Disadvantaged Youth's Subjective Experiences on the Impact of a

Dog Training Intervention: A South African Exploration

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2

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Abstract

Dog Training Intervention (DTI) studies with children and adolescents have demonstrated improvements in social and emotional development, as well as a decrease in problematic behaviours, such as aggression. A DTI is a type of therapeutic intervention which focuses on children assisting in the training of dogs. The Underdog DTI was evaluated by looking at the experiences of graduate participants at the Underdog organisation. Although current research has not been done in South Africa (SA), this study has aimed to enhance our understanding of the impact DTIs have on disadvantaged youth in SA. Disadvantaged youth in SA are at risk of being exposed to violence and anti-social peer groups and the use of a DTI could help reduce problematic behaviours and promote more prosocial behaviours. Semi-structured interviews were completed with six graduate participants at the Underdog organisation. The study explored to what extent the Underdog DTI impacted the participants in terms of their self-esteem, empathy, behaviour, and life skills they may have gained. Thematic analysis was used to analyse the interviews. Four overarching themes were identified that described the experiences of past graduates at Underdog. These are a sense of belonging; prosociality; positive change in beliefs and behaviour; and self-improvement. These findings will inform the development and implementation of future interventions for disadvantaged youth in SA.

Keywords: Disadvantaged and vulnerable youth; dog training interventions; problematic behaviour; prosocial behaviours; underdog DTI

Literature Review

South African youth can be considered to be a vulnerable group due to the remaining inequalities resulting from the Apartheid regime (Klasen, 1997). The aftereffects of Apartheid have resulted in many Black communities being exposed to poverty, deprivation, crime, and violence (Bantjes & Kagee, 2013). Furthermore, Makiwane and Kwizera (2009) report that South African youth, particularly Black African young people, have a poor quality of life. Findings indicate that youth have little to no access to health, social services, or household facilities, are at an increased risk for unemployment and economic marginalisation and are vulnerable to experiencing poverty (Makiwane & Kwizera, 2009). In addition to these significant stressors, many disadvantaged youths are also continuously exposed to community violence (Kaminer et al., 2013). The continuous exposure to violence has been proven to increase risky behaviours within children and youth. Swahn and Bossarte (2009) report that youth who live in disadvantaged communities are more likely to partake in vandalism, theft, violence, and the selling of drugs. Continuous exposure to violence has also been associated with a decrease in academic performance and a lowered sense of self and wellbeing (Isaacs & Savahl, 2014).

Intervention for Vulnerable Youth

One of the ways in which the South African government can provide support to their disadvantaged and at-risk youth is through the implementation of community-based interventions (Whitehead et al., 2005). Community-based interventions are designed to target a specific group that requires change. Furthermore, interventions that target youth who face inequalities can help to improve their quality of life, which in turn improves their community's lives (McLeroy et al., 2003).

A fairly new and popular community-based intervention is Animal Assisted Intervention (AAI). AAIs have shown multiple benefits in the lives of individuals. These benefits include the development of prosocial behaviour, better communication skills, improved reading abilities, increased empathy, decreased aggression, health benefits and improvements in the overall quality of life (Friesen, 2010; Jain et al., 2021; Kirnan et al., 2018; Tissen et al., 2007; Wohlfarth et al., 2013). Many studies have focused on assessing AAIs among children and adolescents and have found that AAIs foster an environment that teaches children about empathy, important life skills, positive-initiated behaviours, and effective ways to communicate with others.

AAIs can be classified as a Dog Training Intervention (DTI) and Animal Assisted Therapy (AAT). Braun et al. (2009) define AAT as a form of intervention that involves a trained animal, (which could be a dog), a therapist, and an animal handler, which provides a therapeutic experience to the individual. In contrast, a DTI is a type of therapeutic intervention which focuses on children assisting in the training of dogs while also incorporating life skill activities (Ben-Itzchak & Zachor, 2021). Furthermore, the research on AAIs indicates that working with dogs or the presence of dogs can be extremely beneficial in social and emotional development and reducing risky and problematic behaviours among children.

Social and Emotional Development

Most studies evaluating DTIs or AATs have assessed empathy and prosocial behaviour of the participants. Ben-Itzchak and Zachor (2021) and Lahav et al. (2019) assessed a DTI for children diagnosed with autism spectrum disorder and youth with emotional and social difficulties as well as low academic achievements, respectively, and

found improvements in empathy and social development. In contrast, Grommon's et al. (2020) study assessing a DTI in a prison environment found no improvement. This could be due to the fact that the study included prisoners who were already compliant with prison rules and therefore met necessary requirements for the study. Therefore, the lack of improvement in their study could be because participants already displayed good prosociality.

Studies assessing the impact of AAT on children and adolescents also found that dogs were not only a source of significant emotional support to these children and adolescents, but they also aided in the enhancement of their social skills, communication, self-efficacy, self-regulation, and empathy (Becker et al., 2017; Flynn et al., 2020; Friesen, 2010; Tsai & Kaufman, 2014). Friesen (2010) compiled 30 years of literature relating to studies of AATs with children in the home, therapeutic settings, classrooms, special-needs environments, and hospitals. The systematic review concluded that therapy dogs offered social, physical, emotional, and physiological support for children. Similar benefits can be seen in the use of a virtual pet to provide support to children (Tsai & Kaufman, 2014), as well as in the Becker et al. (2017) study, which compared conditions that either included a therapy dog (experimental group) or did not (control group). Flynn et al. (2020) provided further support for these findings through their accounts of clinicians' perspectives of AAT and reported improvements in both prosocial behaviour and levels of empathy.

In relating these findings to a South African context and particularly to disadvantaged youth, a clear gap exists in the literature. None of these studies were conducted in low-and-middle income countries (LMICs) and especially not within an African context. However, some of these studies, like Grommon et al. (2020) and Lahav et al. (2019) specifically focused on at-risk youth, which could be helpful in translating those findings to at-risk youth in South Africa. The main theme present within these studies is that there seemed to be a

significant improvement within prosocial behaviour associated with AAT and DTI. This could be a significant factor in supporting vulnerable youth as Sanders et al. (2018) argue, that prosocial behaviour could be important for protecting and preventing vulnerable youth from partaking in risky behaviours.

Risky and Problematic Behaviours

While both AAT and DTI have been shown to benefit the social and emotional development of children and adolescents, they have also been shown to significantly decrease many problematic behaviours in children. Sprinkle (2008) and Syzmanski et al. (2018) both reported positive results in reducing problematic behaviour through the use of a DTI. Sprinkle (2008) evaluated the effectiveness of school-based violence prevention. They found that the DTI significantly altered childrens' normative beliefs about aggression, increased levels of empathy, and decreased violent and aggressive behaviours. Syzmanski et al. (2018) found that using a DTI decreased recidivism and improved quality of life in a juvenile prison setting. Syzmanski et al. (2018) also incorporated a qualitative aspect by requesting participants to keep a journal and this may have encouraged more introspection and reflection in the participants which could have helped to reduce the need to partake in risky behaviours.

Studies assessing AAT display more conflicting results. Muela et al. (2019) evaluated AAT on children who were exposed to gender-based violence. However, they found no impact on affective and behavioural dysregulation. In contrast, Silva et al. (2011) and Esteves and Stokes (2008) demonstrated a decrease in negative-initiated behaviour, an increase in positive-initiated behaviour, and increased engagement after AAT. Whereas Silva et al. (2011) and Esteves and Stokes (2008) assessed children with developmental disabilities,

Muela et al. (2019) assessed at-risk youth. The conflicting results could therefore be a consequence of the different characteristics of the participants in the studies.

In relating this to the context of SA, some of these studies did include at-risk youth participants (Muela et al., 2019; Syzmanski et al., 2018). However, Muela et al. (2019) reported that there were no improvements. Another thing to note is that none of these studies were based in LMICs, so the challenges that at-risk youth face in high-income countries may be different to what at-risk youth face in SA. However, Sanders et al. (2018) suggest that youth engage in these types of problematic behaviours as a coping response to the challenges they face. Therefore, if a DTI or AAT is able to provide more helpful coping mechanisms to these youths, it could produce positive outcomes.

Despite these positive results for both DTI and AAT, these interventions are different and are both not necessarily suitable for a LMIC such as SA. As mentioned, although both intervention types use dogs to improve behaviour, empathy, communication skills and emotional development, a DTI focuses more on actively working with training dogs while also partaking in other life skill activities whereas an AAT primarily uses the presence of a trained therapy animal (such as a dog, horse, dolphin). Additionally, most DTIs are more group-based and can use untrained shelter dogs whereas AATs are often individualised and use highly trained animals. In a South African context, there is a lack of resources to effectively aid in interventions that support children and adolescents within disadvantaged communities (Ruane, 2010). Therefore, DTIs are more accessible to LMICs as they do not require trained dogs, nor do they require the use of other, more inaccessible, and trained animals which some AATs use.

Critiques and Limitations of the Literature

Of the studies reviewed, most of them used quantitative methods, with only two studies using qualitative methods. While quantitative research is useful in demonstrating objective change, qualitative research is able to capture whether participants displayed change in aspects that were not measured by quantitative data collection. The use of qualitative research can provide an understanding of the subjective change in participants, and whether the quality of life of participants has changed.

The Gap in the Literature

Researchers have only recently started studying DTIs and AAT as interventions.

Although the existing literature focuses more on AATs than DTIs, both of these types of AAIs have been evaluated by studies done in high-income countries, therefore it is unknown if DTIs will have similar effects in a LMIC, specifically within disadvantaged communities where poverty and crime are more prevalent. Additionally, only a few studies focused on atrisk youth where factors like prosociality and externalizing behaviours may show different results in at-risk youth of SA. As discussed, DTIs are more feasible and accessible for LMICs because they do not require trained therapy dogs like AAT, which can be expensive.

Therefore, studying the Underdog DTI in a South African context could contribute to paediatric interventions, child development, and address the literature gap.

The Underdog Project

We have chosen to work on a project that was provided to us by the Knowledge Coop at the University of Cape Town. The Knowledge Co-op were approached by The Underdog Project requesting evaluative research to be done on their DTI. The Underdog Project is a non-profit organisation located in Hout Bay, Cape Town and works with vulnerable children and shelter dogs currently housed at DARG (Domestic Animal Rescue Group). The DTI incorporates animal-assisted activities such as dog training as well as therapeutic workshops such as journal writing and group sharing. The aim of Underdog is to teach children empathy and life skills as well as provide caring to abandoned dogs.

Research Aim and Questions

Research Aim

This study aims to contribute to the literature on DTIs in LMICs, specifically focusing on disadvantaged youth in SA. We sought to obtain a sense of the lived experiences of graduate participants of the Underdog DTI, to gain a more in-depth understanding of the program's impact, and to understand if the Underdog DTI is able to assist in the positive development of disadvantaged youth.

Main Research Question:

What is the subjective experience of disadvantaged youth on the impact of the Underdog DTI?

Secondary Questions:

- 1. How did these experiences impact their behaviour?
- 2. How did these experiences impact prosociality?
- 3. Is the Underdog DTI appropriate for a South African context?

- 4. Are interactions with dogs regarded as desirable or not in a Black, South African community?
- 5. Is the Underdog DTI able to lessen the needs of disadvantaged youth that are threatened by social exclusion?

Methods

Research Design

This study was done using a qualitative approach. The aim of this study as mentioned above, was to obtain an in-depth understanding of disadvantaged youth's experiences of the Underdog DTI. Therefore, using a qualitative approach was useful to get an account of the participants' experiences. Qualitative studies are not about generalising findings; and the data collection and analysis techniques are flexible as they allow the investigator to adapt to findings that might provide new insights (Langdridge & Hagger-Johnson, 2009). Additionally, a qualitative approach is helpful when trying to understand the strengths, interactions, and nature of variables (Black, 1994; Jones, 1995).

The theoretical framework we adopted aligns with this study, as it was used to understand and explain why disadvantaged youth are at risk of deviant behaviours, why there is a need for interventions for disadvantaged youth and what needs are being threatened. The theory of social exclusion is based on the notion that socio-economically disadvantaged children are excluded from participating in normatively set activities which could be economically, politically, or even socially based. Looking at social exclusion from a theoretical point of view, it points out detailed social processes that refute effective development of one's capability or assets and therefore reduces opportunities for upward mobility (Gingrich & Lightman, 2015).

Being a LMIC, SA has high levels of unemployment, more so during the current COVID-19 pandemic. Hashemi (2015) suggests that high levels of unemployment create difficulties for adolescents to socialise with their peers through consumption practices. This means that youth with different socio-economic status have different consumption practises. Therefore, disadvantaged youth would not be able to afford the lifestyle that youth with high socio-economic status could afford, creating an us and them situation, where the disadvantaged youth are excluded from being an active part of society. These exclusions cause youth to become frustrated, which leads to deviant behaviours (Hashemi, 2015). Our study explored the unique experiences and personal identities of disadvantaged youth with the understanding that their experiences and identities are partly a product of broader social constraints with which youth from disadvantaged communities are faced.

Unemployment does not just cause frustration. Parents who face stressors that come with unemployment and poverty, often transfer their negative emotions onto their children (Evans & Kim, 2013). Additionally, increased poverty and unemployment have an influence on crime and violence, which may impact disadvantaged youth (Hashemi, 2015). This decreases opportunities for youth, which may have a negative impact on their self-esteem. Our study wanted to focus on ways to decrease these deviant behaviours by evaluating the Underdog DTI, which aims to promote self-growth and reinforces positive behaviours. Therefore, understanding that social exclusion threatens prosociality and self-growth, it should be taken into consideration when creating or promoting an intervention. In applying the social exclusion theory to our research, it can be assumed that self-esteem, belongingness, meaningful existence, and control are the four needs that are threatened and need to be restored (Freedman et al., 2016). Therefore, when exploring participants' experiences, these needs will be taken into consideration.

Participants

A purposive sampling strategy was used for this study, as the participants were not randomly selected. The selection of the participants was done by taking the research question into consideration and focusing on participants who have graduated from the Underdog DTI. An advert describing the study was given to the Underdog Organisation to distribute to disadvantaged youth who have completed the programme (referred to as "past graduates"). Participation in this study was voluntary for Underdog participants. Those past graduates who were interested were given informed consent forms for parents to sign. Due to time constraints, a total sample of four female and two male participants aged 14-21 were recruited for the study. Clinically referred children who were a part of the Underdog DTI were not included in this study, due to ethical constraints.

It is important to note that some of the participants in the study completed the Underdog DTI several years prior, around the age of 14-16, but continued attending Underdog after completion of the DTI. Zola completed the DTI when they were 16, and has been attending Underdog for five years, whereas Buhle and Linathi completed the Underdog DTI in the same year the study was conducted. All the participants from this study came from disadvantaged communities, where there is a lack of adequate resources for social and physical development.

Data Collection Tool and Procedure

Semi-structured interviews were used to gather in-depth qualitative data on the personal experiences of the participants (see Appendix A). Semi-structured interviews allowed for all participants in this study to be asked the same set of questions, which were open-ended, and these questions could be asked in any order (Dearnley, 2005). Additionally,

it allowed for key roles for the participant and investigator in the interview process (Corbin, 2003). The structure reminded participants that it was an interview, giving them the role of information provider, and the investigator the collector of this information (Corbin, 2003). The individual face-to-face interviews aimed to gain accounts of the subjective experiences of participants who are past graduates of the DTI. An introduction was given at the beginning of the interviews, to provide a sense of what the focus of the interview was. Using the aims and research question of the study, open-ended questions were used to direct the semi-structured interviews. These explored whether and how the DTI has changed the participants in terms of their self-esteem, their behaviour, the certain life skills they felt they have gained, or if it has made them more caring and empathic to animals and people.

Adverts (see Appendix B) were given to Underdog to distribute to past graduates. Past graduates interested in the study were given informed consent forms (see Appendix C and Appendix D). These were signed and returned to Underdog, and later collected by us.

Participants were interviewed individually in person by the Principal Investigator (PI) via semi-structured interviews. All COVID-19 measures and precautions were taken to ensure the safety of all participants. The interviews were no longer than one hour. Participants and their parents/guardians were informed and consented to the interviews being audio-recorded and transcribed. All interviews were conducted, and consent forms were produced in English.

Data Analysis

A thematic analysis (TA) was used in this study to provide an in-depth understanding of participants' experiences. This study chose to use TA for multiple reasons, mainly because TA was more accessible to researchers who have little or no experience doing qualitative research (Braun & Clarke, 2006). TA was also helpful in summarising key aspects from a

body of data, offering an in-depth description of the data (Braun & Clarke, 2006).

Additionally, TA was flexible and highlighted similarities and differences across the data set.

There are six phases of TA that were used in the data analysis process (Braun & Clarke, 2006). The first phase involved us as the researchers familiarising ourselves with the interviews, by first listening to the recorded audios and then transcribing the data. The second phase involved generating initial codes. These codes assisted in finding themes that were present across all the participants. The codes were identified in the third phase taking the research question into consideration, which assisted in generating themes. Once these themes were found, we commenced the fourth phase, which is reviewing the themes. When that was completed, we proceeded to phase five where we then defined and named the themes. The last phase was producing the report.

Ethical Considerations

The application for ethical approval from the University of Cape Town Research Ethics Committee was approved (see Appendix E). The project adhered to the guidelines regarding research with human participants as specified in the Declaration of Helsinki (2013) and with those provided by the University of Cape Town.

Consent and Voluntary Participation

All participation was entirely voluntary for youth. We obtained informed consent of participants over the age of 18 in the study, as well as written obtained informed consent from parents of participants under the age of 18. The consent form outlined the process and requirements for the study. The participants and their parents were informed and consented to the interviews being recorded. All participants were informed that they reserve the right to

withdraw from the study at any point and would not be penalised for withdrawing or refusing to participate.

Confidentiality

Confidentiality was of the utmost importance within this study. All data collected was kept confidential and only made available to those researchers directly involved in the study. In addition, each participant was assigned an identity number to ensure that participants' names and identifying characteristics were kept confidential. The identity numbers were used in all the spreadsheets containing data. The PI was the only one to have access to the sheets linking identifying information about participants to their identity number. Additionally, no identifying characteristics were used in any reports or publications stemming from this research. This was done by using pseudonyms when reporting findings.

Risks and Benefits

Participation in this study did not carry any significant risk. Interviews took place on the DARG grounds in a well-ventilated classroom. Additionally, the PI and participants had all the personal protective equipment that was required for extended contact. The interviews posed no risks to participants, as participants were reminded that all data and interviews would be kept strictly confidential.

There were no costs to participants as data collection took place at Underdog on a day that they were attending the program. Participants were compensated with goodie bags at the end of the study. In the long term, if positive outcomes are consistent then this will have implications for Underdog's continued operations, and for paediatric interventions in an African context.

Reflexivity

According to Lumsden et al. (2019), it is important for qualitative researchers to practice reflexivity as they are included in the reality that is being studied and need to be reminded that individuals included in the research are not merely objects but rather subjects. Furthermore, reflexivity draws attention to the social world and how there are power dynamics and relations between researcher and subject that need to be addressed throughout the research process (Lumsden et al., 2019).

We as researchers had to reflect on our positionality in the research and how that might have influenced the results. Due to Covid-19 restrictions, we as researchers were not allowed to interview participants, so we were only active agents in the process of analysing the results. When approaching the analysis, we as middle-class researchers, used the social exclusion framework, which provided us with preconceived ideas about the identities of disadvantaged youth, and the challenges they might have faced, which may have influenced the way we interpreted the data. Our positionality as middle-class researchers might have exaggerated the experiences of disadvantaged youth, or not represented disadvantaged youth accurately.

Our positionality in the research was linked to the limitations of the study, as the language barriers between the participants and interviewer may have limited the amount of information the participants could elaborate on in English. The PI had to change the way she interviewed participants due to these language barriers, and this caused the interviews between participants to be inconsistent. Additionally, when approaching the analysis, we looked at specific areas of interest like prosociality and empathy, narrowing the lens of our study. There were power imbalances that existed between the participants, the Underdog

organisation, researchers, and the PI. Notably, the interview questions failed to elicit any negative responses from the participants about the Underdog DTI. This could be the result of the Underdog organisation's direct involvement in advertising the study, as participants might not have felt comfortable to share any negative experiences about the DTI. Secondly the PI was a middle-aged, white woman, who did not come from a disadvantaged community and therefore held more power in the interview. Therefore, this could have caused participants to portray themselves differently and choose carefully what they should and should not reveal to the interviewer, as they might have felt that the interviewer would not be able to relate to them.

Findings and Discussion

During analysis, four overarching themes emerged: sense of belonging; prosociality; positive change in beliefs and behaviour; self-improvement. An elaboration on themes, with representative quotes, follows.

Theme One: Sense of Belonging

All participants in the study reported that the Underdog DTI provided a space in which they felt a sense of belonging. This was encompassed by the participants feelings of security, comfort and being in a safe space to express themselves. Many participants who completed the Underdog DTI stayed on to continue helping dogs, because they felt that they belonged at Underdog. The sense of belonging theme consists of two subthemes: feelings of safety and comfort, and openness.

Feelings of Safety and Comfort

Feelings of safety and comfort was a significant subtheme that was shared by all participants. Safety and comfort within this study was found to represent the participants feeling like they were being protected from an unsafe environment and having the opportunity to be part of a positive family environment. The extract below from Zola (21 years old), explains how Underdog provided them with a safe space.

This program has actually tried to actually shun out all the bad things and actually try to keep them much more safer coz even after school, ..., then you start joining bad things whereby if-if you...after school programs you-you get to learn a lot and you get to actually stay safe, or you get to be protected from a lot things outside

Similarly, an extract from Ayanda (16 years old) interview showed the intensity of the impact that Underdog has in creating a space for inclusion.

The program is very helping and if you came here you'll be welcomed as a family, as one with us. It's actually nice place to be, there's peace uhm you make a lot of friends-people as well as dogs.

Many participants reported coming from a disadvantaged community, in which they were exposed to violence, and poverty. Social exclusion causes youth in disadvantaged communities to be excluded from participating in normatively set activities. This results in youth placing themselves in situations where they do feel included (Hashemi, 2015). This was evident in many youths who chose to interact with peers who may partake in deviant behaviour such as criminal activities (Sanders et al., 2018). Zola reinforced this notion by explaining their previous involvement in gang activities. The Underdog DTI created a positive space where these disadvantaged youths could feel included. Coming from a disadvantaged community can result in many stressors that youth experience (Freedman et al., 2016). The Underdog DTI was able to provide a positive outlet for youths to lessen these

negative feelings, as emphasised by Ayanda. Ayanda also provided evidence for the sense of belonging in how they referred to the Underdog as a family and that they felt a part of this family while being there. This also further reinforced the sub-theme of feelings of security and comfort as a positive family environment creating a space of security and comfort.

The participants' experiences in this study were similar to the findings in Flynn et al. (2020), where clinicians reported that children found animals to be calming and comforting. Their study also found that animals provided a safe environment for children, as animals were non-judgmental and provided children with an unconditional positive regard (Flynn et al., 2020).

Openness

Participants went on to express how Underdog created a space that promoted transparency. Openness within this study represents the participants being more open to sharing their feelings, and that by expressing their feelings they would be heard. Zola reported being able to express their feelings more openly at Underdog than they could at home.

So as-as we got here that's when we started learning that, ok It's important to actually talk about, uhm your week, how are you doing, is there anything that was bothering you, so that some of us could actually help you if you need help. So it's-it's something that we got used to here, whereby we didn't do that at home, so that's where we actually felt comfortable here to actually talk and actually get to express ourselves ... So things like that where we were like made it much more easier for us to actually feel free from like home when we were here.

Social exclusion makes it difficult for people in disadvantaged communities to be more transparent about their feelings and issues (Gingrich & Lightman, 2015; Hashemi,

2015). This is especially seen in parents who are dealing with stressors that come with living in a disadvantaged community (Evans & Kim, 2013). Parents might have difficulty with being able to share their feelings or with being able to talk to their children about stressful topics, which could result in their children thinking that it is not acceptable to share how they feel with their parents. Additionally, children might decide not to share their feelings with their parents, as they feel that their problems are inadequate and small compared to the problems their parents have. Children may take on the role of not wanting to be a burden to their parents or feel like their problems may not be able to be solved. Parents do not just make it difficult for children to express their feelings, but sometimes transfer these stressors onto their children (Evans & Kim, 2013).

The encouragement of transparency and openness within the Underdog DTI is consistent with the literature. Friesen (2010) reports on children experiencing enhanced openness, which could be associated with the fact that the interaction with dogs results in children encountering an accepting and non-judgemental relationship. Similarly, Flynn et al. (2020) also reflect on children using the DTI as a form of therapy, where they would be able to express their feelings regarding a crisis or stress they were dealing with while interacting with the dogs. In our study it was apparent that many of the participants were unable to fully express their feelings at home and they had no way to positively offload their problems and issues.

I think it is, it has to me because sometimes I get so upset easily and the dogs you know get calmed and relaxed. (Buhle-14 years old)

In the extract above, Buhle also shows how the Underdog DTI was able to encourage the participants to be more open with their feelings, as well as how the dogs were able to help them feel calm and relaxed when they were upset.

Theme Two: Prosociality

All participants in the study reported that the Underdog DTI improved empathetic behaviours towards animals and people. This was encompassed by participants showing their concern about the wellbeing of dogs', as well as respecting and learning how to treat others. Participants also learned to build relationships and bonds with the animals and people. Therefore, prosociality will be encompassed by two subthemes: treatment towards dogs and building relationships.

Treatment Towards Dogs

Through the Underdog DTI, participants alluded to the fact that their treatment of people and animals became more positive. There was a recurring idea that animals have feelings and different personalities. Mpho (18 years old) spoke about how training dogs not only benefited the dogs but also benefited them.

...It's not only about training dogs. You teaching a-a dog something and even a dog teaches you something you know? You know so, to me I-I enjoy it, ya and it's about love, kindness and everything because when you're with the dogs you can't be rough with the dogs, you have to be calm. So that also teaches you how to be calm when you're like with everybody else, maybe people around you-you have to be calm just because you're used to being calm with the dog so

Along with Mpho, other participants reported similar experiences. They spoke about dogs as if they were not just animals. Ayanda referred to the dog they trained as their sister. These interactions they have with the dogs, shows an increase in empathy not just towards dogs, but people as well. Mpho mentioned how their interaction with dogs taught them how to be calm, and how what they learnt through interacting with dogs is then used in their

interactions with other people. Additionally, they learnt that animals are delicate and need to be handled with love and kindness. After undergoing the Underdog DTI, many participants reported thinking about the wellbeing of dogs. This resulted in them wanting to spread awareness in their communities on how dogs needed to be treated. Training dogs also taught participants how to understand the body language of dogs.

Ya, of course-of course, they have feelings-they have feelings dogs, because a dog can, you-you can even tell when the dog is feeling, you can tell it. From how its behaving and the body language. You know I can't tell how a human is-how she's feeling, I can maybe say "oh ok, I can see the facial expressions", but I cannot see the body, but from a dog you can see from the body, and the tail by no-there's something wrong with this dog. (Mpho)

The positive treatment towards dogs by the participants has also been found in most quantitative research done on a DTI where the DTI has significantly influenced the way in which people feel about dogs and treat them, and these feelings have been transferred to how they feel and treat people. Lahav et al. (2019) comments that participants who engaged in the dog-training became more caring towards the dogs. Furthermore, the continuous care and training of the dog resulted in the participants being more compassionate and empathetic to others' needs. This can be seen in how the participants of this study learnt that dogs should be treated with respect and kindness and started experiencing more compassion for dogs and being concerned for their wellbeing. It is therefore evident that the participants could benefit from the continuous interaction with the dogs at the Underdog DTI. Sprinkle (2008) supports this notion by stating that when people interact with dogs they can learn and adopt principles of kindness, empathy, and cooperation. Additionally, participants who trained the dogs also

found that the dogs taught them how to be more respectful and kinder, rather than rude. The extracts below from Linathi (13 years old), emphasises what dogs taught them:

I learned how-I learned to be kind and not to be so rude to dogs, I have to give them the respect that they give me.

This experience was shared between the participants, showing positive development in the treatment of animals and people.

Building Relationships

In this study building relationships is defined as the ability to bond with the people and dogs, work well with others and forge friendships. Many participants reported that they had formed friendships with people they had not known prior to their involvement in the Underdog DTI.

Uh first uhm I was scared of the dogs but I-I opened up and also I was scared of opening up my feelings uhm to people that I don't know but as I go on they-they can become my friends and family. So I started trying and they helped me a lot to express myself around them, ya. (Mpho)

Youth from disadvantaged communities often have to also deal with the stressors carried by their parents, so they may find it difficult to make friends and to form social connections, especially if they have to take on more adult roles and responsibilities. As mentioned, they could be suppressing their feelings, which could make it difficult for them to be themselves with their peers and to communicate effectively. This could hinder their ability to establish bonds. In our study we found that participants who bonded with the dogs went on to bond with other people in the organisation. Similarly, Flynn et al. (2020), reported that children who went through traumatic experiences felt that it was safer to bond with dogs, which later made them willing to bond with people. According to all the participants, the

26

Underdog DTI included social skills exercises, where participants had to interact with other

youth in the DTI and talk about their feelings. These social skills exercises helped

participants in the study to communicate more effectively with other people, as they were

more willing to share their feelings. This is consistent with quantitative research done by

Ben-Itzchak and Zachor (2021), where it was found that participants displayed an increase in

their social and communication skills by interacting with dogs. Furthermore, it was

suggested that dogs can assist in building skills for more complex human interactions (Ben-

Itzchak & Zachor, 2021). Additionally, during the sessions with dogs, participants reported

that they were put in groups with other youth, where they had to work together to train the

dogs.

You don't just focus on the dogs, ya the-the main goal is that we-we wanna get the

dogs to have better homes and safer homes but then we also wanna have a bond with

the people that we are working with coz we won't reach our end goal if we-we don't

have a bond ourselves also. So, working together, being as one, actually the first step

to actually reaching our main goal. (Zola)

Participants in the Underdog DTI displayed a sense of understanding between each

other. They learnt that working together would benefit the dogs, and this teamwork forged a

deeper bond between the youth in the DTI. Thando (15 years old) and Buhle also expressed

similar experiences, where they referred to other people in the Underdog DTI as family. Zola

also emphasised how becoming friends with other youth in the DTI not only allowed them to

share their problems, but also enabled them to help their friends when they had problems.

Theme Three: Positive Change in Beliefs and Behaviours

The third theme that was prominent amongst the participants was that of positive change in beliefs and behaviours. This specifically focused on the beliefs participants held about dogs, and how those beliefs changed during the Underdog DTI. This also focused on children's moral reasoning, which translates into their behaviour. Therefore, there will be two subthemes: positive change in beliefs and positive change in behaviour.

Positive Change in Beliefs

Amongst experiences that the participants shared, one of the most prominent was the fear of dogs. In disadvantaged communities, crime and violence are prevalent (Kaminer et al., 2013). Therefore, participants reported that the only reason people had dogs was for protection and security. These dogs were considered vicious and dangerous, creating a fear amongst the participants, as they believed that approaching a dog would result in getting attacked and bitten. This belief however changed once participants joined Underdog. Ayanda talks about how Underdog changed their beliefs about dogs, helping them overcome their fear.

...in primary I was scared of dogs then uh in grade 8 uhm I decided that I must join it so that I can see and I can see how dogs live their lives. Then I joined it and I experienced it and witnessed it that dogs are actually amazing...

Ayanda did not just get over their fear of dogs, but also developed a relationship with the dogs. Zola shared their experience of being bitten by a dog as a child, and how they became cautious towards dogs, especially Pit bull terriers.

I wasn't a fan of Pit bulls coz most of the dogs that are within in my community were Pit bulls and what I remember about Pit bulls was that they're fighters, they're strong and they bite, so stay away from them. So, I-I always didn't wanna, I didn't really love, I didn't love them at all coz, because of the picture that I saw within my

community, but when I came here that's when I realised like oh. So, it's a different story from the community than here, then that's when I started getting the love, that's when I started feeling more and more and actually realising that they do have uhm feelings.

Zola and Ayanda both elicited a positive change in beliefs about dogs. Other participants also reported overcoming their fear of dogs once joining the Underdog DTI. Zola explains how the community that one lives in can influence the beliefs an individual holds, in their case, the belief they had about Pit bull terriers. As mentioned above, disadvantaged communities often experience high levels of unemployment, crime, and violence, so this impacts the youth and the belief they hold. After joining the Underdog DTI, participants reported that dogs have different personalities and that their breed does not determine their nature. For example, just because a dog was a Pit bull did not mean it was vicious. This shows how the Underdog DTI works towards changing these beliefs that youth have about dogs, and also provides a meaningful purpose for youth.

Positive Change in Behaviours

Along with a positive change in beliefs about animals, many participants elicited a change in their behaviours. This change focuses on their sense of moral reasoning, and how they have an increased desire to help the community. Youth in disadvantaged communities often associate with anti-social peers, which can lead to them being exposed to and partaking in substance abuse, violent behaviours and other offences (Sanders et al., 2018). Thando shared their experience of joining a group of friends engaged in anti-social activities.

I was doing bad stuff with my friends but now I-I don't like the things they are doing.

I-uhm sometimes I'm not staying with my friends I'm always here at Underdog.

Their experience evoked a sense of moral reasoning. Thando understood that their friends were engaging in deviant activities, and that it was wrong, so they excused themselves from the situation and decided to engage in more meaningful activities, such as participating in Underdog. Other participants reported that coming to Underdog helped them stay away from these anti-social peers. Participants also expressed an increased desire to help their community and friends.

I wish that more and more could happen within the program-within my community.

That's why I would say if we had more-more projects like these, I actually think that would create a successful community. We would actually have much more uhm positive boys uhm much more confident girls also, who actually-who play bigger roles uhm within the community coz kids actually look up to everyone within the community whether you're doing good things or they doing bad things, they actually look up to you, and then they decide that what you're doing is right and they would do the same thing, not knowing that its right, not knowing that its wrong. So I would think that the more we get kids-the more we get the youth to-to to play a positive impact, the more we get better generations who are also going to do the same thing. (Zola)

Participants spoke about the younger children in the community looking up to them, so they have the responsibility to be good examples and to teach them about what is wrong and what is right. Many participants also viewed their peers and younger children as being the ones who could create positive change in their community, so it was therefore important for them to instil these values for future generations. Interestingly it was found that participants took up other after-school activities:

Yes, every day. Mondays I go to Lalela, Tuesdays to drama, Wednesdays here at Underdog and Thursdays at drama, uh Fridays I do uhm music class. (Ayanda)

Ayanda gives a list of activities that they were involved in other than Underdog. This seemed to keep participants busy and prevented them from engaging in deviant behaviour. This is consistent with other findings about community-based activity or interventions, which could aid in preventing disadvantaged youth from joining an anti-social peer group (McLeroy et al., 2013; Whitehead et al., 2005).

Although most of the research that was consistent with this subtheme was quantitative, it further reinforces the idea that a DTI can influence changes in problematic behaviours or particular beliefs. This can be seen in participants' normative beliefs about aggression and violent behaviours being changed through the interaction with dogs (Sprinkle, 2008), which could also be associated with a decrease in negative behaviours such as aggressive and obsessive manifestations (Silva et al., 2011). Most participants in this study have also demonstrated changed belief systems, which has then manifested into a change in their behaviour. This not only included a decrease in beliefs and behaviours that were problematic, but also included the adoption of more positive beliefs and behaviours, such as overcoming their fear of dogs, which was shared by the participants. This is consistent with findings reported by Syzmanski et al. (2018) where participants who interacted with dogs developed a more positive attitude toward the program. The participants wrote about liking the program, what they learned, as well as training challenges and goals for their assigned dog. Additionally, as seen in the Underdog study, participants' changed beliefs and behaviours were applied to their peers and community.

Theme Four: Self Improvement

One of the main aims of the Underdog DTI is to promote self-improvement within the youth that they work with. This was evident in how participants spoke about gaining

confidence and having a higher self-esteem, setting goals and believing in themselves, and being able to have an awareness of their emotions. These will be encompassed by two subthemes: emotional regulation, and confidence and self-esteem.

Emotional Regulation

As mentioned above, the Underdog DTI incorporated social skills activities for youth in the programme. These social skills activities encourage open communication and better emotional regulation. This meant that participants had a better understanding of how they felt, and what they needed to do in order to manage their emotions. A quote from Zola best encompassed these aspects:

Time to time as-as kids or students or young adults we get to experience things that you-you don't feel free talking with uhm someone that's face-to-face even at home...but then when we got here uhm we actually were told that it's actually okay to actually uhm write about what's uhm bothering you or what's uhm not going on well at home so that you can actually get help whereby than just having a problem and then just keeping it inside and it's the lo-it's the continuously destroying you withwithin inside and then when you're here you're not happy and stuff like that...

Along with the social skills activities, the Underdog DTI also promotes journaling, which Zola referred to above. They show an understanding that suppressing emotions can affect the way you feel and interact with others, so by expressing how he feels about a certain issue, he can find solutions to that problem, and manage his emotions. This emotional growth was mirrored by other participants.

It makes a lot of difference because when they uhm saying something to me I like get angry now that I'm here the dogs get me calm when I get home I'm calm. (Buhle)

Buhle reported being able to control feelings of anger, by calming themselves and this prevented them from shouting at their family. Emotional regulation also featured within the literature. The ability to regulate one's emotions and to have an awareness for them was apparent within this study. Flynn et al. (2020) supports this by stating that increased interactions with dogs can increase emotional stability within children. As mentioned, the Underdog DTI also incorporated the use of journals which could have aided in self-reflection as well as an increased awareness of their emotions, which is similar to what Syzmanski et al. (2018) found in their study when participants also participated in journal writing.

Confidence and Self-Esteem

All participants in the study evoked improved self-esteem, and confidence. As mentioned above, Underdog DTI works to promote self-improvement. It is evident from literature that the self-esteem and meaningful existence of youth from disadvantaged communities are under threat, so Underdog works to restore these needs. Training the dogs and being able to see positive outcomes of their efforts, helped the participants to gain more confidence and to doubt themselves less. Moreover, this allowed them to feel that they were doing something meaningful.

I've learned that as a person you don't have to like doubt yourself in order to do something, you have to try it out and see if it works for you and when you want to make a mistake you learn from it. So by learning from that mistake that's when you realise some things in life are valuable and they can help you in the future and ya and it's a good experience, you know what one day I want to own a veterinary clinic. (Mpho)

Participants revealed not just feelings of improved confidence and self-esteem, but these feelings also led to having more goal-directed behaviours. Mpho mentions that they would like to own a veterinary clinic in the future, and later talks about how it could benefit the community. The Underdog DTI creates opportunities for youth from disadvantaged communities. Often youth from disadvantaged communities are said to have less opportunities due to unemployment (Makiwane & Kwizera,2009), which could explain lack of confidence. Zola reflected on how being in the Underdog DTI allowed them to gain confidence to take on leadership positions at school:

so at-It was the only thing that I felt uncomfortable with was just talking uhm in front of a big group of people, but then as time went by I got used to it and then I actually fell in love with it coz it also uhm ended up uhm playing a bigger role within the school; started joining uhm debate clubs, started joining the-the school uhm governing bodies and then I started joining the-the the school's RCL whereby we were raps at school and we had to talk in front of the students and it actually continuously went on, went on until now.

Other participants revealed how they became more confident in speaking their mind. Linathi reported that they had gained confidence to express their opinions, and even if it was wrong, they were glad they shared it. The confidence and self-esteem that the participants gained helped to eliminate social exclusion threats, and this allowed participants to be more goal oriented, and positive about the future.

The improvement in self-esteem, and the adoption of more goal-directed behaviour was observed in other studies as well. Flynn et al. (2020) reports on the fact that many children who experience AAIs started feeling more competent and had an increase in their self-worth. This was as a result of the intervention providing them a sense of being able to achieve something, and to be able to do it well. Moreover, it made them feel capable and good about themselves. Improved self-esteem and confidence could lead to an increase in

goal-directed behaviour (Syzmanski et al., 2018), as suggested by the participants in the Underdog study where they expressed their dreams, goals, and aspirations, which they were willing to work towards achieving, and believed that they could achieve it.

Overall, while analysing the interviews we found that participants who stayed on at Underdog post the DTI showed different levels of growth. Participants who stayed on with Underdog the longest elicited the most social and emotional growth compared to participants who had just completed the DTI. However, we also acknowledge that this could be because of the difference in age. This relates to the notion of children gaining more knowledge and intellect as they grow older (Faulkner et al., 2013). The interviews also revealed that participants also participated in other after-school activities, which could have also influenced their behaviours.

Summary and Conclusion

This research set out to address the gap in the literature by assessing a DTI within an LMIC, specifically focusing on disadvantaged youth in a South African context, by giving a more in-depth understanding of the subjective experiences of disadvantaged youth who participated in the Underdog DTI. The thematic analysis approach helped in identifying the common experiences between the participants, and the social exclusion theory aided in understanding disadvantaged youth, and how their needs are threatened.

During the analysis, the following themes emerged from disadvantaged youth speaking about their experience at Underdog: sense of belonging; prosociality; positive change in beliefs and behaviours; and self-improvement. The thematic analysis helped to identify the overarching themes that were common across participants. The themes highlight some of the needs that social exclusion threatens. Findings suggest that the Underdog DTI works to restore these needs, including belongingness, meaningful existence, self-esteem, and empowerment.

Findings suggested that a sense of belonging came with a sense of security and comfort and being able to speak about your feelings knowing that you are not being judged. At-risk youth suggested that they felt included and were a part of something bigger at Underdog. The Underdog DTI not only provided youth with a space where they felt included, but also provided them with a sense of security. The findings suggested that at-risk youth felt that Underdog provided them with a safe and secure space, which they lacked within their community.

Participants were unaccustomed to the concept of openness, as they were used to not being able to express their feelings at home. Children from disadvantaged communities might feel that their problems are small compared to their parents, so they suppress their feelings.

Participating in Underdog provided opportunities for them to express their feelings and to seek help when they needed to. The Underdog environment was non-judgemental, and participants felt that they could be themselves and were unafraid to make mistakes or to be vulnerable.

Participants' treatment towards dogs changed drastically after joining the Underdog DTI. It was evident that participants started treating dogs in a more humane way, through how they acknowledged that dogs have feelings and by taking the dogs' wellbeing into consideration. They did not just learn how to treat dogs, but their interactions with the dogs also taught them values such as love, kindness, and respect for others as well as how to remain calm in volatile situations. Additionally, participants learnt how body language revealed dogs or people's feelings and emotions.

The Underdog DTI social skills exercises promoted sharing your feelings and problems. Participants felt more comfortable sharing their feelings which assisted in building relationships with others. Another activity that helped participants build bonds was that they had to work in groups when training dogs, so participants learnt that in order to train the dog effectively they had to work as a team.

Findings suggest that the Underdog DTI promoted empowerment among the participants, with them either having the courage to overcome their fears or actively wanting to make better choices in their lives. Participants refrained from joining antisocial peers and engaging in risky behaviours. Instead, they revealed a desire to contribute and improve the community for future generations. Additionally, they were willing to identify unethical behaviour, especially when it involved dogs.

Participants in the study displayed emotional awareness, improved confidence, and goal-directed behaviours. These findings suggested that the Underdog DTI promotes the

improvement of self-esteem and provides participants with more opportunities for growth and empowerment. Participants were more aware of their emotions and were able to manage their emotions more effectively. The Underdog DTI gave participants the confidence to take on leadership positions and be more outspoken. It also empowered them to set more ambitious future goals and to persevere, even when making a mistake.

The themes found in the lived experiences of the disadvantaged youth provided an overlap with the existing literature, offering more depth of understanding in the area of DTIs, specifically through a qualitative lens. This builds on existing literature by providing a South African account of the impact DTIs have on disadvantaged communities, which is consistent with existing literature. The results of this study could help promote the use of DTIs in LMICs, as it shows that DTIs are an effective intervention for South African youth. The study also aids in understanding disadvantaged youth, and how DTIs could be helpful in improving their development.

Limitations

One of the limitations of this study was the time constraints, due to the one-year honours programme and COVID-19 restrictions. The Underdog DTI is a four-to-six-month intervention and because our Honours program was one year long, we were not able to get a larger sample size for the study. Due to COVID-19 Underdog was only able to take groups of 5-6 children at a time, therefore there were not many past graduates to interview, and this also affected the sample size. Another limitation was the language barriers between the interviewer and interviewee. The PI and researchers were not fluent in isiXhosa, which was the participants' home language. Additionally, because English was the participants' first language, this made it difficult for them to communicate effectively during the interviews.

This language barrier could have impacted the way participants answered questions, as they might have had difficulty understanding the questions, or articulating their responses. The PI was also reluctant to bring in an interpreter as that would increase the risk of being exposed to COVID through face-to-face contact. Additionally, The PI was a middle-aged, white woman, who did not come from a disadvantaged community. Therefore, this could have caused participants to portray themselves differently and choose carefully what they should and should not reveal to the interviewer.

Recommendations and Considerations for Future Studies

Future research should consider interviewing participants in their home languages for more accurate accounts of their experiences. Another consideration for future research should be that participants could be interviewed by someone around their own age as they may feel more comfortable around people their own age.

A quantitative approach should be used in future studies to strengthen the validity of the results gathered from the Underdog DTI. The use of a control group in an experimental design would allow for comparison between the control group and the Underdog DTI group. Additionally, adding pre- and post-tests into the study design would allow us to track whether there has been a significant change in participants.

Finally, this study revealed that the Underdog DTI plays a role in preventing disadvantaged youth from engaging in deviant behaviours. Therefore, there should be a focus on creating more after-school activities or interventions for disadvantaged youth in South Africa. Furthermore, these programs should be tailored to not only prevent disadvantaged youth from engaging in risky behaviours, but to also work with disadvantaged youth towards improving the community.

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Appendices

Appendix A

Semi-structured Interview Questions

This interview will be recorded for research purposes, but don't be alarmed as we assure you that your personal information and identity will be kept confidential, which means we will not use your name or any personal information in our research paper and we will not share the audio recording with any other people.

(Interviewer introduces themselves and will do some ice-breakers with the participants.)

Today we would like to interview you, because we would like to know more about your experiences at Underdog. We would like to know if you learned anything at Underdog, and whether it has impacted your life in any way.

Specific areas/domains of interest:

- * Background information (family history)
- * Feelings about the program
- * Life before Underdog
- * Prosocial behaviour (child`s social life, friends/company they keep)
- * Beliefs about violence, problematic behaviours
- * Self-esteem

Questions	<u>Prompts</u>
Can you tell me a little about your family?	Describe your relationship with your family members. (This is to understand the participants background)
What was your experience at Underdog like?	• If no negative information: Was there anything you didn't like or felt uncomfortable with? / So you liked everything about Underdog?
Can you remember what your life was like before starting the program?	 How did you spend your after-school time before you started the Underdog program? What about yourself? Do you think you have changed in any way?'
Can you tell us a little about your friends?	 Have you made any friends with other children in the underdog program? If yes: Do you still speak or meet? When you meet, what is you'll's favourite thing to do?
What did you learn from your interaction with the dogs? What did the dogs teach you?	How do you feel about animals and people now?
We live in a country where there is a lot of violence and crime. How does this make you feel?	How does this affect you?How does this affect your community?
How did the Underdog programme make you feel?	What about the programme made you feel this way?

Appendix B



TELL US ABOUT YOUR EXPERIENCE AT UNDERDOG



You have been through a program where you worked with dogs in the Underdog Project. We are a team of researchers from UCT Psychology Department who are interested in seeing how this project works.

We want to hear from you about this project - What was your experience? What did you learn? Did it change anything about the way you think? We want to hear all about it.



If you are interested in taking part, Underdog will give you some forms to take home for you and your parent to

read, and your parent/guardian will need to give consent for you to take part. Return the signed form to Underdog. Then we'll set up a time to chat with you at Underdog, and you can tell us about your experience.



We hope to chat to you soon! Chelsea, Shinay and Susan

Principal Investigator

Associate Prof Susan Malcolm-Smith

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Honours Candidate
Shinay Ramesh
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Ethics Committee

Rosalind Adams

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Appendix C

Adolescent Information and Consent sheet

Your child is being invited to take part in a study examining children's experiences of the dog training program at Underdog. This form explains the study – please read it carefully, and contact us if you have any questions.

Why is this study being done?

Underdog runs programs where children learn how to train and care for dogs. These programs may have positive effects on the way children feel and act outside of the project as well. We would like to hear about how your child experienced the program, and what they may have learned.

What must I do if I agree to let my child continue in the study?

We are inviting children who are interested in talking about their experience with Underdog to take part in this study. This is completely voluntary, and there will be no negative consequences if you decide you do not want your child to take part. You or your child can also withdraw from the study at any point if you change your mind later.

If you agree that your child can take part in the study, please sign the consent form. Also ask your child to sign the assent line if they want to participate. Your child must return the signed form to Underdog, where we will collect it.

We will then arrange a time to chat to your child at Underdog. We'll ask your child to describe how s/he experienced the program, and what may have been learned. Note that this interview will be audio-recorded and transcribed (i.e. written out).

What are the benefits and risks of being in the study?

The information we collect will help us understand how the children who enrol in the dog training program experience it, and if it has any benefits for them.

There are no risks to your child in taking part in the study – since the interviews are done in person, COVID-19 measures and precautions will be taken to ensure the safety of all participants.

Will there be any cost to participate in the study?

No, there will be no cost to you or your child.

Will my participation in the study be confidential?

All information that your child provides will be treated as strictly confidential, and no mention of your or your child's name will appear on stored data or in any publication in connection with this study. Your child will be assigned a unique identity number and all data will be stored with only this identifier (not your names). Only the Principal Investigator will have access to the spreadsheet linking your names to the ID. No-one other than the researchers involved in this study will have access to the anonymized data.

What do I do if I have any questions?

If you have any questions about this study, you can contact the researchers (details below) or the Psychology Dept Ethics committee. We'll be happy to answer your questions.

Principal Investigator	Honours Candidate
Associate Prof Susan Malcolm-Smith	Chelsea Adams
susan.malcolm-smith@uct.ac.za	ADMCHE006@myuct.ac.za
Honours Candidate	Ethics Committee
Shinay Ramesh	Rosalind Adams
RMSSHI010@myuct.ac.za	rosalind.adams@uct.ac.za
Informed Consent	
Informed Consent	
I, understand the	
I, understand the information and consent form. I give permission to	my child to participate in this study
I, understand the	my child to participate in this study
I, understand the information and consent form. I give permission to	my child to participate in this study
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I, understand the information and consent form. I give permission to Signature:	my child to participate in this study
I, understand the information and consent form. I give permission to Signature: Date:	my child to participate in this study
I, understand the information and consent form. I give permission to Signature: Date: Assent: I choose to take part in the study described above	my child to participate in this study

Appendix D

Information and Consent sheet

You are being invited to take part in a study examining youths experiences of the dog training program at Underdog. This form explains the study – please read it carefully, and contact us if you have any questions.

Why is this study being done?

Underdog runs programs where youth learn how to train and care for dogs. These programs may have positive effects on the way youth feel and act outside of the project as well. We would like to hear about how you experienced the program, and what you may have learned.

What must I do if I agree to continue in the study?

We are inviting youth who are interested in talking about their experience with Underdog to take part in this study. This is completely voluntary, and there will be no negative consequences if you decide you do not want to take part. You can also withdraw from the study at any point if you change your mind later.

If you agree to take part in the study, please sign the consent form. This signed form must be returned to Underdog, where we will collect it.

We will then arrange a time to chat to you at Underdog. We'll ask you to describe how you experienced the program, and what may have been learned. Note that this interview will be audio-recorded and transcribed (i.e. written out).

What are the benefits and risks of being in the study?

The information we collect will help us understand how the youth who enrol in the dog training program experience it, and if it has any benefits for them.

There are no risks in taking part in the study – since the interviews are done in person, COVID-19 measures and precautions will be taken to ensure the safety of all participants.

Will there be any cost to participate in the study?

No, there will be no cost to you.

Will my participation in the study be confidential?

All information that you provide will be treated as strictly confidential, and no mention of your name will appear on stored data or in any publication in connection with this study. You will be assigned a unique identity number and all data will be stored with only this identifier (not your names). Only the Principal Investigator will have access to the spreadsheet linking your names to the ID. No-one other than the researchers involved in this study will have access to the anonymized data.

What do I do if I have any questions?

If you have any questions about this study, you can contact the researchers (details below) or the Psychology Dept Ethics committee. We'll be happy to answer your questions.

Principal Investigator	Honours Candidate
Associate Prof Susan Malcolm-Smith Adams	Chelsea
susan.malcolm-smith@uct.ac.za	ADMCHE006@myuct.ac.za
Honours Candidate	Ethics Committee
Shinay Ramesh RMSSHI010@myuct.ac.za	Rosalind Adams rosalind.adams@uct.ac.za
Informed Consent	
understand the information contained in this information and consent form. I give permission to participate in this study.	
Signature:	<u>~</u>
Date:	

Appendix E

UNIVERSITY OF CAPE TOWN



Department of Psychology

University of Cape Town Rondebosch 7701 South Africa Telephone (021) 650 3417 Fax No. (021) 650 4104

03 May 2021

Susan Malcolm-Smith Department of Psychology University of Cape Town Rondebosch 7701

Dear Prof. Malcolm-Smith

I am pleased to inform you that ethical clearance has been given by an Ethics Review Committee of the Faculty of Humanities for your study, *The impact of a dog training intervention program on children's social functioning: A pilot evaluation study of the Underdog program in the Western Cape.* The reference number is PSY2021-011.

I wish you all the best for your study.

Yours sincerely

Middle

Lauren Wild (PhD) Associate Professor

Chair: Ethics Review Committee

UNIVERSITY OF CAPE TOWN



Department of Psychology

University of Cape Town Rondebosch 7701 South Africa Telephone (021) 650 3417 Fax No. (021) 650 4104

03 June 2021

Susan Malcolm-Smith Department of Psychology University of Cape Town Rondebosch 7701

Dear Susan

I am pleased to inform you that ethical clearance has been given by an Ethics Review Committee of the Faculty of Humanities for the amendments to your study, *The impact of a dog training intervention program on children's social functioning: A pilot evaluation study of the Underdog program in the Western Cape.* The reference number remains PSY2021-011.

I wish you all the best for your study.

Yours sincerely

Middle

Lauren Wild (PhD) Associate Professor

Chair: Ethics Review Committee