The effect of the Lifeplan® programme on the psychological well-being of a rural community in South Africa

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Mini-dissertation submitted for partial fulfilment of the degree Magister Artium in Counseling Psychology at the North-West University: Potchefstroom Campus

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- To my brother, Deon, my sister Chantel, her husband Henno, and their baby girl, Zenél, for their support and hospitality.

PREFACE

- This thesis is part of the requirements for fulfilment of the Magister Artium degree in Counseling Psychology and is presented in article format in terms of the North-West University rule A.13.7.
- The article comprising this thesis is intended for submission to the Journal of Psychology in Africa.
- The referencing style and editorial approach for this thesis is in line with the prescription of the *Publication Manual* (6th edition) of the American Psychological Association (APA), except in the instances where the journal guidelines indicated otherwise.
- For examination purposes, the page numbering is consecutive from the title page.
- The study supervisor and assistant supervisor of this article, Prof. Karel F.H. Botha and Dr. Alida W. Nienaber have submitted a letter consenting that the article may be submitted for examination purposes for this degree Magister Artium in Counseling Psychology.

LETTER OF PERMISSION

PERMISSION TO SUBMIT THIS MANUSCRIPT FOR EXAMINATION PURPOSES

We, the supervisor and assistant supervisor, hereby declare that the input and effort of Miss. A. Bonthuys, in writing this manuscript reflects research done by her on this topic: *The effect of the Lifeplan® programme on the psychological well-being of a rural community in South Africa.*

We hereby grant permission that she may submit this manuscript for examination purposes in fulfilment of the requirements for the degree Magister Artium in Counseling Psychology.

Signed on this …… day of …….2010 in Potchefstroom.

…….	……
Prof. K.F.H. Botha	**Dr. A.W. Nienaber**
Supervisor	**Assistant supervisor**

SUMMARY

The effect of the Lifeplan® programme on the psychological well-being of a rural community in South Africa

Keywords: psychological well-being; life skills; awareness; rural community; poverty; community development

This study explored the effect of the Lifeplan® programme, an Africa Unit for Transdisciplinary Health Research (AUTHeR) initiative, on the psychological well-being of the rural community of Taung, in the North West Province of South Africa. A mixed method sequential explanatory research design was followed where quantitative data were obtained in a pre- and post-evaluation phase. Participants were adult individuals (N=99) between the ages of 20 and 83 years, with a mean age of 43 years, living within six rural towns in the Taung community. Participants were randomly divided into an experimental group (n=47) and a control group (n=52). Four standardised scales, the General Psychological Well-being Scale (GPWS) (Khumalo, Temane, & Wissing, 2010), the Patient Health Questionnaire (PHQ-9) (Kroenke, & Spitzer, 2002), the Coping Self-Efficacy Scale (CSE) (Chesney, Neilands, Chambers, Taylor, & Folkman, 2006), and the Mental Health Continuum – Short Form (MHC-SF) (Keyes, 2006; Keyes, Wissing, Potgieter, Temane, Kruger, & van Rooy, 2008), validated for use in a Setswana-speaking group, were administered to measure psychological well-being. Qualitative data were obtained through conducting semi-structured interviews with a simple random sample of 30 participants three months after presentation of the programme. The quantitative findings reflected a small increase

in the general psychological and emotional well-being of the experimental group. Between-group comparisons showed small practical significant differences (d=0.19 – 0.40) in the experimental group on most of the measuring instruments. Qualitative results suggest that the participants in this study experienced the Lifeplan® programme as educational, and contributing positively towards their general well-being. Participants felt that they have become more attentive to their health needs especially through exercise, a healthier diet and better attendance to overall hygiene. Suggestions for further research and possible programme interventions include a follow-up study to evaluate the sustainability of skills obtained and changes made as a result of the Lifeplan® programme.

OPSOMMING

Die effek van die Lifeplan®-program op die psigologiese gesondheid van ‘n landelike gemeenskap in Suid-Afrika

Sleutelwoorde: psigologiese gesondheid; lewensvaardighede; bewustheid; landelike gemeenskap; armoede; gemeenskapsontwikkeling

Hierdie studie het die effek van die Lifeplan®-program, ‘n “Africa Unit for Transdisciplinary Health Research” (AUTHeR)-inisiatief, op die psigologiese gesondheid van die landelike gemeenskap van Taung, in die Noordwes-Provinsie in Suid-Afrika ondersoek. ‘n Gemengde-metode sekwensiële verduidelikende navorsingsontwerp is gevolg waarin kwantitatiewe data in ‘n pre- en post-evaluasiefase verkry is. Die deelnemers was volwasse individue (N=99) tussen die ouderdomme van 20 en 83 jaar, met ‘n gemiddelde ouderdom van 43 jaar, wat in ses landelike dorpe binne die Taung-gemeenskap woon. Die deelnemers is ewekansig verdeel in ‘n eksperimentele groep (n=47) en ‘n kontrole groep (n=52). Vier gestandaardiseerde skale, die “General Psychological Well-being Scale” (GPWS) (Khumalo, Temane, & Wissing, 2010), die “Patient Health Questionnaire” (PHQ-9) (Kroenke & Spitzer, 2002), die “Coping Self-Efficacy Scale” (CSE) (Chesney, Neilands, Chambers, Taylor, & Folkman, 2006), en die “Mental Health Continuum – Short Form” (MHC-SF) (Keyes, 2006; Keyes, Wissing, Potgieter, Temane, Kruger, & van Rooy, 2008), wat vir die gebruik in ‘n Setswana-sprekende groep gevalideer is, is toegepas om psigologiese gesondheid te meet. Kwalitatiewe data is verkry deur semi-gestruktureerde onderhoude met ‘n ewekansige steekproef van 30 deelnemers te voer drie

maande nadat die program aangebied is. Die kwantitatiewe bevindinge het ‘n klein toename in die algemene psigologiese en emosionele gesondheid van die eksperimentele groep reflekteer. Inter-groepvergelykings het klein prakties-beduidende verskille (d=0.19 – 0.40) in die eksperimentele groep in die meeste van die meetinstrumente getoon. Kwalitatiewe resultate het getoon dat die deelnemers aan hierdie studie die Lifeplan®-program as opvoedkundig, en as ‘n positiewe bydrae tot hulle algemene welstand ervaar het. Deelnemers het gevoel dat hulle meer aandag aan hulle gesondheidsbehoeftes gegee het, veral deur oefening te doen, ‘n gesonder dieet en beter aandag aan algehele higiëne te skenk. Voorstelle vir verdere navorsing en moontlike programintervensies sluit ‘n opvolgstudie om die volhoubaarheid van aangeleerde vaardighede te evalueer en veranderinge wat aangebring is as gevolg van die toepassing van die Lifeplan®-program in.

MANUSCRIPT

GUIDELINES FOR AUTHORS: JOURNAL OF PSYCHOLOGY IN AFRICA

Manuscripts

- Manuscripts should be submitted in English, French, Portuguese or Spanish. They should be typewritten and double-spaced, with wide margins, using one side of the page only.
- Manuscripts should conform to the publication guidelines of the latest edition of the American Psychological Association (APA) publication manual of instructions for authors.

Manuscript format

All pages must be numbered consecutively, including those containing the references, tables and figures. The typescript of manuscripts should be arranged as follows:

- **Title:** This should be brief, sufficiently informative for retrieval by automatic searching techniques and should contain important keywords (preferable < 10 words).
- **Author(s) and Address(es) of author(s):** The corresponding author must be indicated. The author's respective addresses where the work was done must be indicated. An e-mail address, telephone number and fax number for the corresponding author must be provided.
- **Abstract:** Articles and abstracts must be in English. Submission of abstracts translated in French, Portuguese and /or Spanish is encouraged. For data-based contributions, the abstract should be structured as follows: *Objective* – the primary purpose of the paper,

Method – data source, subjects, design, measurements, data analysis, *Results* – key findings, and *Conclusions* – implications, future directions. For all other contributions (except editorials, letters and book reviews) the abstract must be a concise statement of the content of the paper. Abstracts must not exceed 120 words. It should summarize the information presented in the paper but should not include references.

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- **Referencing in text:** References in running text should be quoted as follows: (Louw & Mkize, 2004), or (Louw 2004), or Louw (2000, 2004a, 2004b), or (Louw & Mkize 2004), or (Mkize, 2003; Louw & Naidoo 2004). All surnames should be cited the first time the reference occurs, e.g. Louw, Mkize, and Naidoo (2004) or (Louw, Mkize, & Naidoo 2004). Subsequent citations should use **et al**., e.g. Louw et al. (2004) or (Louw et al. 2004). 'Unpublished observations' and 'personal communications' may be cited in the text, but not in the reference list. Manuscripts accepted but not yet published can be included as references followed by 'in press'.
- **Reference list:** Full references should be given at the end of the article in alphabetical order, using double spacing. References to journals should include the author's surnames and initials, the full title of the paper, the full name of the journal, the year of publication, the volume number, and inclusive page numbers. Titles of journals must not be abbreviated. References to books should include the authors' surnames and initials, the year of publication, the full title of the book, the place of publication, and the publisher's name. References should be cited as per the examples below (please note the absence of punctuation):

Appoh, L. (1995). *The effects of parental attitudes, beliefs and values on the nutritional status of their children in two communities in Ghana*. Unpublished master's dissertation, University of Trondheim, Norway

Peltzer, K. (2001). Factors at follow-up associated with adherence with directly observed therapy (DOT) for tuberculosis patients in South Africa. *Journal of Psychology in Africa*, 11, 165-185.

- **Tables:** Tables should be either included at the end of the manuscript or as a separate file. Indicate the correct placement by indicating the insertion point in brackets, e.g., <Insert Table 1 approximately here>. Tables should be provided as either tab-delimited text or as MS Word table (One item/cell). Font for tables should be Helvetica text to maintain consistency.
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The effect of the Lifeplan® programme on the psychological well-being of a rural community in South Africa

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ABSTRACT

This study explored the effect of the Lifeplan® programme on a rural South African community's psychological well-being. Participants were adult individuals (N=99) between 20 and 83 years, with a mean age of 43. A mixed method sequential explanatory research design was followed with quantitative data obtained through standardised scales, validated for a Setswana-speaking group, in a pre- and post-evaluation stage. Qualitative data (N=30) was obtained through semi-structured interviews. Quantitative findings reflected an increase in general psychological and emotional well-being. Small practical significant differences (d=0.19 – 0.40) were found between the experimental and control groups. Qualitative results suggested that participants experienced Lifeplan® as educational and contributing towards general well-being. Further research suggesting an evaluation of sustainability in skills and knowledge obtained, was made.

Keywords: psychological well-being; life skills; awareness; rural community; poverty; community development

WORD COUNT [114 WORDS]

The effect of the Lifeplan® programme on the psychological well-being of a rural community in South Africa

This study focuses on the effect that the Lifeplan® programme (Freeks, 2008) has on the psychological well-being of the people living in the rural community of Taung, situated in the North West Province of South Africa. The Lifeplan® programme was developed by the Africa Unit for Transdisciplinary Health Research (AUTHeR) from the North-West University, as part of research and postgraduate training that focus on the health needs and context of South Africa (Vorster, 2006), and has been designed to integrate different issues that individuals within a rural community are faced with regularly. Following a path of interactive, core lecturing exercises, activities and presentations, Lifeplan® has been designed to build knowledge, promote interpersonal skills and trust through contact and sharing, it also builds thinking and planning skills, motivation and commitment to action (Freeks, 2008). Lifeplan® is a combination of human development and training in life skills, in order to improve well-being in terms of health, nutrition and choice, and can therefore be seen as a holistic promotion of health in context, i.e. restoring, maintaining and promoting bio-psycho-social health, as to add to the best possible quality of life and well-being for the population (Freeks, 2008).

The dynamics of the Lifeplan® programme are closely related to the model of community development described by the World Health Organisation (WHO) as mobilizing and empowering communities to become responsible for their own health and development. Emphasis is put on the improvement in standards of living, health status and quality of life, as well as economic growth (WHO, 2003). The Lifeplan® programme has been designed according to the socio-cultural context of the Taung rural community, an area situated on the western part

of the North West Province where it borders with the Northern Cape. Taung is approximately 428 kilometres from Johannesburg (South African Explorer, 2008). According to the Census 2001 released in July 2003 (North West Province, 2009), the majority of the residents in the Taung rural community are Setswana speaking and most of the population belong to Christian denominations.

In this study "rural" communities are understood to be based on demographic, infrastructure and socio-economic criteria that vary across nations (Thekiso, 2008). While researching for alternative definitions it was found that poverty is closely linked to rural communities (Aliber, 2003; Studies in Poverty and Inequality Institute, 2007; Woolard, 2002). Explaining "rural" in terms of geography, Gopaul (2006) found that South African rural societies are some of the most impoverished societies in the world, and access to employment, education, land, housing, health services and other resources still separate them from their urban neighbours. An agreement has not yet been reached on a common definition for "rural", as African countries distinguish between rural and urban on a legal basis, some kind of administrative basis, or 'common knowledge' that is not easy to harmonize (WHO, 2006). Even though no consensus have been reached about the understanding of "rural communities", it is clear that they have fewer resources than urban communities, leaving them, like the Taung community, in a disadvantaged position. A great deal of poverty is experienced in the Taung municipality district, having an undersupply of basic services like running water, electricity and flush toilets (Kintu, 2003). This has multiple implications for rural development and planning in the context of improving the standards of living in the community as well as the overall health situation.

Combrink (2008) found that a gap exists in the knowledge of psychosocial well-being in rural areas and emphasizes the importance of increasing well-being awareness in a rural context, therefore enhancing the experienced level of psychological well-being.

In this study, psychological well-being is seen as multi-dimensional (Wissing & Van Eeden, 2002) and defined from a positive psychological perspective focusing on strengths, mental well-being and capabilities, with positive contributions towards enhancement in quality of life (Thekiso, 2008; Wissing & Van Eeden, 2002). Research on psychological well-being has opened up the possibility of a new psychological sub-discipline focusing on psychological strengths, called Psychofortology (Wissing & Van Eeden, 2002). Early research of psychological well-being was mainly focused on the subjective understanding of well-being, life satisfaction and the difference between positive and negative affect (Ryff, 1989). According to Edwards and Steyn (2008), Carol Ryff (1989, 1995) has in recent years, moved the focus from a subjective to an objective conception of psychological well-being, and integrated previously established theories to operationalize the following six dimensions of psychological well-being: 1) Autonomy, which she defines as the regulation of one's own behaviour through an internal locus of control, 2) personal growth, seen as the ability to develop and expand the self, to become a fully functioning person, to self-actualize and accomplish goals, 3) environmental mastery is choosing and controlling the surrounding and imagined environment through physical and/or mental actions, 4) purpose in life refers to the perceived significance of one's existence and involves the setting and reaching of goals, which contribute to the appreciation of life, 5) having positive relations with others is an essential component in the development of trusting and lasting relationships as well as belonging to a network of communication and support, and 6) self-acceptance, which is a key component of self-actualization. There has however been a question

about the universality of this model as it only incorporates Western personality theorists' cultural values and assumptions (Christopher, 1999).

Several models and theories have been developed to explore the multi-dimensional aspect of psychological well-being. Gropp (2006) has found the following dimensions to appear consistently in most of these models: 1) Aspects of the self (intrapersonal, affective or cognitive behaviour, spirituality and personal growth), and 2) other domains of life (interpersonal, social and contextual, in love and work) in which the self manifests itself. Van Eeden (1996) also acknowledged these dimensions, stating that psychological wellness can be divided into the different facets of individuals' lives, namely facets of the self, cognition, emotions, behaviour, social interaction and value alignments (Gropp, Geldenhuys, & Visser, 2007). Optimal functioning of psychological well-being occurs when all dimensions are in balance. Psychological well-being therefore functions in a complex system that will change with time and place, as well as with the integration of the different dimensions (Gropp, Geldenhuys, & Visser, 2007). Eckersley (2002) found that socio-cultural factors of psychological well-being can directly affect health and well-being (Sokoya, Colings, & Muthukrishna, 2005).

The aim of this research study is to evaluate the effect of the Lifeplan® programme on the psychological well-being of the rural Taung community.

Method

Research Design

A mixed method sequential explanatory research design (Cresswell & Plano Clark, 2007; Tashakkori & Teddlie, 2003) was used with the triangulation of quantitative and qualitative data gathering and analysis methods. Qualitative data provided a refined understanding and

explanation of quantitative results obtained during phase one and two of this study (Cresswell & Plano Clark, 2007).

Participants

Participants were adult individuals (N=99) between the ages of 20 and 83 years, with a mean age of 43 years, living within six rural towns in the Taung community. Participants were separated through simple random sampling (De Vos, Strydom, Fouché, & Delport, 2005), into an experimental group (n=47) and a control group (n=52). Both male and female participants (12:87) were represented in the sample. The majority of the residents in the Taung community are Setswana speaking. Some of the participants were employed, and most of them had limited to no literacy capabilities.

Procedure

Participants were selected and informed consent was obtained during initial access to the Taung community. During the pre-evaluation stage, participants completed the questionnaires for quantitative data collection. Trained field workers assisted illiterate participants in completing the questionnaires. A staff member of AUTHeR presented the Lifeplan® programme to the Taung community, where after participants were asked to complete the questionnaires again in the post-evaluation stage. Qualitative data were collected through scheduled interviews, three months after the programme was presented, during a post post-evaluation stage. All questionnaires were translated into Setswana using the forward translation, back translation method (Ferreira, Carvalho, Ruotolo, de Morais, Prado, & Prado, 2009). All questionnaires were bound and all participants were fully informed about the voluntary nature of the research.

Data Gathering

Quantitative Measures

Quantitative research was conducted in two stages, a pre and a post-evaluation stage (Neuman, 1997). The following measuring instruments were used as test battery in both stages of the study.

General Psychological Well-being Scale (GPWS) **(Khumalo, Temane, & Wissing, 2010)**

The GPWS is a 20-item measuring scale developed in accordance with research done by Wissing and Van Eeden (2002) on the general psychological well-being (GPW) factor. Research has shown that general psychological well-being includes several functioning subsystems of the person as a whole (i.e. affective, cognitive, behavioural, etc) (Wissing & van Eeden, 2002). The identification of the GPW construct, involves sense of coherence as measured with the Sense of Coherence Scale, life satisfaction measured by the Satisfaction with Life Scale, and positive affect balance measured by the Affectometer-2 (Khumalo et al. 2010). The GPWS is therefore an integrative construct with facets from both the hedonic and eudaimonic perspectives, and is based on the fact that although psychological well-being is conceptualized from different theoretical perspectives and from different views on human nature, this actually refers to a great extent to the same multi-dimensional phenomenon on an empirical data level (Wissing & Van Eeden, 2002). The GPWS is a newly developed measuring tool and has been validated and translated into Setswana (Khumalo et al. 2010).

Patient Health Questionnaire (PHQ-9) **(Kroenke & Spitzer, 2002)**

The PHQ-9 is the 9-item depression module from the Patient Health Questionnaire (PHQ) and consists of the actual nine criteria on which the diagnosis of the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) depressive

disorder is based (Kroenke, Spitzer, & Williams, 2001). The PHQ-9 is distinguished from other two-step depression measures for which, when scores are high, additional questions must be asked to establish a DSM-IV depressive diagnoses. An item was added at the end of the diagnostic portion of the PHQ-9, which is an excellent global rating of functional impairment and has been shown to correlate strongly with a number of quality of life, functional status and health care usage measures. The PHQ-9 has good psychometric properties and is a valid and reliable tool to use in an African context (Adewuya, Ola, & Afolabi, 2006).

Coping Self-Efficacy Scale (CSE) **(Chesney, Neilands, Chambers, Taylor, & Folkman, 2006)**

The CSE consists of 26-items measuring an individual's self-efficacy to cope with life stressors. It has three subscales, namely: problem-focused coping, stop unpleasant emotions and thoughts, and get support from friends and family. In line with stress and coping theory, predictive validity analysis of the CSE showed that change in using problem- and emotion-focused coping skills was predictive of reduced psychological distress and increased psychological well-being over time. The CSE has been translated into Setswana and has shown good reliability and validity during previous research done in a South African context (Laureano, 2008).

Mental Health Continuum – Short Form (MHC-SF) **(Keyes, 2006; Keyes, Wissing, Potgieter, Temane, Kruger, & van Rooy, 2008)**

The MHC-SF consists of 14 items that were chosen as the most prototypical items representing the construct definition for each facet of well-being. Three items were chosen (happy, interested in life, and satisfied) to represent emotional well-being, six items (one item from each of the 6 dimensions) were chosen to represent psychological well-being, and five items (one item from each of the 5 dimensions) were chosen to represent social well-being. The

response option for the short form measures is the frequency with which respondents experienced each symptom of positive mental health, and thereby provides a clear standard for the assessment and a categorization of levels of positive mental health. Mental health is categorised on three levels, namely: flourishing, moderately mentally healthy and languishing. The psychometric properties of the MHC-SF have shown to be reliable and valid for use in an African context (Van Rooy, 2007). The MHC-SF has been translated into Setswana (Keyes et al. 2008).

Qualitative Measures

The first author and two co-authors conducted semi-structured interviews with thirty participants (N=30) of the experimental group, during the post-post evaluation stage. The following questions were asked to find out how the participants experienced the Lifeplan® programme, and if it had an impact on their well-being: “What was negative and what was positive about the programme?”, “Do you think the programme has made, or will make a difference in your own lives or in the community?”, and “What was the most important thing you got from the programme that you didn’t know or had previously?” Participants were asked to elaborate further on all questions. These participants were chosen through the method of simple random sampling (De Vos et al. 2005). Interviews were recorded and transcriptions delivered a total of 42 (A4) pages of information.

Data Analysis

Statistica (Marques de Sa, 2003) and SPSS (Marques de Sa, 2003; Field, 2005; Pallant, 2007) were used in consultation with the North-West University Statistical Consultation Service to analyse the quantitative data. Qualitative data was analysed through coding, refining raw data into relevant text, repeating ideas and establishing themes using ATLAS.Ti 5.0 (Muhr & Friese,

2004). From this information, theoretical and narrative constructs were formulated (Auerbach & Silverstein, 2003; Braun & Clarke, 2006). Trustworthiness was ensured by 1) triangulation of data analysis through a mixed method approach and independent coding, 2) continuous confirmation of researcher's interpretation and themes with participants through member checking, 3) reflexivity by continuous reflection on my role as researcher to prevent possible biases (Krefting, 1991).

Results

Quantitative Results

As Table 1 indicates, the measuring scales (GPWS, CSE, and PHQ-9) used in this study displayed good internal consistency with Cronbach alpha coefficients varying between 0.76 and 0.93. Items on the MHC (EWB, SWB and PWB) and the CSE (SFF) displayed low Cronbach alpha coefficients (< 0.5). These low results can be found with scales that have less than ten items (Nunnally & Bernstein, 1994; Pallant, 2007), and will require careful interpretation. On the basis that a small non-homogeneous sample was tested, p-values have been included for the sake of completeness.

Before the Lifeplan® programme was presented, participants in both the experimental and control groups were considered to have an average level of psychological well-being as measured by the GPWS, when taking 4 as the middle point on this seven-point Likert type scale (Khumalo et al. 2010). Both groups were moderately mentally healthy, neither "languishing" nor "flourishing" on emotional well-being (MHC_EWB) and social well-being (MHC_SWB), as per the MHC-SF (Keyes, 2009). On the MHC_PWB the scores for both groups indicated a level of flourishing (Keyes, 2009). Both groups displayed moderate to good coping skills as measured by

all three subscales of the CSE (Chesney et al. 2006). On the PHQ-9 both groups showed mild symptoms of depression (mean< 10) (Kroenke & Spitzer, 2002).

An independent-samples t-test was conducted to compare the scores prior to the presentation of the Lifeplan® programme, between the experimental and control groups. Statistical significant differences were found (GPWS, MHC_TOTAL, CSE_SUE and PHQ_TOTAL $p < 0.05$) as indicated in Table 1. The magnitude of differences in the effect sizes was small. A difference with medium effect was also found for CSE_TOTAL, even though the p-value was insignificant. As the sample is relatively small, this difference is important.

<Insert Table 1 approximately here>

Table 2 shows the means of the scales used, for the experimental and control groups, pre- and post-evaluation. The experimental group displayed statistical significant increases in scores on the GPWS, but with small effect only. Small practical significance was also found on the MHC_EWB. The control group showed an increase in mean scores on CSE_SUE, and a decrease in mean scores on MHC_PWB, both with statistical significance, but only with small effect.

<Insert Table 2 approximately here>

To compensate for initial differences (Table 1) found between the experimental and control group, an ANCOVA test (Field, 2005; Pallant, 2007) was used to explore the differences between the experimental and control groups after the presentation of the Lifeplan® programme. Table 3 shows that after adjusting for pre-evaluation scores, there were small significant

differences found between the experimental and control groups on post-evaluation scores for most of the measuring instruments.

<Insert Table 3 approximately here>

Qualitative Results

The results are reported here in order of identified themes. Themes are reported according to frequency of occurrence.

Physical well-being

Firstly the participants indicated that through the Lifeplan® programme, they became more aware of what a healthy lifestyle entails. This awareness has also created some concern about the health risks they are exposed to, which include high blood pressure, cholesterol and HIV. Participants identified specific factors that they felt put them at risk. These included unhealthy food, "*too much fat*", limited fruit and vegetables in their diets, and the lack of exercise. Since the Lifeplan® programme, they have started to apply the knowledge obtained to their lifestyle, as reported in: "*…but now I try to exercise, ... fruit and vegetables that I didn't eat, now I begin to eat it, ... when you have HIV you must never smoke, ...also eat good food and help your body"*.

Secondly, there seemed to be a lack of awareness about the role hygiene plays on enhancing physical health, before Lifeplan® was presented. Comments like: "*...we didn't know how to keep our body clean, ... if you wash you must wash between my toes and my fingers and sometimes germs they can be there, ... now I do also dusting"*.

Thirdly, dealing with stress to increase physical well-being was also explored and participants are now *"...trying to relieve my stress, but though it is dificult, ... one should take rest so that your body can rest and so that you are better able to deal with the stress, ... o maybe that stress when she sit alone at home, by now she's busy exercising"*.

It seems that the participants' experience of the Lifeplan® programme increased their understanding of what aspects are important regarding physical well-being, and what role they can play in creating a healthier lifestyle.

Social well-being

Before the Lifeplan® programme, participants understood optimal social functioning to be the result of working together and creating a better community *"…just continued helping each other"*. One participant indicated that *"…when I have a problem in sewing, I go to this mother, to ask him what's the problem when I forget to do this teach me, and also he come to me"*. This however tended to be very simplistic and concrete, causing them difficulties with problem solving, relating to others and handling conflict. After Lifeplan®, participants provided examples of how they have started to implement more effective ways of making provision for their own finances *"…don't have to wait for other people to do it, you do it yourself, ... Lifeplan® helped me very much because by now I'm selling electricity"*, improved communication *"…I try to tell them how to take care of themself, ... when you have problems when you must sit down with your family and talk"*, and using more effective ways to handle conflict *"…community, when they fight, come and learn them how to move from the fighting to the writing, ...you see for the first time she said she didn't talk with peoples and she go and forgive them after Lifeplan"*.

Participants have indicated the importance of helping others in the community and teaching them the skills which they have obtained through Lifeplan® *"...because I didn't know if*

somebody got HIV and AIDS what can I help her or him with, ... learning his sons about HIV and AIDS, ... I got to teach him or her that you can do this if you want life, ... Motivate, to motivate other people".

Participants found forgiveness to be an essential factor in their social well-being after completing the Lifeplan® programme. One participant indicated that *"I'm also glad about Lifeplan®. The thing in Lifeplan® is about forgiveness"*. They also indicated that*"...you must forgive him, ... I have forgive other people, ... The children when they fight I try to take them and sit with them told them the big one must forgive the small one, ... are talking more to the people and not just ignoring them"*.

Although the participants are moving towards and started to implement more effective ways to improve their social well-being, factors like *"...the abuse, and the alcohol abuse, and the child abuse did not really change, …unemployment"*, are preventing them to experience optimal social well-being.

Psychological well-being

Participants displayed a better acceptance of looking after, and standing up for themselves after the programme. Before Lifeplan® there seemed to be a lack of awareness of the self as individual entities, functioning autonomously. Some changes have been made since Lifeplan®, moving towards the satisfaction of their own needs *"...accept yourself before that you want the people to accept yourself, ... And I like myself, , ... It has also taught me to speak out, ...Now when I sing I had that hapiness"*. It seems like Lifeplan® has made participants aware of how they can look after themselves on a physical, emotional and social level, contributing to a higher level of psychological well-being. Participants explain how they have started to apply their knowledge: *"…we didn't know how to keep our body clean..., ... I*

understand now, what can be bad in my body, what is good in my body,... I begin to exercise, I eat healthy food, ... I wash myself and clean the house, ... don't have to wait for other people to do it, you do it your self, ... It has also taught me to speak out, ... You are talking more to the people and not just ignoring them".

There seem to be a newly found motivation from the majority of participants, to work towards the future and reaching their goals *"…By now I stand up now and I am working, ... I do something like go and work, ...We must try to work hard for what we want, ...By now we must learn to go forward, not backward, ...it is the Lifeplan he encourage me more".*

Participants displayed difficulty in finding words for expressing emotions after completing the Lifeplan® programme, and mostly focus on general explanations *"….we were enjoying that, ... but it was very positive, ... you are not going to get better, ... help you feel good, ... I am melancholic,...I was very positive about it,...I was feeling a little bit discouraged,...times goes on I feel very encouraged".* During the interviews, emotions were mainly about coping with issues in the community.

Coping

Participants spoke about how, after Lifeplan®, they are handling stress and looking after themselves to cope more effectively with life's demands. It seems that religion has always played a big role in helping them to cope with difficult circumstances, and Lifeplan® confirmed this importance *"…learn about to pray, if I have the problem I must also pray for that fault, ... you must thanks God always, nevermind the food is too small, ... religion is very important".* Talking about issues also seem to have an impact on their handling of difficult situations. One participant inidicated that after completing Lifeplan® *"...now today I know that if my child has*

HIV and AIDS, I just come and talk to him, speak to him and say no, it is not the end of the life, can go on going, and I teach her to go to the clinic, ... The stress come out".

During the programme, participants were introduced to making use of relaxation as a coping mechanism *"... one should take rest so that your body can rest and so that you are better able to deal with the stress."* Participants became more aware of effective coping skills they were already making use of before the Lifeplan® progamme. Singing is one of these skills that help them to deal with stress and problems as one participant explains: *"when I sing I had that happiness".*

Discussion

The current study investigated the effect that the Lifeplan® programme had on the psychological well-being of the Taung rural community. From a multi-dimensional perspective this study attempted to understand psychological well-being through facets of the self, cognition, emotions, behaviour, social interaction and value alignments.

Minimal increases with small effect (d=0.2) were found after the presentation of the Lifeplan® programme. Participants displayed small increases within their level of psychological well-being as measured by the GPWS. The small increase in their ability to stop unpleasant emotions and thoughts as measured by CSE_SUE indicated that the participants made more use of emotion-focused coping (Chesney et al. 2006), after the Lifeplan® programme was presented. Similar to Worthington and Scherer (2004), participants have used forgiveness as an emotion-focused coping strategy. As confirmation, participants stated: *"…And now today I know that if my child has HIV and AIDS, I just come and talk to him, speak to him and say no, it is not the end of the life, can go on going..., By now we must learn to go forward, not backward..., ... it is the Lifeplan he encourage me more..., ...community, when they fight, come and learn them how*

to move from the fighting to the writing, ...accept yourself before that you want the people to accept yourself..”.

The small practical significance found by MHC_EWB suggests that the increase in effective emotion-focused coping had a positive impact on overall emotional well-being. This supports Fredrickson and Joiner's (2002) theory that positive emotion should facilitate coping with adversity, building psychological resilience and enhance emotional well-being.

No significant differences were found in MHC_SWB or in CSE_SFF scores. Participants have already made use of these skills prior to the presentation of Lifeplan®, which can be seen in statements like: *“…when I have a problem in sewing, I go to this mother, to ask him what's problem when I forget to do this teach me, and also he come to me”*, and as confirmed by the interviewer, participants: “*…just continued helping each other*...”. This supports the assumption that people within an African context is more inclined to a collectivistic than an individualistic way of life, and have a tendency within their culture towards gregariousness and group orientation (Eaton & Louw, 2000). No practical significant difference was found within CSE_PFC. Participants only received an introduction to problem solving skills through the Lifeplan® programme, and could benefit from a more enhanced level of training in this particular skill.

Participants displayed a greater sense of awareness in terms of their health, which might account for the small practical significant decrease in PHQ-9 scale scores. They became more attentive to their health needs especially through exercise, a healthier diet and better attendance to overall hygiene as can be seen in: “*but now I try to exercise..., ..fruit and vegetables that I didn't eat now I begin to eat it..., ...now I do also dusting*”.

Considering the phases of change (Prochaska, DiClemente, & Norcross, 1992), participants have started to modify their behaviour, experiences and environment in order to overcome what they found to be problems, and are therefore classified to be in the action stage. Participants have therefore started the process of change, but may move through the precontemplation, contemplation and action stages several times before mantaining their new behaviours (Prochaska et al. 1992).

Conclusions

Considering the small, but positive changes found within the experimental group and in comparison with the control group in the post-evaluation phase, as well as the perceived qualitative changes for the experimental group, it can be concluded that the Lifeplan® programme has enhanced aspects of psychological well-being, specifically with regards to the general level of psychological and emotional well-being, and seems to have played an educational role within the sample group.

Obvious limitations to the study include the small size of the samples for both experimental and control groups. All quantitative data were gathered by trained field workers, but the quality of their work could not be evaluated. Homogeneity of participants in terms of gender and literacy levels, are further limitations that should ideally be taken into account by future studies. As basis for a follow-up project, the sustainability of the Lifeplan® programme, in other words its effect on the psychological well-being of participants over time, should also be evaluated.

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Table 1

Reliability analysis, and initial differences between groups: Experimental (N=47) and Control (N=52)

Variable	*α*	Mean	SD	Mean	SD	p	*d*
		E		C			
GPWS_TOTAL	0.85	87.77	21.53	96.84	18.56	0.03º	0.42*
MHC_EWB	0.49	9.94	3.36	10.40	3.06	0.47	0.14
MHC_SWB	0.55	15.98	4.78	16.19	5.65	0.84	0.04
MHC_PWB	0.61	25.96	3.71	25.42	4.68	0.53	0.11
MHC_TOTAL	0.58	51.87	7.25	52.02	9.07	0.02º	0.02
CSE_PFC	0.86	94.66	17.43	85.40	19.30	0.20	0.48*
CSE_SUE	0.86	73.00	15.17	65.81	14.30	0.01º	0.47*
CSE_SFF	0.66	40.51	8.61	37.87	7.93	0.12	0.31*
CSE_TOTAL	0.93	208.17	37.51	189.08	38.36	0.93	0.50**
PHQ_TOTAL	0.76	9.38	5.73	7.90	5.69	0.01º	0.26*

Note: GPWS= General Psychological Well-being Scale; MHC= Mental Health Continuum; EWB= Emotional Well-being; SWB= Social Well-being; PWB= Psychological Well-being; CSE= Coping Self-Efficacy Scale; PFC= Problem focused coping, SUE= Stop unpleasant emotions and thoughts, SFF= Get support from friends and family; PHQ= Patient Health Questionnaire; E= Experimental group; C= Control group; SD= Standard deviation; d= Effect size

*d = 0.2 small effect, **d = 0.5 medium effect, ***d = 0.8 large effect & practical significance.

ºStatistically significant (p-values $\leq$ 0.05).

Table 2

Pre-and Post differences within groups: Experimental (N=47), and Control group (N=52)

	Pre				Post							
Variable	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**p**		***d***	
	E		**C**		**E**		**C**		**E**	**C**	**E**	**C**
GPWS_TOT	87.77	21.53	96.84	18.56	97.89	20.67	97.92	20.86	0.00º	0.75	0.47*	0.06
MHC_EWB	9.94	3.36	10.40	3.06	10.79	3.54	10.31	3.20	0.12	0.86	0.25*	0.03
MHC_SWB	15.98	4.78	16.19	5.65	15.68	5.49	16.81	5.47	0.73	0.52	0.06	0.11
MHC_PWB	25.96	3.71	25.42	4.68	25.57	3.34	23.67	5.43	0.55	0.04º	0.10	0.37*
MHC_TOT	51.87	7.25	52.02	9.07	52.04	8.98	50.79	11.32	0.89	0.47	0.02	0.14
CSE_PFC	94.66	17.43	85.40	19.30	94.66	18.71	85.15	18.13	1.00	0.93	0.00	0.01
CSE_SUE	73.00	15.17	65.81	14.30	74.82	12.98	70.62	13.53	0.42	0.03º	0.12	0.34*
CSE_SFF	40.51	8.61	37.87	7.93	40.16	8.21	38.21	9.31	0.80	0.79	0.04	0.04
CSE_TOT	208.17	37.51	189.08	38.36	209.64	36.11	193.98	37.16	0.77	0.38	0.04	0.13
PHQ_TOT	9.38	5.73	7.90	5.69	8.30	5.74	7.56	5.27	0.24	0.68	0.19	0.06

Note: GPWS= General Psychological Well-being Scale; MHC= Mental Health Continuum; EWB= Emotional Well-being; SWB= Social Well-being; PWB= Psychological Well-being; CSE= Coping Self-Efficacy Scale; PFC= Problem focused coping, SUE= Stop unpleasant emotions and thoughts, SFF= Get support from friends and family; PHQ= Patient Health Questionnaire; E= Experimental group; C= Control group; SD= Standard deviation; d= Effect size

*d = 0.2 small effect, **d = 0.5 medium effect, ***d = 0.8 large effect & practical significance.

ºStatistically significant (p-values $\leq$ 0.05).

Table 3

Analysis of covariance between groups: Post-evaluation

Variable	p	*d*
GPWS_TOTAL	0.36	0.19*
MHC_EWB	0.32	0.20*
MHC_SWB	0.32	0.20*
MHC_PWB	0.05º	0.40*
MHC_TOTAL	0.50	0.14
CSE_PFC	0.15	0.30*
CSE_SUE	0.50	0.14
CSE_SFF	0.62	0.10
CSE_TOTAL	0.34	0.20*
PHQ_TOTAL	0.86	0.04

Note: GPWS= General Psychological Well-being Scale; MHC= Mental Health Continuum; EWB= Emotional Well-being; SWB= Social Well-being; PWB= Psychological Well-being; CSE= Coping Self-Efficacy Scale; PFC= Problem focused coping, SUE= Stop unpleasant emotions and thoughts, SFF= Get support from friends and family; PHQ= Patient Health Questionnaire; d= Effect size.

*d = 0.2 small effect, **d = 0.5 medium effect, ***d = 0.8 large effect & practical significance.

ºStatistically significant (p-values $\leq$ 0.05).