The evaluation of an equine-assisted therapy programme with a group of boys in a youth care facility

Christa Boshoff, Herman Grobler & Alida Nienaber

To cite this article: Christa Boshoff, Herman Grobler & Alida Nienaber (2015) The evaluation of an equine-assisted therapy programme with a group of boys in a youth care facility, Journal of Psychology in Africa, 25:1, 86-90

To link to this article: http://dx.doi.org/10.1080/14330237.2015.1007611

Published online: 26 Feb 2015.

Submit your article to this journal

Article views: 149

View related articles

View Crossmark data
The evaluation of an equine-assisted therapy programme with a group of boys in a youth care facility

Christa Boshoff, Herman Grobler* & Alida Nienaber

Community Psychosocial Research, North-West University, South Africa.
*Corresponding author email address: 23376600@nwu.ac.za

The goal of this study was to evaluate the efficacy of an equine-assisted therapy programme aimed at improving the psychological well-being of boys in a custodial school of industry. Participants were 39 boys who live in a youth care facility for boys who display problem behaviour. They were from different cultural groups (Black, Coloured, and White) and aged between 14 and 18 years. Horses were utilised in the structured sessions to help the boys learn different coping skills through experiential learning. Data were collected on the boys’ level of coping and subjective well-being in order to assess the efficacy of the programme. The data were analysed using independent groups t-test comparisons. The results showed that the programme significantly improved the boys’ subjective well-being, problem focused coping, and emotion focused coping. However, their levels of dysfunctional coping were unchanged following the intervention. An equine-assisted therapy programme appears to show modest evidence of enhancing psychological well-being of adolescent boys in custodial care.

Keywords: Adolescent boys, animal-assisted therapy, coping, equine-assisted therapy, school of industry, subjective well-being

Adolescence is characterised by several dramatic changes and is viewed as the most important phase for the development of the self (Craig & Dunn, 2010; Louw, Louw, & Ferns, 2007; Oaklander, 2006). The choices that adolescents make during this life stage influence and determine certain outcomes in their adult lives such as their lifestyle and the success they will achieve later in life (Zarret & Eccles, 2006). Adolescent support interventions are needed to enhance their development and functioning. This study evaluated the efficacy of an equine-assisted therapy programme aimed at enhancing the psychological well-being of adolescent boys in a school of industry in four areas: subjective well-being, problem-focused coping, emotion-focused coping and dysfunctional coping.

Subjective well-being consists of people’s emotional responses, domain satisfaction and a general satisfaction with their lives (Diener, Suh, Lucas, & Smith, 1999). It is highly correlated with cognitive appraisal of life satisfaction and fulfilment (Diener et al., 2009). It is clear that the concept of subjective well-being consists of two distinguishable aspects, namely a positive affective aspect (happiness) and a cognitive aspect of a subjective appreciation of life (life satisfaction) (Snyder, Lopez, & Pedrotti, 2011). Subjective well-being is a psychological source that will facilitate adaptable development in adolescents (Antaramian, Huebner, & Valois, 2008; Bird & Markle, 2012; Carr, 2011).

Adaptive coping leads to psychological well-being in adolescents. Coping is defined as the continuously changing cognitive and behavioural attempts of persons directed at the management of specific internal and external challenges in their lives that tax or exceed the personal resources of these persons (Lazarus & Folkman, 1984; 1986). Adolescents need to develop good coping skills to be able to enter adulthood in an adaptable and self-actualising manner (Frydenberg, 2008; Hampel et al., 2008). Problem focused coping refers to attempts made to solve problems or eliminate the source of stress (Carver et al., 1989). In the youth care facility the boys encounter problems in their relationships and school work that they must construct solutions. Emotion focused coping is the using of strategies to ameliorate affective reactions associated with certain life situations or stressors (Carver et al., 1989; Worthington & Scherer, 2004). The boys in the youth care facility might endure emotional distress from missing their families and especially from learning to share resources with others. Dysfunctional coping entails responses to stress which are maladaptive (Carr, 2011; Carver et al., 1989; Frydenberg, 2008). These responses include behavioural or mental disengagement or reducing efforts to manage the stressor or “giving up”. An example is giving up on a structured intervention to reduce alcohol and drug abuse (Carver et al., 1989). In the youth care facility the boys might give up any efforts, day dream or use drugs instead of focusing on solving their problems.

Effective problem focused coping skills will lead to better management of stressors or problems in the boys’ lives. For instance, clients may actively work on solving the problems or reducing the situations which are sources of distress in their lives. Successful problem solving might assist emotional coping through making a situation or challenge more manageable as much as emotional coping might allow for better problem solving (Greenberg, 2004; Lapiere & Allen, 2006). Reducing dysfunctional coping would follow from effective problem solving with appropriate emotional control.

Equine-assisted therapy is an intervention utilised with horses as resources for clients to become aware of their own interpersonal style and how this affects the responses of...
others. Its many outcomes include empowering clients by providing opportunities for making projections in a safe and accepting environment. The therapy environment interacting with horses facilitates development of empathy and patience; improves skills of relationship building, communication, improves self-esteem, and facilitates change from dysfunctional behaviour patterns to functional behaviour patterns (Cumella & Simpson, 2007; EAPISA, 2009; Kohanov, 2003; Mandrell, 2006). Communication ability is a goal for which equine-assisted therapy may be used. Table 1 presents a description of a typical equine-assisted therapy intervention in which horses are used to enhance communication ability in clients.

Equine-assisted therapy can be defined as a psychotherapeutic technique that originated through the inclusion of horses in the therapy process to help facilitate growth and change in persons who do not function effectively (Equine Assisted Psychotherapy Institute of South Africa [EAPISA], 2009). Evidence is needed on its efficacy for therapeutic use in the South African multicultural context on adolescent boys who display problem behaviour.

Goals of the study
The overarching goal of the study was to investigate the influence of the equine-assisted therapy programme on the psychological well-being of boys in a school of industry. Specific goals of the study were to investigate the influence of the programme on subjective well-being as well as on problem-focused coping, emotion-focused coping and reducing dysfunctional behaviour.

Method
Research method and design
The Solomon four-group design was specifically utilised for this study (see Figure 1).

Research context and participants
Participants were 39 boys aged between 14 and 18 years. The sample consisted of boys from different cultural groups. The total group of 39 boys consisted of 18 Coloured boys, 12 White boys and 9 Black boys. The school for selection houses a population of boys who show problems with regards to behaviour. The participants of the study had to be literate to be able to answer the psychometric assessments utilised.

Intervention programme description
The programme consisted of eight structured sessions aimed at improving the boys’ subjective well-being and coping. Session one was an individual session aimed at introducing boys to the programme and building a relationship with them. They were introduced to the horses and spent some time getting used to the animals. Session two was aimed at self-knowledge and empowerment. The session utilised projection techniques to aid the boys in discovering their strengths. Session three facilitated the learning of effective communication techniques and teamwork to aid in the maintenance of relationships (see table 1). Session four focused on effective conflict resolution which will help the boys cope with relationships. Session five aimed at learning to feel empathy in the different relationships in the boys’ lives. Session six was devoted to facilitating the learning of effective problem-solving techniques. In session seven, the boys learnt the skill of assertiveness and how to implement this skill in their lives. Session eight was the final session which focused on emotional awareness and mindfulness as well as closure of the programme.

Procedure
The study was approved by the Research Ethics Committee of the faculty of health sciences of the North-West
Table 1. Structure and process of an equine-assisted therapy session

<table>
<thead>
<tr>
<th>Goals and activities</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ice-breaker and introduction to session theme/goals for effective communication</td>
<td>Participant clients stand in a circle and throw a bean bag at each other and when a client has the bean bag he has to name the strengths that he discovered he has during session 2</td>
</tr>
<tr>
<td>Structuring: Explanation of the activities and procedures</td>
<td>Therapy facilitator explains the process of the activity in detail. He or she reminds the clients to be mindful and aware of every aspect of their experience during the activity</td>
</tr>
<tr>
<td>Teaming: Allocation of group members</td>
<td>Clients choose a partner for the activity</td>
</tr>
<tr>
<td>Activity with horses example:</td>
<td>Therapy facilitator and assistant build a winding path in the round pen. Client 1 is blindfolded. Client 2 has to sit on the fence of the round pen. Client 1 has to lead the horse through the path without stepping on the boundaries. Client 2 has to verbally instruct Client 1 exactly where to lead the horse. Every time the horse steps on the boundaries, penalties are incurred. The team with the least penalties wins.</td>
</tr>
<tr>
<td>Reflective discussion of activity for metaphoric deeper meaning</td>
<td>Therapy facilitator asks clients to describe what they experienced and learned during the session. He or she discusses metaphoric meaning provided by the horses. He or she leads clients to see how they can transfer these skills into everyday life.</td>
</tr>
<tr>
<td>Debriefing: Closure and socialising with horses for fun</td>
<td>Client groom horses and feed them treats like carrots. Clients discuss the session amongst themselves and the therapy facilitator closes the session.</td>
</tr>
</tbody>
</table>

University: NWU 00060-12-A1. The researcher obtained informed consent from the Free State Department of Education and from the principal of the school. Informed consent for every boy who participated in the study was obtained from their legal guardians.

Data collection
Data were collected on the boys’ levels of subjective well-being and coping in the form of a pre-test before the intervention. One of the experimental groups and one of the control groups participated in the pre-test (as in figure 1). The equine-assisted therapy programme was then conducted with both the experimental groups. After completion of the programme, the post-test was conducted on all four the groups. The post-test included the same instruments as used in the pre-test.

Well-being measures
The Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larsen, & Griffin, 1985) was used to measure the participants’ subjective well-being. It is a 5-item self-report measure and answered on a 7-point Likert scale. Scores from the scale have favourable psychometric properties with a Cronbach-alpha coefficient of 0.87 for internal consistency and a correlation coefficient of 0.82 for test-retest reliability (Koen, 2008). The Coping Orientations to the Problems Experienced Scale (COPE) (Carver, Scheier, & Weintraub, 1989) was used to assess the problem focused coping, emotion focused coping, and dysfunctional coping of participants. The COPE a 53-item scale answered on a 4-point Likert scale. Problem-focused coping consists of five subscales, namely denial, behavioural disengagement, mental disengagement and alcohol-drug disengagement. Previous studies report moderate to high internal consistencies of 0.82 for problem-focused coping, 0.78 for emotion-focused coping and 0.65 for dysfunctional coping for the COPE (Basson, 2008).

Results
Subjective well-being
The effect of pre-test sensitisation was tested first. Results showed that no significant interaction ($p = 0.266$) was found between the main effects, namely the intervention and the pre-test. The influence of the intervention was then assessed. A significant statistical effect was found because the calculated $F$-value of 8.648 was significant on the 1% level; therefore, it can be concluded that the intervention had an effect and that this effect exists without a prerequisite. The equine-assisted therapy programme significantly improved the life satisfaction of the participants in the experimental group (experimental group = 25.63; SD = 5.56; control group = 20.20; SD = 5.92), $t(df = 39) = 2.95, p < 0.0055$.

This finding concurs with previous related other studies (e.g., Bachi, Terkel, & Teichman, 2011; Brenna, 2013; Klontz et al., 2007). For instance, Klontz et al. (2007) found an equine-assisted therapy programme to improve levels of psychological well-being in the adult participants. Brenna (2013) reports that the participants in an equine-assisted therapy programme experienced more positive emotions after completing the programme. Bachi, Terkel, and Teichman (2011) reported similar results to the current study. They also found that an equine-assisted therapy programme significantly improved a group of 29 at-risk adolescents’ life satisfaction. These results confirm the present study’s results...
that an equine-assisted therapy programme improves adolescents’ life satisfaction and; therefore, also their subjective well-being significantly.

**Coping**
The equine-assisted therapy programme improved the participants in the experimental group’s active coping significantly (experimental group = 13.84; SD = 1.76; control group = 11.14; control group = SD = 2.27, t(df = 37) = 4.5307, p < 0.0001). Specifically, the equine-assisted therapy programme significantly improved the problem-focused coping of participants in the experimental group (experimental group = 67.37; SD = 8.17; control group = 52.95; SD = 8.70), t(df = 37) = 5.64, p < 0.0001.

The equine-assisted therapy programme also improved the use of planning of the participants in the experimental group significantly (experimental group = 14.32; SD = 1.86; control group = 11.30; SD = 2.27), t(df = 37) = 4.5307, p < 0.0001.

**Socio-emotion-focused coping**
Social enhancement outcomes included that the equine-assisted therapy programme increased the social support seeking of the participants in the experimental group for instrumental reasons significantly (experimental group = 13.19; SD = 1.81; SD = 1.84), t(df = 37) = 8.45, p < 0.00001. The equine-assisted therapy programme significantly increased the social support seeking of the participants in the experimental group for emotional reasons (experimental group = 13.11; SD = 2.92; control group = 9.65; SD = 2.32), t(df = 37) = 4.12, p < 0.0002.

The equine-assisted therapy programme significantly improved the positive reinterpretation and growth of participants in the experimental group (experimental group = 14.26; SD = 1.56; control group = 11.15; SD = 2.21), t(df = 37) = 5.05, p < 0.0001.

The equine-assisted therapy programme significantly improved the emotion-focused coping of participants in the experimental group (experimental group = 67.00; SD = 51.1; control group = 58.45; SD = 7.49), t(df = 37) = 4.14, p < 0.0002. However, it seemed that the equine-assisted therapy programme did not significantly improve the acceptance of the experimental group’s (experimental group = 12.74; SD = 2.21; control group = 12.00; SD = 2.73), t(df = 37) = 0.93, p < 0.3597.

The meta-analysis technique was applied (0.1257 + 1.4051)/√2 = 2.165; p = 0.03) and it was calculated that the intervention had an effect on the acceptance of the boys (p < 0.05).

**Dysfunctional coping**
The equine-assisted therapy programme had no effect on the alcohol and drug disengagement predispositions of participants in the experimental group when t-tests were performed (experimental group = 1.84; SD = 1.17; control group = 1.90; SD = 1.16, t(df = 37) = 0.16, p = 0.8731; neither did it significantly improve on the overall dysfunctional coping of participants in the experimental group (experimental group = 33.33; SD = 6.10; control group = 34.25; SD = 5.89), t(df = 37) = 0.38, p < 0.7098. However, when the meta-analysis technique was performed, the results showed to be significant. For alcohol and drug disengagement the calculation was as follows: (1.4758 + 1.5548)/√2 = 2.143; p = 0.03. This effect was significant (p < 0.05). The meta-analysis calculation for the overall dysfunctional coping was: (1.3408 + 1.4758)/√2 = 1.992; p = 0.05.

**Discussion**
The results that found that the equine-assisted therapy programme significantly improved the participants’ subjective well-being as well as their problem-focused coping, emotion-focused coping and dysfunctional coping. These findings are consistent with available literature (e.g., Brenna, 2013; Ewing et al., 2007; Trotter, Chandler, Goodwin-Bond, & Casey, 2008). Ewing et al. (2007) found that an equine-assisted therapy programme improved the participants’ levels of seeking social support. According to Brenna (2013) an equine-assisted therapy programme improved the problem-focused coping and supplied a source of emotional support for participants in the programme. Trotter, Chandler, Goodwin-Bond, and Casey (2008) found that an equine-assisted therapy programme lead to significant improvements in the participants’ coping. The findings concur with the literature as well as with the theoretical framework in which the study was based. Much research has been done internationally on this topic and it was expected that South African adolescent boys would respond similarly. Horses provide excellent opportunities for growth in therapeutic settings. They provide a valuable personal resource for the boys to use when they are developing their personal coping skills. It is possible that the study achieved its goals because the researchers built relationships with the boys and paid extra attention to them, but this is not likely because there are many researchers and therapists who engage with the boys daily with little or no effect.

**Limitations of the study**
A limitation of the study was that females were not included in the sample. Future studies should seek to include both male and female participants. The programme effects also need replication with a larger sample to add to the confidence with which the findings can be held. Future studies could also utilise a longer term intervention with several data observation points to track the changes over time.

**Conclusion**
This study’s findings showed that an equine-assisted therapy programme significantly improved on participant boys’ subjective well-being and coping. Participation in the programme lead to significant improvements in the boys’ levels of subjective well-being as well as levels of problem-focused coping, emotion-focused coping and dysfunctional coping.

**References**


