of the radio station on the community. The flexibility was needed to ensure that participation was not restricted to solely educated people. Answers provided from these questions were the stories/testimonies that were used during the data analysis process.

**3.8.1 MSC Analysis**

The following will explain the MSC analysis process that was conducted with the interviews/stories. The aim of the MSC Technique is to involve various levels of an organisation in the analysis to determine a story which most accurately represents the

---

*Since the evaluation has been completed MSC has been translated into an appropriate format for Indonesian by Paul Boon, a member of the MSC research community (Davies, 2008). [http://groups.yahoo.com/group/MostSignificantChanges/message/773](http://groups.yahoo.com/group/MostSignificantChanges/message/773)*
most significant change brought about by the project (Davies & Dart, 2005). A three phase process was used to guide the MSC outcome. After 74 participants were interviewed, 39 stories were collated for MSC analysis (represented in Figure 6, phase 1). Six staff members were involved during the analysis stages. The radio-station staff stories were not used through this section of analysis as this may have introduced bias. Stories from the radio station staff were used as supporting evidence. As some stories were undertaken using Nominal Group Technique (Delbecq & VandeVen, 1971; Liamputtong & Jirojwong, 2009) they may have included the views of up to eight people in their story. However even with eight people in the group, stories generally involved consensus and therefore only one description of most significant change was given. All interviews were used in determining all of different changes reported.

During phase 1 of analysis each radio station staff member was given a different set of 6/7 stories and told to determine the most significant change story which most accurately represents the Heartline project. Literature suggests that the approach to providing selection protocols should be dependent on the project (Davies & Dart, 2005). The present study instructed members to select the story which according to the staff members beliefs, most accurately reveals the most significant change impact that the radio station had achieved within the community. Once a selection was made a group discussion followed regarding the reasoning behind the personal selection and then group support was given about whether the story was valid.

Once a collection of six stories was collated these were given to the Station Manager (phase 2) to select a Most Significant Change story which best represented the changes the radio station had made. A final selection was then reported back to staff and the reasons why the selection was made (phase 3). The analysis process was completed with the selection of Most Significant Change, as represented in Figure 6.
3.9 Community Radio Indicators

To complement and triangulate (see 3.16 Triangulation, p. 34) the MSC technique findings, a series of community radio indicators were implemented (James, 2004). These indicators, were a revision of community radio indicators that had been trialled in an evaluation for a previous community radio project (James, 2004). Revisions were made with consultation with Dr Ross James and the indicators were made to be community relevant to the Heartline Bali project in Tulikup. Indicators were evaluated through a key-informant interview with the radio station manager. Field observations, which were kept regularly in a diary, and a review of written literature acted as validation techniques for the indicators.
The indicators (see Appendix 4) reveal the different areas of a community-orientated radio station that are considered important, by industry, for this specialised type of radio programming (James, 2004).

### 3.9.1 Community Radio Indicators Analysis

Each indicator was judged into three categories: “Yes” indicated the radio station has successfully achieved the indicator; “Pursuing” shows the radio station had not quite reached the indicator but had shown either an intention to or the initial stages in addressing these indicators and “No” revealed that at this stage the radio station has not attempted to address these indicators and has no intention to address these at this point in time. These indicators helped to support the stories/testimonies that were obtained through the MSC interviews. Information gained through the MSC interviews also helped validate the community integration indicators.

### 3.10 Sampling - Community Participants

Seventy four (74) participants were interviewed during the research period. A breakdown of the background of people interviewed is shown in Table 1. The majority of people were recruited through purposive methods. Before the research commenced a list of key informants were developed through consultation with Heartline Bali staff. The research team would then try to find these people within the community. During times where the research team was not able to interview key informants, interviews were often conducted with community members we encountered within the community. Cultural advice suggested that through this approach more people would be responsive to the questions. This was highlighted by the difficulties encountered when the research team tried to arrange formal interviews. With the informal approach most participants (n=71) were receptive to interviews.
Key-informants

From the interview schedule (Table 1) a number of key-informants were identified. The following will outline those participants who were considered key-informants. All Klian dinas’s were interviewed and were considered key-informant interviews. Four Klian adat’s were also interviewed however confirmed their belief that their opinions would be the same as the Klian dinas. The Kades (village leader), Kades secretary and the leader of the BPD were interviewed as key-informants. The Kades was new to the position however the secretary had been in his position since the Heartline project began so was considered to have valuable insights. A leader within the Health Department and a senior lecturer from the DNPHP provided insight into the health impacts that the radio station had assisted with. The radio station manager also provided valuable insights into the operation of the station. While the majority of key informants were male due to the social structures that exist, the research was not restricted to solely males (Warren, 1993). For example participants also included people such as a local business woman who owned a brick-making business, a female shop employee, a housewife and a number of other local women.
Table 1 Interview Schedule

<table>
<thead>
<tr>
<th>Background</th>
<th>Local NGOs</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Manager for Medical Ministry</td>
<td>Senior lecturer for the Department of Nutrition-Jurusan Gizi</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>Leader for Health Promotion- Gianyar District</td>
</tr>
<tr>
<td></td>
<td>Headmaster for Tulikup primary school</td>
<td>Leader for AIDS prevention and Vice-leader for the Gianyar Health Regency</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>General Practitioner</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Radio Staff</th>
<th>Community Organisations</th>
<th>Government Organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Station Manager</td>
<td>Cooperation and Debt and Credit- Staff</td>
</tr>
<tr>
<td></td>
<td>Announcer</td>
<td>Administration Accountant for the community LPD</td>
</tr>
<tr>
<td>Announcer</td>
<td>Producer/ Community Development Team Leader</td>
<td>Police-Head of Public Relations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
<th>Cleaner</th>
<th>Community development worker</th>
<th>Brick maker business owner/ Banjar treasurer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General staff</td>
<td>Older community member</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Village leaders</td>
<td>Older community member</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kades</td>
<td>Housewife</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kades accountant</td>
<td>Farmer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secretary of Kades(Sekdes)</td>
<td>Driver</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leader of BPD</td>
<td>Driver</td>
<td></td>
</tr>
<tr>
<td>Banjar Leaders</td>
<td>Tegal- Klian dinas/adat</td>
<td>Shop Keeper</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kembengan- Klian dinas/adat</td>
<td>Tour Operator</td>
<td></td>
</tr>
<tr>
<td>Menak-Klian dinas</td>
<td>Group discussions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Menak-Klian adat</td>
<td>7 people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meranggi- Klian adat</td>
<td>4 people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kaja Kauh- Klian dinas/adat</td>
<td>3 people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siyut- Klian dinas</td>
<td>8 people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roban- Klian dinas</td>
<td>14 people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pande-Klian dinas</td>
<td>2 people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roban- Ex banjar leader</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total- 74 participants (excluding radio staff)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.11 Field Observations

To help with validation of the MSC stories and community radio indicators a journal was kept by the primary researcher throughout the research period. Notes were taken with regard to participants’ reactions to the interview process through observations of body language. Observations were also kept with regard to Heartline Bali FM and its appearance within the community. For example the researcher observed the prevalence of 92.2 Heartline Bali FM products such as stickers seen throughout the community and where they were located. These were seen at various places throughout the community confirming the presence of the radio station. Stickers were seen at the village office which confirmed the verbal support the radio station received from the Kades (village leader). The village office felt comfortable in supporting the radio station and proved it by displaying the Heartline Bali sticker. Field observations aided the judgment for various community radio indicators (Appendix 4, i.e. indicator 1.4.7).

Field notes were also made about the apparent community reaction at Heartline Bali FM events. One Heartline Bali FM event was a health clinic was conducted in the village office. The village office chose to support the program by offering the use of their offices. Community members turned out in large numbers to support the program, which suggests a positive relationship between the radio station, the village government office and the community.

3.12 Existing Written Documentation

The Most Significant Change Technique also used background information to help validate and explain the stories/testimonies. The review of literature included an exploration of census data from the Government offices to gather background information on Tulikup residents to assist with analysis. A review of the information delivered by the free medical clinics also enabled an understanding and confirmation of the health issues that are
prevalent within the community. Using this method the researcher was able to develop an understanding of the community and determined whether the radio station was responding appropriately to community relevant issues. The information gathered, supported the views of health professionals within the region. A review of the radio program schedule assisted the researcher in determining the type of programming broadcast and whether it was responding to actual local issues.

3.13 Data Collection

The research period was completed over 22 days, 8th-26th of October 2007 (see Appendix 5). The primary researcher travelled to Tulikup to conduct interviews within the village. Data collection included key-informant interviews, group discussions and purposive interviews with community members. Interviews were recorded in Bahasa Indonesian/Balinese and then transcribed to English in the field. At the completion of the research recordings were erased. The transcribed interviews will be stored at Edith Cowan University (ECU) in Perth, Western Australia for the preservation period of five years.

Most interviews needed to be arranged through purposive methods, approaching community people. Many participants were hesitant when they heard that a researcher wanted to conduct an interview so communication generally began as informal conversations. Participants realised that interviews would only be a few simple questions and therefore not be difficult. The technique enabled many interviews to be conducted and allowed the research team to cover a wide-cross section of the community in a short period of time. Beginning with a small research period it was significantly shortened to six days of interviews through a range of cultural limitations, such as unplanned religious holidays for the community. The alternative days were used to transcribe, translate, and cross-check the data collected. Having two interpreters allowed this cross-checking to occur. Even with limitations the research team still believe that the research method was the most appropriate providing a representative view of the population, after being able to interview all of the Klian dinas’s and the Kades (Wiratama, 2007).
3.14 Research Rigour

The validity of qualitative research is often questioned by social researchers (Winter, 2000). In order to ensure validity there were a number of strategies that were utilised to maintain research rigour. Strategies included thick description, systematic process of selection, transparency, verification, participation and member checking (Davies & Dart, 2005). Each strategy will be explained by how they supported the research.

Thick description required stories to be presented with solid descriptive data (Davies & Dart, 2005). Stories needed to be appropriately supported with contextual information to enable validation. Throughout the research period the interviewer pursued contextual information as participants described impacts within the community. This was particularly important as contextual information is required throughout the MSC Analysis process (see MSC Analysis).

Throughout the MSC Analysis process (stage 1 and 2) staff members were required to choose the story/testimony which most accurately represented the impact experienced within the community. Staff members were required to judge the story as valid, through the information given in the story. Being involved within the community allowed the staff members to judge whether the story was from a valid source (Davies & Dart, 2005). After each staff member selected their story, a group discussion followed about the story and the reasons as to why it was selected. This process also enabled an opportunity for staff members to support other staff members’ selections too.

Transparency is essential in any form of qualitative research and the MSC technique is no different (Davies & Dart, 2005). There is an obligation to continually report and monitor the process of research. This occurred on a number of levels. The researcher collected
field notes and continually reported back to advisors. Data collected was also presented to staff at the radio station in an appropriate form.

Within this research, community participation was considered essential as it would support the community development principles the community-radio project sought to develop. Appropriately the researcher sought a methodology which would maximise community participation on all levels from data collection to data analysis and MSC achieved this successfully.

3.15 Reliability

Cultural and linguistic interpreters were used to not only provide interpretation for the interviews but also a link to the cultural norms of the community. They assisted in limiting the effect of the ‘western-cultural filter’ that the researcher brought to the research. This is a term which describes the attitudes and biases that are associated with a researcher who is not a part of the culture being researched, particularly one from a ‘western’ developed country conducting research within the developing world (Pepall, 2004). Before data collection interpreters were given training by the researcher regarding data collection techniques and how to enhance reliability through the process, while maintaining research principles. Using two interpreters allowed cross-checking of the data collected during the research period which ensured no valuable data was lost through translation. Interpreters reviewed the recordings of the interviews they conducted as well as cross-checked interviews conducted by the other interpreter. This technique proved valuable ensuring no data was lost.

3.16 Triangulation

Triangulation was used on a number of levels to increase data validity (Berg, 2004). Using a multi-faceted technique allowed valuable triangulation to ensure that results gained throughout the process were valid. Results from MSC process could be strengthened
through support from the community radio indicators, with a reciprocal relationship existing (see Appendix 5 i.e. indicators could also then be confirmed with MSC stories). For example, having community perceptions and attitudes explored through a MSC interview could then be confirmed/ reaffirmed through the community perception-community radio indicator. This methodology ensured that results in both aspects of the methodology were valid.

3.17 Summary

This section outlined the methodology that was implemented to conduct the evaluation of the radio station Heartline Bali FM in October 2007. The multi-faceted methodology was designed to be appropriate for the specialised research environment, by considering the cultural context the research needed to be implemented within. It was largely informed by the 'Most Significant Change' technique and a series of community radio indicators, with the methodology being considered as community relevant. The MSC technique is a story-based qualitative technique which encourages participation from community members at many levels. To assist in evaluation the researcher also evaluated the radio station with regards to a set of community radio indicators. These indicators had been previously trialled in evaluations throughout the world.
Chapter 4  Findings and Discussion

4.1  Introduction

The most significant change analysis was undertaken by the staff at Heartline Bali FM with a most significant change story being ultimately selected by the radio station manager. The story highlights the significant change that the radio station has made within the community over the past three years. Appropriate community radio indicators were used to help evaluate the radio station and provide support to the MSC findings. A comment is made about the community indicators used in evaluation of the radio station.

4.2  Most Significant Change Analysis

After collating the collection of significant change stories, they were then used in an analysis process to determine the most significant change story (as previously described in figure 6). The following will briefly outline the six stories selected by the staff members (phase 1), and then explore the station’s manager’s selection of most significant change (phase 2). A brief field breakdown of the reported significant changes is shown in appendix 6.

Staff’s Top Six

(1) Staff member Dewi† selected an interview conducted with a local banjar leader. She stated the story showed how HLB is having a good effect on the community through both on and off-air activities. The banjar leader stated his belief that the most significant change is that the radio station is helping the community through easily available information on-air and through the social activities off-air within the community. He described the relationship between the radio station and the community as “Generally the relationship is very good, so there is no problem”. This interview showed a change in the

† Names altered to protect identity
community attitude towards the radio station while also revealing the type of activities that have lead to this change.

(2) Agung selected an interview by the tour operator who runs tours to the Tulikup village. This was an initiative that began as a result of the Social and Needs Assessment conducted in 2004 by Pepall. The tour operator runs approximately 8-10 tours a year with tours being set up on demand. The initiative aims to improve the economy by bringing tourists into the community, with money from the tour being spent on local families to provide tourists with a village experience. The tour also has an important connection with the radio station providing 10% of its profit to Heartline Bali FM for their social and community projects, such as the pig project. This was the reason why Agung selected the story; he believed it showed how the radio station is having a positive effect on the community through various strategies.

(3) Kadek selected an interview that was from the owner of the local laundry business. The owner of the business states his belief of the significant change Heartline has made to him and his family:

"(translation) Talking about the influence of HLB that I feel directly because I get a chance to promote our laundry through HLB. So I feel advantage from this activity so my laundry increase 50% than before."

The radio station provided free advertising for this local business and the owner states that the use of his business by the community had increased 50% since the advertising was aired. Kadek stated that it was encouraging to see the power of the radio station on local businesses and the influence the radio station is having within the community. He believed this positive influence on the community through the radio programming was the important change.
(4) Wayan† selected a story which showed the positive effect of the pig project on the community. This interview was with another banjar leader who stated his belief of significant change being:

“(translation) HLB have help the community here especially for the poor people and HLB the community here by giving pig projects”

The banjar leader stated the positive assistance Heartline was having through the pig project, which is a social development project that Heartline Bali FM had implemented. It aimed to improve the social and economic position of marginalised people within the community through a sustainable community development program. This positive view was supported by many other stories from community members about the positive impact the pig project was having within the community. The pig project is further explained below.

(5) Anak† selected an interview by the local Headmaster of one of the primary schools in Tulikup. He stated the change being the positive relationship and now formal partnership that Heartline Bali had with the school. The headmaster stated how the radio station is helping the children through many strategies such as teaching English, access to the HLB Library, fun days for the children and many competitions for the children. The positive effect on the children of Tulikup is supported by a Senior Lecturer at the Department of Nutrition Polytechnic of Health Denpasar who stated that the teachers at the local primary school believed the nutrition programs being run in association with the radio station also helped with the health of the school children. Anak believed that the interview showed the radio station’s impact on the children of the community, so that was the significant change.

(6) Made’s† choice was an interview with a teacher from the community and her mother. It reveals that the off-air activities by the radio station are helping the poor (i.e. pig project) which they believe is a significant change within three years. This interview also
highlighted how the on-air activities can help with social well-being as the grandmother stated her view that the radio makes her “very happy” as she is a “24 hour a day” listener

4.2 Most Significant Change

The manager of the radio station selected the ‘first story’ of change as the most significant change. The testimony was from a local banjar leader who stated:

“The changes in the community with Heartline here (within the community) are: First the community can get much information here easily from the radio and second the radio station helps with the social activities within the community.

The most significant change is that the community here have been helped in information and banjars have been helped through social activities such as the pig project”

The banjar leader was stating that the Most Significant Change in the community was the influence Heartline Bali FM had made on the community of Tulikup through the information it broadcast on-air and the off-air social development programs it implemented.

The station manager selected this story as it revealed a significant change in attitude within the community. When the radio station was established in 2003 there was widespread suspicion and resentment from the largely Hindu community, as Heartline was an outside organisation coming into the community with mostly-Christian radio staff (Pepall, 2004). This negative view had now changed with the banjar leader now believing the significant changes are positive through the broadcast of information and the social activities implemented while describing the relationship between the radio station and the community as “Generally the relationship is very good, so there is no problem”. Coming from a banjar leader, this story is considered a representation of a large section of the communities’ view as community members believe that the banjar leader’s view is the
same as those of the banjar he represents (Waters, 2007). The testimony shows the significant change within the community with regards to change in attitude.

The identification of the Most Significant Change story does not conclude the MSC technique. To maintain research rigour the Most Significant Change story must be supported by other relevant research information. Below a discussion follows the information and social development programs that the banjar leader mentions in his Most Significant Change testimony. Evidence is drawn from other key-informant and Most Significant Change stories gained throughout the research practice as well as the supporting field notes made by the primary researcher.

4.3 Information/On-air Programs

The information that the banjar leader refers to in his Most Significant Change testimony includes all of the various types of information that Heartline broadcasts to improve the quality of life of members within the community, which ranges from Balinese news to health and social development messages. Through the MSC interviewing many community members particularly valued that the radio station was local and Balinese and the programming reflected that. While it broadcasts Balinese news it also broadcasts local information about the village and promotes the local market and businesses. This information is regarded as having a positive effect on the social well-being of the community. Heartline has a focus to improve the quality of health within the village. As such, they promote various health issues through community service announcements (CSA’s). Health information is broadcast about local health issues such as: diarrhoea, dengue fever and HIV/AIDS (Waters, 2007). These CSA’s inform listeners on positive behaviours to minimise the effects of these health issues. Government organisations, such as the police, use the radio station as an outlet to broadcast necessary information, ranging from road safety messages to information about social activities.
4.4 **Social Development/Off-air Projects**

Heartline acknowledges that to sustain positive social changes within the community the approach needs to be multi-faceted and not just by broadcasting information on-air. As a result it has implemented different social/community development projects within the community. These projects have been able to prove to the community that the radio station’s sole purpose it to positively impact the community. The community have witnessed this impact, which is highlighted with the change in attitude of the banjar leader in the most significant change story, as he believed the relationship is very good. Social development projects have been varied by responding various community needs.

Examples of the development projects include a day-tour which aimed at bringing tourists into the community to use services and provide some income into the community. Responding to the health needs HLB has coordinated a number of health clinics within the community which provided free health services to community members. To help address children’s schooling needs, the radio station has established a library within the radio station which provided valuable learning resources for children. Children were able to go to the library after school hours to complete any necessary studies under the guidance of a library coordinator (Heartline staff).

An effective project implemented by the radio station was an income-generating project for vulnerable families within the community, called the pig project. The project gifted a piglet and a pig pen to vulnerable families within the community to aid their economy. Pig recipients then bred their pigs once they reach the appropriate age. New piglets were then used as a valuable form of income to the families. Recipients stated that the income generated from the piglets, had been used to meet basic needs for families and support the education needs for children within the family. To ensure sustainability there was an
understanding that if piglets are born, two are to be returned to the radio station so they can be gifted to more vulnerable families.

Many stories within the MSC process from recipients and community members mentioned the pig-project as significantly valuable to impacting community needs (see appendix 4). An example of the impact was the testimony of a recipient who stated that after receiving two piglets he had generated 10,000,000 Rp (≈$1250 AU as of June 2008) over two years, through the breeding program. He used the income to meet basic needs and send his children to school. With over half the community living below the poverty line this shows how the radio station responded to community need through its social development projects (Kusumajaya, 2006).

4.5 Community Radio Indicators

Although the Most Significant Change story selected by the radio station manager could be supported by other stories of significant change, it was necessary to triangulate that information with another method. A matrix employed for this task assessed the response of the radio station to community needs and whether the radio station contributed to community empowerment. The matrix assessed programming indicators, announcer indicators, audience reaction, community integration indicators and station management indicators. Tables 3-7 show the results of the assessment. The assessment was made through a key-informant interview with the radio station manager and the collective information obtained throughout the research period. Each indicator was then given a rating of yes, pursuing and no. “Yes” identified that the radio station had successfully achieved the indicator whereas “pursuing” showed that the radio station had shown the initial stages of fulfilling the indicator but had not completely achieved it. A “no” revealed that the radio station had not reached a level in which they could successfully achieve the indicator and therefore intend to fulfil the indicator.
4.5.1 *Programming Indicators*

Heartline Bali FM had actively engaged in promoting local health issues through its programming (see Table 2). They had a number of public service announcements which cover community health issues such as HIV/AIDS, smoking and dengue fever. Throughout the program schedule Heartline broadcast many features with a family focus, which were education programs aimed at improving knowledge to change behaviours. Message topics were very broad covering a variety of issues relating to improving family relationships and behaviours.

The radio station chose to focus on providing local community information about activities and services. Programming features included the local Puskesmas (health centre), information about the local Pasar (market) and banjar information. This information also extended to information about community activities encouraging participation in these activities.

**Table 2**

*Community Radio Indicators- Programming Indicators*

<table>
<thead>
<tr>
<th>1.1 Programming Indicators</th>
<th>Yes</th>
<th>Pursuing</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1 HLB programs promote local health and social issues (Nutrition, Respiratory Infections, Tuberculosis etc)</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>1.1.2 HLB critically discuss social issues and inequalities related to health issues</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.3 HLB programs provide perspectives of marginalised groups</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>1.1.4 HLB programs facilitate open discussion about local health issues</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>1.1.5 HLB programs encourage listener participation in dialogue regarding local health issues</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>1.1.6 HLB programs promote and encourage understanding of the issues that affect those suffering from ill-health</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.7 HLB programs promote opportunities for participation in off-air activities</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.5.2 Journalist-Programming Indicators

Journalist-programmers (JP) is a generic term that refers to announcers/ producers of the radio station (James, 2004). Table 4 shows the results of the evaluation of the ways in which JP’s can promote or facilitate social development within the community, through radio.

It can be seen (Table 3) that Heartline Bali FM had not developed the confidence to advocate for more powerful sectors of society to be more socially responsible for the community. It must be acknowledged, however, that when Heartline began broadcasting it was in danger of being shut down. Consequently, caution was given to advocating for social issues. Future advocacy could be made possible as the station’s standing and influence within the community grows.

Even so JP’s were still pursuing the ideal of personally engaging in learning or programming or other activities that would give them closer identification with the community.

Of the indicators evaluated as “Yes” (Table 3), the JPs had become quite involved in training local groups to contribute to programming, and had engaged with community members to record their voices for programs. With the assistance of HCR, Heartline has engaged in training local people to be involved in community radio programming. This training has developed skills in radio producing, while also strengthening the health promotion/community development approach. Local people and health organisations had regularly participated in promoting knowledge, information and social learning and dialogue regarding community health issues.
### Table 3
Journalist-Programmers (JP) Indicators

<table>
<thead>
<tr>
<th>1.2 Journalist-Programmers (JP) Indicators</th>
<th>Yes</th>
<th>Pursuing</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.1 JPs train local community members to contribute to local health programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.2 JPs train local organisations to contribute to local health programs</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.3 JPs regularly participate in off-air community activities and events</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.4 JPs regularly update their knowledge and information resources of local health and social issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.5 JPs initiate on-air discussions about local health issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.6 JPs support and encourage listener participation in programming</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.7 JPs advocate for marginalised groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.8 JPs advocate for powerful sectors of society to be more socially responsible for the welfare of the community</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 4.5.3 Listener indicators

Listener indicators (Table 4) measured the radio audience with their ability to interact with the radio station and its programming and the impact it had upon them (James, 2004). Heartline staff reported that local participation in on and off-air activities had increased. There has been a significant increase in interactions such as calling-in with comments or requests for songs, guest presenters and people visiting the radio station.

However more needs to be done with Listener interactions, specifically with regards to encouraging marginalised populations to be involved in areas of the radio programming. Reviewing the station programming scheduled revealed that there were no regular programs for marginalised populations within the community. These findings are similar to previous tables, where Heartline had not been involved in activities of advocacy. It was considered inappropriate for the radio station to be engaged in any advocacy activities.
Table 4

*Listener Indicators*

<table>
<thead>
<tr>
<th>1.3 Listener Indicators</th>
<th>Yes</th>
<th>Pursuing</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3.1 Listeners are encouraged and supported to participate in on-air public-campaigns addressing local health issues</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>1.3.2 Listeners are encouraged and supported to advocate for the community through radio programming</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>1.3.3 Listeners are encouraged to discuss community issues through radio</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>1.3.4 Marginalised listeners are encouraged and supported to advocate for their social situation through radio.</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>1.3.5 Powerful groups are encouraged to recognise the social situation of community groups and recognise and respect human rights.</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>1.3.6 Listeners are encouraged to be involved in community activities and events</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.5.4 *Community Integration Indicators*

The assessment of community indicators (Table 5) revealed that the radio station had integrated well with the community of Tulikup. Through successfully engaging the community with the programming the radio station has gained the respect and trust of the community, which has resulted in the community holding a positive view of the station. This finding is supported by the beliefs found through some of the most significant stories with some community members stating they were “very proud” of the station, showing the change of attitude within the community. It is clear that Heartline’s presence is felt through Tulikup, within Heartline products seen throughout the village and recorded in the primary researcher’s field notes (Waters, 2007).

Whilst Table 5 reveals the connection between the community and radio station, some key indicators are still being pursued. Heartline continues to seek to increase the number
of community volunteers within the project. While they have shown intent to train community volunteers, there are sometimes community-relevant difficulties in locating community members who show a passion to be trained. It was not considered in the scope of this research to further explore these. Heartline was pursuing the objective of motivating community members and organisations to become involved so as to strengthen advocacy to achieve sustainable social change. Indicators were being pursued by the community development team, a department within Heartline, to further integrate the community with the radio station. The staff seeks to strengthen relationships within the community through a range of radio/on-air and social development programs off-air.
### Community Integration Indicators

<table>
<thead>
<tr>
<th>1.4 Community Integration Indicators</th>
<th>Yes</th>
<th>Pursuing</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4.1 Community listeners are motivated to serve the basic needs of their local community through local radio HLB programs</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>1.4.2 The radio station is recognised for what it does to benefit the community</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>a. The number of volunteers involved in HLB programs</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>b. The number of listeners who participate in HLB programs</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>c. The number of community groups who are assisted through the radio station programming.</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>d. The number of community members involved in training through the radio station</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>e. The local and regional agencies which have been given airtime</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>1.4.4 The community feels the radio station is a good influence</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>1.4.5 The community has a sense of ownership towards the radio station</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>1.4.6 Other media are commenting on HLB programming</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>1.4.7 HLB products are seen in the community (i.e. stickers, posters etc)</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
<tr>
<td>1.4.8 HLB is involved and support off-air strategies for health promoting and community development programs</td>
<td>![Yes]</td>
<td>![Pursuing]</td>
<td>![No]</td>
</tr>
</tbody>
</table>
4.5.6 Station Management Indicators

Station management indicators (Table 6) reveal management had a proactive plan to train community volunteers who would engage the community in social learning and dialogue, through radio, and with off-air activities. This programming model became the basis for Heartline programming when Health Communication Resources became involved in the project. As of October 2007, four new community members were scheduled to be trained in the use of radio for development purposes in the community.

Management also aimed to employ local people when possible. The majority of employed staff were from the local area. Expert staff that were not from the local district were required to relocate to the village to immerse themselves in the community. Management continually sought partnership with other community organisations (see Table 6). Government organisations such as the police and health department were frequently involved in community programming. The Head of Police for Public relations in the Gianyar Regency believed that the good partnership with Heartline resulted in significantly reduced road fatalities due to the messages broadcast on Heartline. He believed the relationship was good between the organisations and it was a useful way of decreasing crimes. The Off-air activities, such as the children’s library, pig project and nutrition project, are all reflected in the “Yes” evaluation (Table 6).

Within the three years of the project the radio station had not reached a level where it was considered appropriate to be involved in forms of advocacy. It was considered that any form of advocacy would have impacted the long-term viability of the radio station within the community. As the station was building credibility the social environment did not allow for the radio station in any form of advocacy. This is likely to be an ongoing aspiration as the radio station gains higher recognition within the government and more widely the community.
Table 6
Station Management Indicators

<table>
<thead>
<tr>
<th>1.5 Station Management</th>
<th>Yes</th>
<th>Pursuing</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5.1 Community listeners are represented in the radio station decision and policy making body</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>1.5.2 The station networks with other community organisations (NGO's, health services etc)</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5.3 The station management advocates and supports the radio station in advocacy for community social issues</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>1.5.4 The station management encourages and supports policy and programming that increases awareness and knowledge of community health and social needs.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5.5 Station management encourages and supports listener participation in programming</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5.6 Management has policies or mechanisms which allow JP to be involved in local off-air activities that promote a supportive environment.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.6 Indicators Summary

The evaluation of Heartline Bali with the matrix of community radio indicators gave a fresh perspective to the degree to which 'significant change' was reflected in and through the radio station's activities so as to contribute to empowerment. The results of the matrix support the stories of significant change offered by community members who participated in the present study. Community involvement had increased in the operation of the station. As the radio station involved and integrated the community with the radio activities, trust began to grow and community members became more actively engaged in areas of operation of the station. However more work needs to be done to increase efforts to pursue a satisfactory result for some indicators, particularly with regards to advocacy activities.
4.7 **Standing within the Community**

As suggested by the Most Significant Change story by the banjar leader and supported by the community radio indicators the standing within the community the radio station has achieved has significantly changed within the past three years. The radio station has gone from one which was widely distrusted by the community to one where community members explain they are “very proud” of the radio station in their community. The pride was evident in a number of stories told by the 74 participants when explaining what they perceived as the most significant change brought about by Heartline. The station manager confirmed this change in standing by explaining it was much easier for the station to obtain an annual broadcast license from the Government, when initially it was difficult. This has generally been attributed to showing the Tulikup community and more generally the wider Balinese community, that the radio station is genuine in its approach to improving the quality of life for Balinese people.

4.8 **Community Partnerships**

With the radio station now being accepted by the community it enabled them to partner with many government organisations and departments to impact the well-being of the community, which was not possible initially. Partnerships with organisations include the Department of Nutrition Polytechnic of Health Denpasar, Department of Tourism and the Police Department. The AIDS prevention department, for the Department of Health (Gianyar Regency) described Heartline Bali FM as “very useful because Heartline Bali FM helps to promote our (AIDS) program”.

Heartline sought to engage many of the social connections that exist within the village. Banjar information was regularly aired on-air with to support the community and the banjar system. Throughout the MSC interviews some banjar leaders expressed a desire to be more involved in the operation of the radio station. Early attempts by the radio station to engage banjar leaders in regular programming did not eventuate due to the initial
turbulent relationship that existed between the community and the station. This again showed the change in standing the radio station has achieved, as the local banjar leaders expressed interest in partnering with the station.

4.9 Community Empowerment

Lavarack explains the concept of community empowerment through the use of a continuum model, with five distinct categories (Laverack, 2007). The model ranges from individual empowerment (personal action) to community empowerment (community organisations and partnerships) culminating in social and political action, which is more commonly known as advocacy. The community radio indicators clearly show that the station has had an emphasis on encouraging individual empowerment and community participation. Initially Heartline was unable to engage local participation due to the turbulent relationship between the community and the radio station that existed.

Empowerment has brought about a major change. Heartline empowered individuals by building capacity by providing radio training to enable them to become community volunteers. A number of community volunteers had been trained since Heartline first began. It was not within the scope of the present study to explore further the training of volunteers and the role they played. When Heartline Bali employed staff there was an emphasis on employing local people, with the majority of staff being employed from the regional area. Empowering local people to positively impact their own well-being is the aim for community development/empowerment. The radio station had shown this process had started well, but with empowerment it is an ongoing process.

It is clear that Heartline has successfully partnered with key community organisations such as the police, health department and the local banjar systems to positively impact the community of Tulikup. On the community empowerment continuum this is a clear category (community organisations and partnerships) for community empowerment (Laverack, 2007). Heartline are continuing to move along the empowerment continuum as
it aims to empower the community. Heartline should seek to strengthen current partnerships while also engaging new partnerships with other community organisations.

Social and political action is the final category/aim on the continuum scale (Laverack, 2007). To achieve this goal community groups need to be involved in varied forms of advocacy (James, 2007). The community radio indicators reveal that the radio station have not previously been involved in many advocacy related activities due to the fact that the radio station had not been in a suitable standing within the community to pursue this type of action. As the station has now built its standing it can and should begin to pursue more forms of advocacy to bring about significant social changes.

4.10 Social Capital

Trust and reciprocity are important elements in building social capital (Baum, 2007). Heartline has actively engaged in building social capital within the community of Tulikup. As established, when Heartline began there was a negative response to the radio station which has now changed, with most people describing the relationship within the community as good. Now a trusted source of information within the community, this change has largely been attributed to the fact that Heartline has proven it is genuine in its approach to helping the people of Tulikup. Heartline has strengthened social connections within the community through a range of strategies, such as providing information about social activities and organised many social events. The element of reciprocity is slowly building. For example people who have been positively impacted by the pig project express a desire to help other community members so that they will also been positively influenced by the project in the future. Working in the environment of Bali, Indonesia social structures through the banjar system currently exist Heartline have sought to strengthen these connections through broadcasting important information about the banjars are on-air regularly. Heartline has slowly assisted in building the social connections that exist within the community based on trust and reciprocity, or otherwise known as social capital.
4.11 Limitations

Due to the research environment the research methodology needed to be flexible. Working in the environment there were many unexpected challenges that occurred in the field. The researcher believes the methodology was able to withstand these challenges and not compromise on research rigour. Working in a different culture the language differences and therefore translation may have affected data quality. With the protocols set in place to overcome this, the researcher believes these would have been minor.

4.12 Summary

The Most Significant Change story presents the significant change the radio station had made within the community of Tulikup, Indonesia. Supported by the matrix of community radio indictors, the testimony of change revealed that the radio station had developed into a well respected organisation by proving to the Balinese community that Heartline is genuine in its aim to positively impact the community. The trust and respect had developed through the range of information that had been broadcast on-air as well as the social and community development projects implemented off-air. By empowering people, Heartline has sought to strengthen the social connections/social capital that exists within the social structures of Indonesia. Heartline has shown the value of radio as an important tool used for community development, building social capital and community empowerment.
Chapter 5      Recommendations and Conclusion

Heartline Bali has made many significant changes within the village of Tulikup, Indonesia with a range of strategies through broadcasting information on-air to the social and community development projects off-air. The Most Significant Change that has occurred within the community is the acceptance the organisation Heartline has achieved. When Heartline began in 2004, there was wide-spread distrust of the organisation as it was considered an outside organisation, with largely Christian staff moving into a predominantly Hindu community. Within three years, this has changed with a positive relationship existing between the radio station and the community.

The significant change is highlighted with a local banjar leader outlining the positive aspects of the radio station and then describing the relationship between organisation and community as “very good”. This was considered significant by radio station staff, as working in the social structures of Bali, Indonesia the banjar leader’s view is considered representative of a large proportion of the community. Government organisations, which previously were negative towards Heartline, are now keen to partner with and work to positively impact the people of Bali. These relationships are continuing to build and Heartline should seek to continue this process, particularly with banjar and other village leaders.

Heartline has achieved this success, by proving to the community they are genuine in their aim to positively impact the community through the on and off-air programs. Valuable information is broadcast covering a range of issues from local community (banjar) information to important health information used to address local health issues. Messages are developed to build capacity of community members and empower them to make positive social changes. Community information is broadcast to assist in strengthening
levels of social capital within the village. The radio station should continue to engage community participation with the on-air programming.

The social and community development projects implemented by the radio station have been varied addressing a range of community needs with the village. Projects have proven to the community that the radio station is genuine in its approach to positively impacting the community. Through witnessing the positive impact these programs have had on a range of people within the community, the community attitude has positively changed. Members of the community express a desire for these valuable projects to continue. A key project had been the pig project which is a community development project aimed at increasing the economic position of vulnerable people within the community. This pig project needs to continue to further develop the positive relationship that exists between the radio station and community.

To ensure that the programming on the radio station remains community relevant, the station must continue to seek opportunities to build local partnerships, with both local community members as well as community organisations. Having local people involved in programming is the essence of community-oriented focussed radio. Community members can be used to ensure programming is community relevant. Community radio can be used as a tool to empower the community to make positive social changes and impact the communities’ quality of life.

The evaluation method worked well under the research conditions, providing a flexible technique while maintaining research rigour in the specialised research environment. The methodology encourages participation which is essential when evaluating the effects of community development programs. Further research is required into the link between the Most Significant Change (MSC) technique and the community empowerment, community radio indicators that were revised.
The radio station has made significant gains in providing an outlet to bring about social change within the community of Tulikup, Indonesia. This project has shown the significant value radio can have in assisting to impact health and social development of communities throughout the world.
Chapter 6 Lessons Learnt

The purpose of this chapter is to allow the present researcher to offer personal reflections which could not be made elsewhere in the thesis, but which may be helpful to future researchers.

Flexibility was a key aptitude for conducting the research. The two major obstacles were the work scheduling of the interpreters and religious holidays. Despite agreeing to be available during the research period, the interpreters began to miss research appointments because of other priorities such as family, or undertaking other work.

Planning for the research took into account the official religious holidays scheduled by the Indonesian government, because the interpreters and potential participants would not be available on those days. Unexpected local religious holidays, however, could not be planned for, as even the interpreters and other community members were surprised when these events were announced either a day earlier, or on the day itself.

The Most Significant Change technique could be used in a range of circumstances. The approach worked extremely well in encouraging participation in the research, important to strengthen the impact of participation in the community development intervention (Byrne, 2007). Individuals expressed reluctance to participate in “formal” interviews, however they responded positively when they realised they were being asked to “tell their stories” and not “answer” questions. Consequently, research participants gave valuable information which would have been lost, had a more formal question and answer research instrument been used.

A researcher from outside of the community can often be conferred a status that becomes a communication barrier with community members. The MSC approach
appeared to break down such barriers in the present study. For example as the research team approached one community member he protested, saying: “No! No! Don’t talk to me. I do not speak English. I am stupid.” He was under the illusion that he was not worthy to participate in the study because he did not speak English. Through interpretation, the researcher explained the process. The man then chose to participate and his story of significant change gave the research team great insight into his views of the way Heartline had brought about positive change. The point to be made is that the MSC process had an empowering effect. The community member was impressed that he could be valuable to a research study, when initially he thought he could not.

Research in developing countries is generally outside the scope of university undergraduate research learning. Opportunities to learn and conduct appropriate research techniques such as the qualitative tool the Most Significant Change technique is not a regular technique for research in Western Australia. Working on this project has however given me the necessary skills to not only conduct social research but also the skills to conduct research in different cultures. I acknowledge the extremely valuable opportunity that was provided to me by Heath Communication Resources (HCR) through the duration of the research program.
References


Appendices

Appendix 1

Pledge of Confidentiality

TO WHOM IT MAY CONCERN

RE: Interviews conducted by Dane Waters during the Period October 2007-November 2007

This is to confirm that prior to the participation in the study; all individuals were provided with the details of the study (i.e. the purpose, what was being asked of them to participate in, confidentiality, use and storage of data, possible inclusion of conversation in the final draft) and the rights of the participant to withdraw from the study at any stage without penalty or prejudice.

All participants verbally consented to the interview.

Name: I G S T R A W I N A T O M A  Date 20 October 2007
Research Interpreter
Heartline Bali FM

Witness

Dane Waters  Date 20/10/2007
Researcher
Edith Cowan University
Health Communications Resources (HCR)
Pledge of confidentiality

TO WHOM IT MAY CONCERN

RE: Interviews conducted by Dane Waters during the Period October 2007-November 2007

This is to confirm that prior to the participation in the study; all individuals were provided with the details of the study (i.e. the purpose, what was being asked of them to participate in, confidentiality, use and storage of data, possible inclusion of conversation in the final draft) and the rights of the participant to withdraw from the study at any stage without penalty or prejudice.

All participants verbally consented to the interview.

Name: I KAPPEL GUNAWAN Date: 19 October 2007
Research Interpreter
Heartline Bali FM

Witness

Dane Waters Date: 19 Oct 2007
Researcher
Edith Cowan University
Health Communications Resources (HCR)
Appendix 3- Final Most Significant Change (MSC) questions

(1) Could you please explain your position in the community? Job, position in the community etc?

(2) Have you seen any changes in the community because of Heartline Bali FM in the last three years?

(3) Out of all of those changes what would you consider to be the most significant?
Appendix 4- Community Radio Indicators

<table>
<thead>
<tr>
<th>Community Radio Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1 Programming Indicators</strong></td>
</tr>
<tr>
<td>1.1.1 HLB programs promote local health and social issues (Nutrition, Respiratory Infections, Tuberculosis etc)</td>
</tr>
<tr>
<td>1.1.2 HLB critically discuss social issues and inequalities related to health issues</td>
</tr>
<tr>
<td>1.1.3 HLB programs provide perspectives of marginalised groups</td>
</tr>
<tr>
<td>1.1.4 HLB programs facilitate open discussion about local health issues</td>
</tr>
<tr>
<td>1.1.5 HLB programs encourage listener participation in dialogue regarding local health issues</td>
</tr>
<tr>
<td>1.1.6 HLB programs promote and encourage understanding of the issues that affect those suffering from ill-health</td>
</tr>
<tr>
<td>1.1.7 HLB programs promote opportunities for participation in off-air activities</td>
</tr>
</tbody>
</table>

| **1.2 Journalist- Programmers (JP) Indicators** |
| 1.2.1 JPs train local community members to contribute to local health programs |
| 1.2.2 JPs train local organisations to contribute to local health programs |
| 1.2.3 JPs regularly participate in off-air community activities and events |
| 1.2.4 JPs regularly update their knowledge and information resources of local health and social issues |
| 1.2.5 JPs initiate on-air discussions about local health issues |
| 1.2.6 JPs support and encourage listener participation in programming |
| 1.2.7 JPs advocate for marginalised groups |
| 1.2.8 JPs advocate for powerful sectors of society to be more socially responsible for the welfare of the community |
1.3 Listener Indicators

1.3.1 Listeners are encouraged and supported to participate in on-air public-campaigns addressing local health issues

1.3.2 Listeners are encouraged and supported to advocate for the community through radio programming

1.3.3 Listeners are encouraged to discuss community issues through radio

1.3.4 Marginalised listeners are encouraged and supported to advocate for their social situation through radio.

1.3.5 Powerful groups are encouraged to recognise the social situation of community groups and recognise and respect human rights.

1.3.6 Listeners are encouraged to be involved in community activities and events

<table>
<thead>
<tr>
<th>1.4 Community Integration Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4.1 Community listeners are motivated to serve the basic needs of their local community through local radio HLB programs</td>
</tr>
<tr>
<td>1.4.2 The radio station is recognised for what it does to benefit the Community</td>
</tr>
<tr>
<td>a. The number of volunteers involved in HLB programs</td>
</tr>
<tr>
<td>b. The number of listeners who participate in HLB programs</td>
</tr>
<tr>
<td>c. The number of community groups who are assisted through the radio station programming.</td>
</tr>
<tr>
<td>d. The number of community members involved in training through the radio station</td>
</tr>
<tr>
<td>e. The local and regional agencies which have been given airtime</td>
</tr>
<tr>
<td>1.4.3 Community leaders feel the radio station is a good influence</td>
</tr>
<tr>
<td>1.4.4 The community feels the radio station is a good influence</td>
</tr>
<tr>
<td>1.4.5 The community has a sense of ownership towards the radio station</td>
</tr>
<tr>
<td>1.4.6 Other media are commenting on HLB programming</td>
</tr>
<tr>
<td>1.4.7 HLB products are seen in the community (i.e. stickers, posters etc)</td>
</tr>
</tbody>
</table>
1.4.8 HLB is involved and support off-air strategies for health promoting and community development programs.

1.5 Station Management

1.5.1 Community listeners are represented in the radio station decision and policy making body

1.5.2 The station networks with other community organisations (NGO’s, health services etc)

1.5.3 The station management advocates and supports the radio station in advocacy for community social issues

1.5.4 The station management encourages and supports policy and programming that increases awareness and knowledge of community health and social needs.

1.5.5 Station management encourages and supports listener participation in programming

1.5.6 Management has policies or mechanisms which allow JP to be involved in local off-air activities that promote a supportive environment.
Appendix 5- Research Timeline

Preparation for the evaluation began in May 2007 with a meeting with Dr Ross James (representing HCR) and the researcher. During this discussion it was identified that an evaluation of the radio station Heartline Bali FM was required. After communication with Heartline Bali FM it was agreed that an evaluation was needed. So planning for the evaluation immediately began. The following timeline took place:


September 2007 Meetings with Dr Ross James (HCR) with regard to purpose of evaluation and cultural environment. Communication with Heartline Bali FM staff about the research parameters. Ethics approval granted. Visa granted.

September 2007-October 2007 4-week in country data collection period

September 28 -October 7: Community orientation. Meetings with Heartline Bali Staff FM about evaluation requirements and information with regards to key-informants within the community. Interpreters found and explanation of the research outlined. Trial of survey.

October 8- October 21: Interviews with Key-informants, community members and Heartline Bali FM staff. Transcription of interviews.

October 22-27: Transcription. Data Analysis. Facilitation of Staff MSC analysis. Presentation of research to HLB staff members.


February 2008 Data presentation and dissemination to major stakeholders in Jakarta
## Appendix 6- Significant Changes- Field notes

<table>
<thead>
<tr>
<th>Role</th>
<th>Change Description</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>Help the poor</td>
<td></td>
</tr>
<tr>
<td>Banjar leader</td>
<td>Pig Project</td>
<td></td>
</tr>
<tr>
<td>Leader of BPD</td>
<td>Contribution to the poor people (ie pig project)</td>
<td>Information, Entertainment</td>
</tr>
<tr>
<td>Banjar leader</td>
<td>Pig project and free medicine</td>
<td>Good relationship with the community</td>
</tr>
<tr>
<td>Banjar leader</td>
<td>No change</td>
<td>But sees available information</td>
</tr>
<tr>
<td>School Head- Master</td>
<td>Formal Partnership with HLB- Increases child creativity</td>
<td>Help Teach English, Help with the health information - increase in use of Posyandu supports Juransan Gizi's finding</td>
</tr>
<tr>
<td>Banjar Leader</td>
<td>Information and Pig project</td>
<td>Good relationship with the community</td>
</tr>
<tr>
<td>Sekdes (Secretary)</td>
<td>Promote business and those who are gifted can use them through the radio</td>
<td>Can promote Tulikup with the hosts other people know HLB, Good relation, Social activities that involve the community, Free medication, Enjoy Balinese songs</td>
</tr>
<tr>
<td>Banjar Leader</td>
<td>No change</td>
<td>Has heard of the pig project</td>
</tr>
<tr>
<td>Police</td>
<td>Good Partnership, Attributes messages from HLB to decreasing the fatality rates in the community</td>
<td>Good partnerships</td>
</tr>
<tr>
<td>Group Discussion</td>
<td>Pig Project</td>
<td>Aid</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
<td>-----</td>
</tr>
<tr>
<td>Shop keeper</td>
<td>Sponsor in social activities within the community</td>
<td>Good program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tulikup is known by other regencies</td>
</tr>
<tr>
<td>Brickmaker</td>
<td>feels if he had some information to give he would do it through HLB. Local brickmaker</td>
<td>Valuable tool for health promotion</td>
</tr>
<tr>
<td>General Practitioner</td>
<td>Health advertisement on the walls</td>
<td>Contribution to the community</td>
</tr>
<tr>
<td>Klian adat</td>
<td>No significant change</td>
<td>Pig Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase in foreigners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Free medicine</td>
</tr>
<tr>
<td>Teacher</td>
<td>Health information</td>
<td>Help the poor</td>
</tr>
<tr>
<td>Banjar leader</td>
<td>Pig Project</td>
<td></td>
</tr>
<tr>
<td>Leader of BPD</td>
<td>Contribution to the poor people (i.e. pig project)</td>
<td>Information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Entertainment</td>
</tr>
<tr>
<td>Banjar leader</td>
<td>Pig project and free medicine</td>
<td>Good relationship with the community</td>
</tr>
<tr>
<td>Banjar leader</td>
<td>No change</td>
<td>But sees available information</td>
</tr>
<tr>
<td>Role</td>
<td>Pig Project</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Tukang Ojek Driver</td>
<td>Just knows there is a good program</td>
<td></td>
</tr>
<tr>
<td>Driver</td>
<td>Has trouble with finding the frequencies</td>
<td></td>
</tr>
<tr>
<td>Staff Of Debt</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td>Pig Project</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td>Aid</td>
<td></td>
</tr>
<tr>
<td>Shop keeper</td>
<td>Sponsor in social activities within the community</td>
<td></td>
</tr>
<tr>
<td>Brickmaker</td>
<td>Tulikup is known by other regencies</td>
<td></td>
</tr>
<tr>
<td>General Practioner</td>
<td>Health advertisement on the walls</td>
<td></td>
</tr>
<tr>
<td>Kilian adat</td>
<td>Contribution to the community</td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Help the poor</td>
<td></td>
</tr>
<tr>
<td>Banjar leader</td>
<td>Pig Project</td>
<td></td>
</tr>
<tr>
<td>Leader of BPD</td>
<td>Information</td>
<td></td>
</tr>
<tr>
<td>Banjar leader</td>
<td>Pig project and free medicine</td>
<td></td>
</tr>
<tr>
<td>Banjar leader</td>
<td>Good relationship with the community</td>
<td></td>
</tr>
<tr>
<td>Banjar leader</td>
<td>But sees available information</td>
<td></td>
</tr>
</tbody>
</table>