Examining the level of Empathy of second-year Bachelors of Social Work Students at a South African University making use of the Empathy Assessment Index

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A minor dissertation submitted in partial fulfilment of the requirements for the Degree of Master in Clinical Social Work
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Compulsory Declaration

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Signature: [Signed by candidate] Date: 19/03/18
Abstract

The aim of this study was to examine the level of empathy of second-year Bachelors of Social Work (BSW) students using the Empathy Assessment Index (EAI), and the findings were contextualised within the South African social work training policies. The Social Work Model of Empathy and the social cognitive neuroscientific definition of empathy the EAI was built on, forms the guiding theoretical frame for this study.

It is often assumed that social work students have adequate levels of empathy and this research study was a first step in determining if this was correct. This has contributed to the discussion on social work education, specifically if more direct instruction or policy changes may be necessary concerning empathy in social work training. The researcher utilised a quantitative research methodology in conjunction with the Empathy Assessment Index in order to collect the data. Univariate descriptive data analysis was used in order to illustrate the findings in a logical and understandable format.

The research was conducted using second-year BSW students (n=40) from a Western Cape University and the study found that the respondents had an overall high level of empathy. However, the component score for Emotional Regulation was fairly low. This, according to the literature, could prevent a person from accessing the full benefits of an empathic experience.

It was recommended that universities consider implementing more direct methods to train and increase empathic ability. Furthermore, considering how new the study of empathy is to social work in South Africa, it was also recommended that further studies are required for better implementation of the construct, especially to determine what an optimal level of empathy is for a social work student.
Acknowledgements

I would like to take this opportunity to thank the people that have made this research paper possible.

I would like to thank my family for motivating me and lending me both financial and emotional support. Without them studying further would not have been possible and I would never have been able to reach my dreams.

I would like to thank my partner for all her love and understanding, helping me through the late nights with coffee and kind words.

I would also like to thank my supervisor Leon Holtzhausen for his guidance during my research paper.

Finally I would like to thank the people that assisted me on my research journey, most of them simply doing it out of the kindness of their heart. I hope I can pay that kindness back some day to others in need.
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CHAPTER 1

1.1 Introduction

This chapter is a summary of the research project. It briefly outlines the research topic, the motivation for researching this specific topic and the objectives that were achieved. It includes the background, rationale and significance of the study as well as assumptions that were made and some concept clarifications. Finally, this chapter also delves into the ethical considerations of the study.

1.2 Background

The study examined the concept of empathy within social work by looking at the level of empathic functioning in a second-year Bachelor of Social Work (BSW) degree class in a South African University. This paper considers the findings in relation to the training standards of social workers in South Africa. A brief background of the concept of empathy in social work, its role in the South African context, empathy’s relationship with South African social work training standards and empathy in the context of this study is described below.

Empathy can be defined as “The capacity to understand and enter into another person's feelings and emotions or to experience something from the other person's point of view” (Colman, 2015) according to the oxford psychological dictionary. For ease of reference this general definition serves as a broad understanding of the concept. This study will however show that there are various definitions of empathy (see Chapter 2 section 2.2) and despite their similarities each have their own nuances. Later in this chapter (see Chapter 1 section 1.7) the researcher also defines the exact operational definition of empathy used in this study.

Despite the existence of slightly varying definitions it is clear that the construct empathy plays an important part in various social work processes. This can be seen in social work textbooks such as Direct Social Work Practice: Theory and Skills (Hepworth, Rooney, Rooney, Strom-Gottfried & Larsen, 2009) that have parts of their training textbook dedicated to the role of empathy in social work. Hepworth and Rooney (2009) highlights the importance of empathy as a skill to understand clients, implement constructive communication and for effective social work practice. The social work textbook Social work Practice: a Generalist approach (Johnson & Yanca, 1992) also lists empathy as an important aspect in building effective helping relationships. Furthermore, the textbook, Social Work Skills and Knowledge (Trevithick, 2011) mentions empathy many times and it is also fully described as one of the foundational interviewing skills a social worker should have. These textbooks are used internationally, including South Africa, to train social workers.
Not much research has been done on empathy in social work in the South African context specifically. However, the available local literature does echo the importance of empathy in social work as well. Engelbrecht (1999) describes the important role empathy plays in rapport-building with clients and entering a client’s world in order to gain a better understanding of the person, similar to the points raised in the international training textbooks. The social work scope of practice available from the South African Council for Social Service Professions (South African Council For Social Service Professions, 2011) mentions empathy only once. It briefly describes how social work therapeutic interventions can help build capacity in clients to use their empathic understanding of their own experiences to reach out and help others.

In terms of empathy and the basic standards for training social workers, social work exit-level outcomes (ELO) need to be considered (see Table 1). The ELO’s are a set of standards that were created in order to govern the minimum level of training outcomes when training social workers in South Africa. There is no mention of empathy within the ELO’s as set by the social work standards-generating body (South African Qualifications Authority Standards Generating Body For Social Work (SAQA), 1998).

<p>| 1. Develop and maintain professional social work relationships with client systems. |
| 2. Assess client systems’ social functioning. |
| 3. Plan and implement appropriate social work intervention strategies and techniques at micro, mezzo and macro levels. |
| 4. Access and utilise resources appropriate to client systems’ needs and strengths. |
| 5. Produce and maintain records of social work interventions, processes and outcomes. |
| 6. Evaluate the outcomes of social work intervention strategies, techniques and processes. |
| 7. Terminate social work intervention. |
| 8. Negotiate and utilise contracts during social work intervention. |
| 9. Demonstrate social work values while interacting with human diversity. |
| 10. Appraise and implement the ethical principles and values of social work. |</p>
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<td>Elucidate national, provincial and local governance structures, and the general laws and charters governing social welfare policy and social work services in South Africa.</td>
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<td>19.</td>
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<td>Demonstrate understanding of how social welfare policy and legislation are developed and influenced.</td>
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Empathy may not appear in the ELO’s directly; however, on closer inspection there is considerable overlap between what is considered to be empathy, its function in social work and the ELOs. The first ELO requires social workers to develop and maintain professional social work relationships with client systems (see Table 1). The second ELO requires a social worker to have the ability to assess the social functioning of a client (see Table 1). Both local and international literature (Trevithick, 2011, Hepworth et al., 2009, Engelbrecht, 1999, Johnson & Yanca, 1992) has made it clear that empathy plays a vital role in not only the executing of social work interventions, but also in rapport-building and assessment of the client, which encompass ELOs one and two. The ELOs create a minimum standard that all social workers in training need to achieve in order to ensure that they are competent. According to the literature, it appears that empathic ability in trainees can play a role in the achievement of that standard.

Despite the importance of empathy in social work practice the researcher could not find any evidence of social work students in South Africa having their empathic abilities tested or being trained directly in the use of empathy. This reflects what has been seen internationally. According to the literature, empathy training is sparse or non-existent (Morgan & Morgan, 2005). Morgan and Morgan also note that many educators feel that simply stating that you must have empathy is enough for students to be able to utilise empathy effectively. There is also no agreed-on single operational definition for empathy (Pithers, 1999). This further complicates not only empathy research but practical applications of empathy as well, such as the optimisation of empathic skill sets in social work students.

New strides in social cognitive neuroscience research, adapted to social work by Gerdes, Segal and colleagues (2011, 2011, 2010, 2009) offers a possible solution. Gerdes and colleagues (2010) state that if social work could find a single measurable conceptualisation for empathy it could further the field of empathy in social work immensely. They felt that the work of social cognitive neuroscientist Jeanne Decety provided the theoretical backing to create this new social work conceptualisation of empathy (Gerdes & Segal, 2009). Decety (2007) defined empathy as the interaction between four neural networks containing both automatic and cognitive elements (see Chapter 2 section 2.3). This
definition would help Gerdes and her colleagues to operationalise empathy in social work using a new, measurable and modern definition of empathy.

Gerdes (2011) utilised the work of Decety and created a new and unique Social Work Model of Empathy that consists of three components. The first component identified for the model is Affective Response. This is a physiological reaction experienced in relation to the emotions of others (Gerdes et al., 2011). The second component is cognitive processing which, according to Gerdes (2011), is all the voluntary cognitive processes a person experiences trying to make sense of an empathic experience. Finally, the empathy model created by Gerdes (2009), contains a component with a uniquely social work-related emphasis; namely Conscious Decision-Making. This component considers the voluntary reactions and acts of altruism made in response to the empathic feelings a person experiences.

Social cognitive neuroscience does not consider conscious empathic actions as an important part of experiencing the full extent of empathy. In the context of social work however, according to Gerdes (2009), empathic action is vital and necessary to experience the full range of empathy. The Social Work Model of Empathy was only a first step. Further research was required to operationalise empathy in social work.

Gerdes and her colleagues (2017, 2012, 2011) designed the Empathy Assessment Index (EAI) in order to measure empathy. Based on the Social Work Model of Empathy the EAI has subdivided empathy into five components that measure a person’s empathic ability (Segal et al., 2017).

Affective Response from the Social Work Model of Empathy is measured by two components in the EAI (Gerdes, 2012). The first component is also called Affective Response. This is the physiological reaction of a body when a stimulus that triggers an empathic reaction is seen or heard. For example, we suddenly feel like crying ourselves when we see someone else cry (Segal et al., 2017, Gerdes, 2012). The second measured component is Affective Mentalizing. It involves a person’s reaction to thinking about a stimulus and then experiencing an involuntary empathic physical response. A person telling us a story about someone else crying, that makes us feel like crying would be an example (Segal et al., 2017, Gerdes, 2012). This component comprises what is also called affective empathy by some researchers (Strayer, 1990).

Cognitive processing from the Social Work Model of Empathy is measured by the remaining three components of the EAI. Self/Other Awareness is a person’s ability to recognise the difference between their own emotional experience and the feelings of others (Segal et al., 2017, Gerdes, 2012). Secondly, the Perspective Taking component is a person’s ability to put themselves in another person’s shoes (Segal et al., 2017, Gerdes, 2012). Finally, Emotional Regulation is a person’s ability
not to become overwhelmed by the feelings or experiences of others. These three components, together, situate the empathic response in a more conscious cognitive place as well, rather than entirely in the subconscious automation of Affective Response (Segal et al., 2017, Gerdes, 2012). Some researchers define this part of empathy as cognitive empathy (Strayer, 1990).

All five of the EAI components work together to form what is called an empathic response (Segal et al., 2017). The Conscious Decision-Making component of the Social Work Model of Empathy does not appear to be measured by the EAI (Segal et al., 2017). The researcher was unable to ascertain why this is from the literature. However, based on the literature it seems possible that the EAI only measures a person’s ability to experience empathy. The Conscious Decision-Making component forms part of a person’s full empathic experience according to the Social Work Model of Empathy, but it is not deemed necessary according to other researchers in terms of a person’s potential ability to experience empathy (Segal et al., 2017, Gerdes & Segal, 2009). Despite this, the EAI is recommended for research with social work students because of its comprehensive approach to measuring empathy (Greeno, Ting & Wade, 2017).

This study used the conceptualisation of empathy as found in the Social Work Model of Empathy and the EAI. The EAI was used to examine the level of empathy in a second-year BSW class and use this information to comment on empathy’s role in training social workers in South Africa.

1.2 Problem statement

As previously stated, empathy as a concept is widely used in social work practice and is found in various pieces of social work literature (Trevithick, 2011, Hepworth et al., 2009, Engelbrecht, 1999, Johnson & Yanca, 1992). Theorists such as Freedberg (2007) have highlighted that despite the presence of empathy in social work literature, its appearance has been inconsistent and lacking depth. Empathy is mentioned in several social work training manuals and forms part of social work theory and practice (Trevithick, 2011, Johnson & Yanca, 1992). This has occurred despite other literature highlighting that empathy has not been well defined as a concept (Pithers, 1999).

It has been assumed, according to some studies, that educators feel that trained counsellors such as social workers, simply need to be told that empathy is important in order to be able to apply the concept successfully (Morgan & Morgan, 2005). According to Gerdes (2011), empathy in social work theory as well as practice is rarely clearly defined and it is used without much detailed guidance about how to identify, develop, use, and teach it effectively.

After investigating the literature the researcher could not find studies pertaining to the level of empathy of social work students. Thus there is no clear way of knowing the level of empathy amongst
social work BSW students or if training interventions may be needed in order to increase the general level of empathy of BSW students.

As a consequence the purpose of this study was to examine what the level of empathy was of a second-year BSW class at a South African University.

1.3 Rationale & Significance of the study

It is assumed that social workers intrinsically have empathy due to their choice of profession (Earle, 2008) and that students who are taught interventions can use empathy effectively with only a cursory understanding (Morgan & Morgan, 2005). The literature also highlighted that empathy is important within social work (Trevithick, 2011, Hepworth et al., 2009, Engelbrecht, 1999, Johnson & Yanca, 1992). The current study attempts to broaden our knowledge of these statements and also to add to the understanding of empathy and its role within social work. The following points show the significance of this study.

- Firstly, this study attempted to establish the level of empathy in a group of second-year BSW students via the EAI. According to Earle (2008), social work is seen as a calling and students who have traits such as empathy are drawn to the profession. Knowing if social work students have high or low levels of empathy after a year-and-a-half of training and where these deficits are, allows for certain conclusions. This in turn opens up avenues for further studies.

- Secondly, considering how sparse the research is on empathy both locally and internationally (Gerdes & Segal, 2011) this study was significant in highlighting certain needs for more research on empathy locally. Examining the level of empathy within a second-year BSW class helps to determine whether they have high or low empathy. This begs the question of whether empathy levels are similar in other South African second-year BSW classes. What can be considered an optimal level of empathy for a second-year BSW class? Can more directive training increase empathy in a BSW class? This research paper has been the first step in opening the possibility of looking at these types of research questions on empathy within the South African context.

- Thirdly, the study opened up a discussion and reflection on the current educational outcomes, guidelines and policy. Empathy is not mentioned directly in any of the current BSW training ELOs (see Table 1). However, it was shown in a previous section in this paper (see Chapter 1 section 1.2) that a BSW student would need empathy in order to meet various ELOs effectively. The study explored the possibility of empathy perhaps having a more prominent place in the BSW training ELOs.
• Finally social work students are required to master an adequate level of theoretical and practical training in order to meet the minimum standards required to become a registered social worker in South Africa (De Jager, 2014, South African Qualifications Authority Standards Generating Body For Social Work (SAQA), 1998). The role of empathy in meeting these standards are currently unknown yet the literature indicates it may possibly play a larger role than expected. This study did not answer many questions beyond what the level of empathy in a second-year BSW class was. However, it helped to indicate where further research is needed in the relationship between social work, social work training and empathy.

Owing to its complicated nature and difficulty to measure and define (Gerdes, Segal & Lietz, 2010), it may not have been possible until now to see if social workers have adequate training in empathy. Now, thanks to the EAI, this study has started the inquiry into the level of empathy within social workers and whether there is a need for more formal operationalising and training in this construct.

1.4 Research Topic

“Examining the Level of Empathy of second-year BSW Students at a South African University making use of the Empathy Assessment Index”

1.5 Aims and Objectives

1.5.1 Overall Aim

- To investigate the level of empathy in second-year BSW students at a South African University.

1.5.2 Objectives

1.5.2.1 Objective 1

- To measure the level of Affective Response in second-year BSW students in a university in the Western Cape.

1.5.2.2 Objective 2

- To measure the level of Affective Mentalizing in second-year BSW students in a university in the Western Cape.

1.5.2.3 Objective 3

- To measure the level of Self/Other Awareness in second year BSW students in a university in the Western Cape.
1.5.2.4 Objective 4

- To measure the level of Perspective Taking in second-year BSW students in a university in the Western Cape

1.5.2.5 Objective 5

- To measure the level of Emotional Regulation in second-year BSW students in a university in the Western Cape

1.6 Main assumptions

- Second-year BSW students should have a relatively high level of empathy based on the literature.
- People are often drawn to professions that suit their personality and preferences, thus a significant number of students drawn to social work will have naturally high empathy due to it being a profession that involves helping others.
- Despite the strong possibility that the respondents will have high levels of empathy, there is also the possibility that challenges to this assumption will emerge because this is the first time research is conducted to measure and test this assumption in the South African context.

1.7 Clarification of terms

This section contains a clarification of terms. The terms relevant to the study have been listed and alphabetically ordered. The operational definition in relation to this study is given for all terms as well as a general definition for some of the terms where it is applicable.

**Affective Mentalizing (AM):**

Affective Mentalizing is the process by which a person imagines a stimulus which then triggers an affective or physiological response. The person is told a story or receives an idea of an experience indirectly and then pictures this experience in their mind which then triggers a physiological response as if it were happening to them. This allows a person in part to feel what another is feeling (Segal et al., 2017).

*Operational definition*

For the purpose of this study, Affective Mentalizing is
measured and defined by four items as found within the EAI instrument (see Appendix 1).

**Affective Response (AR):**

Affective Response is defined as a spontaneous innate emotional response which occurs in reaction to an outside environmental stimulus. AR is the ability to instinctually identify emotions and feelings in others as well as to mirror their responses (Decety & Skelly, 2014).

*Operational definition*

For the purpose of this study, Affective Response is measured and defined by five items found within the EAI Instrument (see Appendix 1).

**Emotional Regulation (ER):**

Emotional Regulation (ER) is defined as the competency of controlling or changing our emotional experience as created by our mirrored feelings. This is the cognitive ability that allows a person not to be overwhelmed emotionally by the emotional contagion effect of actively sharing mental states; this in turn helps prevent emotional duress (Decety & Meyer, 2008, Decety & Moriguchi, 2007, Preston & De Waal, 2002).

*Operational definition*

For the purpose of this study, Emotional Regulation is measured and defined by four items found within the EAI instrument (see Appendix 1).

**Empathy Assessment Index (EAI):**

*Operational definition*

For the purpose of this study, the Empathy Assessment Index refers to the instrument designed by Gerdes, Segal and Lietz (2017, 2012, 2011). The EAI (see Appendix 1) measures empathy via the 22 items found in the above mentioned instrument.
Empathy: In neuroscience terms the process of empathy is defined as the dynamic interaction of four “neural networks” (Gerdes, Lietz & Segal, 2011, Decety & Moriguchi, 2007, Decety & Lamm, 2006, Decety & Jackson, 2004) that gives rise to empathy, a cognitive ability to feel with others and to manage our own emotions (Lietz et al., 2011).

Operational definition

For the purpose of this study, empathy is measured by the 22 items found in the EAI instrument. The EAI, as designed by Lietz and her colleagues (2011) consists of five components, namely, Affective Response, Affective Mentalizing, Emotional Regulation, Perspective Taking and Self–Other/Awareness.

Perspective Taking (PT): Perspective Taking (PT) is defined for the purpose of this study as our ability to put ourselves mentally into the emotional and mental state of others which allows us insight into their feelings. This comprises the human ability to be open to various perspectives that might be anything from slightly different to severely different from our own (Decety & Meyer, 2008, Decety & Moriguchi, 2007, Preston & De Waal, 2002).

Operational definition

For the purpose of this study, Perspective Taking is measured and defined by five items found within the EAI instrument (see Appendix 1).

Second-year BSW Student: Operational definition

For the purpose of this study a second-year BSW student is defined as any student that was enrolled at an accredited institution, during their second year of study for a degree in social work.
Self–Other/Awareness (SOA): Self/Other Awareness (SOA) is defined as our natural ability to identify temporarily with another being without the occurrence of confusion between what is the self and what is the other. It is the ability that allows human beings to establish and maintain clear boundaries between their own emotions and the emotions of other people, leading to better identification of what another person’s emotions are or emotional state is and what our own emotions are or emotional state is (Decety & Meyer, 2008, Decety & Moriguchi, 2007, Preston & De Waal, 2002).

Operational definition

For the purpose of this study, Self–Other/Awareness is measured and defined by four items found within the EAI instrument (see Appendix 1).

1.8 Ethical Considerations

According to De Vos et al. (2011), ethics in research has two primary aims, to ensure the physical and emotional safety of the research respondents during the research process and also to ensure that the science is accurate and truthful. The researcher took the following steps in order to ensure the quality of this research paper.

1.8.1 Voluntary Participation

According to Ruben and Babbie (2005), respondents should always have a choice as to whether they want to participate in a study or not. Further work by Babbie (2007) as stated in De Vos et al. (2011) highlights the fact that even if respondents are given a choice verbally, there should not be underlying coercion or pressure to participate.

The researcher ensured voluntary participation in the following way:

The researcher fully explained the study to the second-year BSW class and as part of this explanation, a choice was given to the students to participate or not. Furthermore, in keeping with the suggested guidelines by Babbie (2007), students who did not participate were not negatively impacted in any way, thus ensuring no pressure for participation.
1.8.2 Informed Consent

In order for a respondent to be able to decide if they wish to participate or not, informed consent needs to be given. This entails that every respondent has the details of the study explained to them, the credentials of the researcher, the procedures, the advantages, the disadvantages and any dangers to which they may be exposed (De Vos et al., 2011).

Before initiating the study the researcher explained all parameters and applicable information to the respondents. This included the level of confidentiality of the study, its purpose and all the aforementioned information. The respondents were also afforded the opportunity to ask any questions of the researcher if anything was unclear. A consent form was given to each respondent to sign in order to ensure that all respondents acknowledged that they had the study explained to them and that they consented to participation.

1.8.3 Confidentiality

Confidentiality involves the management of access to information that arises from participation in research. The privacy of individuals participating in a research study is paramount (De Vos et al., 2011). It is also vital that all limitations of a research study’s privacy policy, along with the safeguards to ensure privacy, be explained before a study is conducted (Morris, 2006).

The researcher explained to all respondents that their participation was confidential. They were not required to submit names on their questionnaire sheets and only the researcher and his supervisor would know the names of those who had participated in the study. It was also impossible to trace which person filled in what exact questionnaire, which further ensured their privacy.

1.9 Actions and Competence of Researcher

It is important for research to be conducted by a trained and properly qualified researcher. This ensures that proper standards are maintained and procedures are followed to ensure the safety and privacy of respondents as well as the accuracy of the research (De Vos et al., 2011).

The researcher assured the respondents of his credentials. The researcher is a qualified social worker, registered with the University of Cape Town as a clinical social work Master’s student. He has received the proper training and he also maintained regular contact with his supervisor in order to ensure that the research and its procedures were conducted according to standard.
1.10 Structure of the research report:

The structure of this report is as follows:

1.10.1 Chapter 1

Chapter 1 is an introduction to the research topic. It provides a brief overview of the study and the rationale and significance of the research. It includes the background to the study, motivation for the study, the primary research questions and objectives, clarification of terms, ethical considerations and the competence of the researcher.

1.10.2 Chapter 2

This chapter contains the literature review for the study. It covers the theoretical framework used in the study and core theory that is applicable to empathy within the study. This chapter also contains policy and legislation that is applicable to empathy and the research goals of the study.

1.10.3 Chapter 3

The research design is discussed in this chapter and includes the following: all relevant methodological considerations; the quantitative research approach of the study and the sampling technique that was used; the EAI questionnaire and its implementation; data analysis techniques used; the limitations of the study.

1.10.4 Chapter 4

This chapter focuses on the data gathered using the methods mentioned in chapter three. All findings and the demographic data are stipulated in the first half of this chapter. The second half of this chapter analyses the findings in terms of the current literature.

1.10.5 Chapter 5

This chapter states the conclusions based on the data analysis and includes all relevant recommendations and outcomes for this study.

1.11 Conclusion

This chapter began with an introduction to the research. It stipulated the research topic, motivation for the study, objectives as well as the significance of the study. It briefly provided an overview of most aspects of the research conducted, including the ethical considerations, clarification of terms and the competence of the researcher.

The following chapter consists of a literature review of all aspects pertaining to the study, including an historical overview, definitions of the theoretical frames the study is built on as well as the appropriate policy and legislation pertaining to the study.
CHAPTER 2

2.1 Introduction

This chapter reviews all the relevant literature pertaining to this research project, including the theoretical frameworks utilized within this study. It commences with a historical overview of empathy as a construct. It is explained where the term comes from and how the construct developed into the definition used in this study. The chapter defines the social cognitive neuroscientific definition of empathy, as implemented in this paper, as well as its link to social work. The literature review then describes every component of empathy in detail, linking it to the Social Work Model of Empathy and the importance of empathy to social work. Finally the role of empathy in social work training was discussed and its role in South African social work policy and legislation.

2.2 An historical overview of empathy as a construct

The following section gives an in depth history of the construct empathy. It examines the various conceptualizations of empathy from its initial use up to the modern definition as used in this study.

Compared to other psychological constructs empathy has been in use for a relatively short period of time. Lipps (1903) and Titchener (1909) were responsible for some of the earliest conceptualizations of empathy at the beginning of the 20th century. During its initial use empathy was not used in the field of psychology and social science.

The word empathy originated in the field of art. Lipps used the German word *Einfühlung* in his work and defined it as people having an inner connection with the aesthetics in art while internally imitating the feelings expressed by said art. This was later extended by Lipps to connections between people, he postulated that an outside stimulus causes people to emotionally imitate inside themselves what they are witnessing in others (Jahoda, 2005).

Tichener followed the work of Lipps and translated the word *Einfühlung* into English as empathy. His definition of the word empathy was not always clear from his work but both Tichener and Lipps applied the concept to interpersonal relations and viewed it as the process of feeling yourself into the feelings or experiences of another person (Jahoda, 2005).

The history of empathy becomes hard to follow after the work of Tichener and Lipps as despite concepts similar to the word empathy being used in the works of others, the word empathy itself did not have a prominent place in the scientific lexicon of the day (Eriksson & Englander, 2017). As the 20th century progressed various theories and uses of the word empathy started to appear, some theorists intermittently mentioned empathy in their work while others used different wording with
similar concepts to empathy (Eriksson & Englander, 2017). Only later would a lot of this confusion be removed as empathy was more clearly defined in the work of theorists such as Theodor Reik (Reik, 1983), Heinz Kohut (Kohut, 1959) and Carl Rogers (Rogers, 1992). In the words of Theodor Reik concerning the use of the word empathy up until that point “the word empathy sometimes means one thing, sometimes means another, until now it does not mean anything” (Reik, 1983).

Starting with Theodor Reik, he defined empathy using the following concepts. The first concept was identification, according to Reik (1983) it involved focusing your attention on another person and then contemplating that person. The second concept put forth by Reik was incorporation, which he describes as the process of internalizing another person in order to make their experience your own. Thirdly he wrote about reverberation, which involves experiencing another person’s experience while still being aware of your own thought processes and experiences regarding the observed experience (Reik, 1983). Finally Reik (1983) felt that empathy included the concept detachment, which was the process of detaching from the others experiences in order to respond in a manner that considers both the observed experience as well as the experience of the separate individual. Reik furthered the field of empathy considerably but despite his robust definition other theorists still felt there was more to empathy than what his theories offered.

Kohut also attempted to expand the concept of empathy. He added cognition to the conceptualization which was different from the before mentioned ideas that empathy was just an emotional response (Gerdes, Segal & Lietz, 2010). Kohut (1959) defined empathy as a type of vicarious introspection that according to Kohut is the capacity to think and feel oneself into the inner world of another person. This added a more cognitive element to his definition. Despite the updated definitions however, Kohut's views as well as others before him did not help clearly articulate, measure or operationalize empathy as a concept (Gerdes, Segal & Lietz, 2010).

Carl Rogers contributed to operationalizing empathy more by further expanding the definition of empathy to emphasize its use in therapy (Decety & Jackson, 2004). Carl rogers defined empathy as a process where a person is able to mentally enter another person’s frame of reference as if you were that person while still maintaining one’s own sense of self and not lose the “as if” quality (Rogers, 1959). This set the stage for operationalizing empathy, as the Rogerian method involves the therapist attempting to understand a patients internal frame of reference and then relaying this understanding back to the patient (Decety & Jackson, 2004).

The work of Carl Rogers would not only have a big impact on the field of psychology but also social work. Through his interactions with social work colleagues the Rogerian view of empathy and its role in modalities such as the person centred approach would play a large part in the social work view and use of the term empathy in social work (King Jr, 2011). However, despite his contribution to social
work theory at the time and the attempts of Rogers to effectively operationalize empathy during the 1970’s it was still unclear to many how exactly empathy should be applied (Kranz, Sanders & Hao, 2006).

More modern theorists such as Carkhuff (Carkhuff, 1969) attempted to remedy this by redefining empathy as a specific skill instead of an ambient interpersonal process as put forth by Rogers. Carkhuff (Carkhuff, 1969) saw empathy as an facilitative communication skill, changing the operational definition in such a way that it was more measurable. This advances the field of empathy in terms of application but his definition does not consider all aspects of empathy.

Other modern interpretations focused again on different aspects of empathy. For example by defining empathy as a dispositional ability, theorists such as Hoffman emphasized empathsies intrinsic role in human development. Central to Hoffman’s definition is the concept of empathic distress which is the empathic response given when we sense others in distress (Hoffman, 2001). Hoffman’s theories describe empathic distress as a central concept in moral development and in learning altruistic behaviour (Hoffman, 2001). It can be seen that despite all these theories greatly overlapping there are distinct differences in the various 20th century conceptualizations of empathy from Theodore Reik to Martin Hoffman.

The above mentioned theorists and their definitions of empathy are just some of the various definitions ascribed to empathy during the 20th century, naming them all would be outside the scope of this paper. Studying these definitions however it becomes clear where empathy came from and that despite the theories overlapping there has never been any real consensus amongst theorists or any particular movement towards a single theory during the 20th century.

However in the 21st century a neurologically based definition has emerged from the field of social cognitive neuroscience. It uses various aspects from the theories of its predecessors but is primarily based in social cognitive neuroscience (Decety & Jackson, 2004). This has made it simpler to study and operationalize empathy (Gerdes & Segal, 2009). In the next section we more clearly define the neurological definition of empathy and its significance to social work as a profession.

2.3 Redefining Empathy, the link between Social Work and Social Cognitive Neuroscience

This section will discuss the 21st century change in empathy theory and the link the between the discoveries in social cognitive neuroscience and the social work profession. Understanding the changes in empathic theory starts with understanding the newly available research that was not available to previous theorists.
During the mid-1990’s research on empathy changed drastically. Researchers in Parma, Italy, had discovered the presence of mirror neurons in monkeys. The research found that the monkeys had the same brain activity while watching the researchers eat as when they were eating themselves (Iacoboni, 2008). This meant that when mirror neurons are present in an animal and they view an action of another animal, the same motor systems activate spontaneously as if they were performing the action themselves (Iacoboni, 2008). This would eventually lead to a complete redefining of empathy from a social cognitive neuroscience perspective through the work of Decety and his colleagues.

Decety and Jackson (2004) attempted to see if there was a relation between all the previous historical definitions of empathy and the findings of modern neuroscience, that can be combined into a single concept by connecting previous research with observable neurological phenomena. Their research was successful and lead to further research in 2007 (Decety & Moriguchi) that would use historical empathy research, social science and social cognitive neuroscience to produce a new single definition of empathy as a phenomenon. They defined empathy as follows:

“...four major functional components dynamically interact to produce the experience of empathy:

1. Affective sharing between the self and the other, based on the automatic perception-action coupling and resulting shared representations.

2. Self-awareness. Even when there is some temporary identification between the observer and its target, there is no confusion between self and other.

3. Mental flexibility to adopt the subjective perspective of the other.

4. Regulatory processes that modulate the subjective feelings associated with emotion.

In this view, none of these components can account solely for the potential of human empathy. The four components are intertwined and interact with one another to produce the subjective experience of human empathy.” (Decety & Moriguchi, 2007)

This research did not stay confined within the field of neuroscience. In 2009 Gerdes and Segal recognized the importance of empathy for the profession of social work but also the lack of a proper definition for the term within the discipline. The new research in social cognitive neuroscience offered them a solution to this problem and in response to this issue they created a Social Work Model for Empathy (see Chapter 2 section 2.5).

The model was based on interdisciplinary findings of various researchers, but drew heavily from the above social cognitive neuroscientific findings of Decety (Gerdes & Segal, 2009). It does not only
rely on neuroscience however and is firmly situated within social work norms, values and perspectives. Gerdes and Segal (2009) created the model as a first step towards more practical applications for empathy within the realm of social work.

This lead to the creation of the EAI (Segal et al., 2017, Gerdes, Geiger, Lietz, Wagaman & Segal, 2012) using five instead of the above stated four components, a fair body of research (Gerdes et al., 2012, Gerdes, 2012, Gerdes, Lietz & Segal, 2011, Gerdes & Segal, 2011, Gerdes et al., 2011, Lietz et al., 2011, Gerdes, Segal & Lietz, 2010, Gerdes & Segal, 2009) and eventually a book summarizing and situating the new perspective on empathy in social work (Segal et al., 2017). The aforementioned book, Assessing Empathy, is currently the first of its kind. It contains all of the relevant research to date, pertaining to this new perspective on empathy in social work, as created by Segal, Gerdes and colleagues. It is used extensively in this research paper because it also contains up to date information on the EAI and all of the relevant guidelines for its use.

2.4 Components of empathy

In order to understand empathy, it is important to understand the components that it is comprised of. As stated earlier in this chapter under section 2.3, this study used the EAI to measure empathy and thus also the same operational definitions and models the instrument was based on. The EAI uses the operational definition of empathy based on the work of Decety (Gerdes, 2012) and the Social Work Model of Empathy as created by Gerdes & Segal (Gerdes & Segal, 2009). It measures each component in order to create an impression of what someone’s general level of empathy is (Segal et al., 2017). The following five headings described each empathic component in greater detail, as they were utilized in this study.

2.4.1 Affective Response

During a person’s daily life they are exposed to various types of stimuli. This can be direct visual or auditory stimuli or even occur via the use of multimedia. When this happens it triggers an Affective Response by activating our own neural pathways (Decety & Skelly, 2014). This causes us to have a physiological response that attempts to mimic what was observed in others (Iacoboni, 2008).

This process of taking in stimulus from the outside world is one of the first and important steps in experiencing an empathic reaction (Segal et al., 2017). This is an unconscious and automatic process that initiates in the limbic system, causing similar brain activation in the viewer as what is being experienced by the subject being viewed (Iacoboni, 2008, Decety & Moriguchi, 2007, Preston & De Waal, 2002). After the Affective Response has occurred, the three cognitive components described in
the following sections allow for meaning making of the automatic experience and thus triggering an empathic experience.

Example: ”….when we see someone trip and fall, we may well have a physical sensation of falling ourselves, that is, of matching or mirroring the actions we see.”
(Segal et al., 2017)

2.4.2 Affective Mentalizing

Affective Mentalizing is very closely related to the previously described concept Affective Response. When we consider, think of or imagine a stimulus it can also activate an Affective Response, this is known as Affective Mentalizing (Schnell, Bluschke, Konradt & Walter, 2011, Decety & Grèzes, 2006, Frith & Frith, 2006, Decety & Chaminade, 2003). Affective Mentalizing is not however imagining yourself in the place of another person, it is limited to the imagining of a stimulus that activates a physiological Affective Response (Decety & Cacioppo, 2011).

Example:” Thus, when hearing or reading a story, we visualize the actions in our minds, which then triggers the motor neuron system giving us the physical sensation of doing the action.”
(Segal et al., 2017)

2.4.3 Perspective Taking

Perspective Taking can be described as the ability to mentally and emotionally put yourself in the position of another person (Segal et al., 2017, Decety & Moriguchi, 2007, Decety, 2005). Perspective Taking in conjunction with Self/Other-Awareness and Emotional Regulation allows us to regulate, understand and use the empathic reaction caused by stimulus from the outside. This forms the conscious cognitive side of the empathic reaction, allowing for cognitive interpretation (Segal et al., 2017).

Perspective Takings link to an empathic reaction however is not as simple as understanding something from someone else’s point of view. Taking someone else’s perspective without regulating your own feelings and having clear mental boundaries means that you see their point of view but you impose your own thinking over theirs (Segal et al., 2017). This is not empathy. In order for it to be a true empathic reaction there needs to be a clear distinction between the self and the other, knowing what the experience is meaning to the person and not what the other persons experience means to you (Segal et al., 2017).
The difficulty with accurate Perspective Taking is highlighted by the work of Coplan and Goldie (2011). They postulate that a person can have self-orientated Perspective Taking where perspective is taken as you viewing another’s experience. Other-orientated Perspective Taking involves the opposite, viewing another’s experience as the other person. Self-orientated Perspective Taking, as previously stated, isn’t true empathy and leads to bias, however, there is another difficulty with accurate Perspective Taking.

The complex interaction of Perspective Taking with other equally complex neural components leaves a margin for error. Correspondence bias is the habit of judging others by what we perceive to be their traits as opposed to the actual current situation (Howell & Shepperd, 2011). Cognitively speaking social and cultural variables can influence our interpretations and thus skew Perspective Taking (Betti & Aglioti, 2016).

Example:” Suppose you are sitting on a park bench and a person jogs by you. You also jog and love the feeling you have after a good run. Upon first seeing the jogger, you may have some unconscious physical sensations of running, such as elevated heart rate, breathing harder and even the feeling of having the pavement beneath your feet. Theory of mind would move you to infer something about the mental state of the jogger; that is, your love of jogging may lead you to think about how good the person will feel after completing the run. You will have used affective reaction and cognitive processing to infer the other’s state of mind. Then the person comes to a stop and sits down next to you, muttering how hard it is to jog and swearing to never try it again.”
(Segal et al., 2017)

2.4.4 Self-Other/Awareness

Self/Other Awareness is about maintaining good emotional boundaries between the incoming feelings/stimulus from the outside and your own thoughts and feelings. This allows a person to keep their sense of self as an objective observer of another’s state of mind while experiencing the feelings of the other via the empathic process (Decety & Meyer, 2008, Decety & Moriguchi, 2007). Maintaining this sense of individualism is vital for both empathy and healthy communication (Decety & Lamm, 2006). When we take the perspective of another, differentiating between what are your experiences and the other’s experience is essential. This is what prevents us from only using self-orientated Perspective Taking since without it we are simply projecting our feelings onto the other (Segal et al., 2017).
Example:” Suppose a friend calls you on the phone to tell you that she is distraught because she just lost her job. Of course the friend wants you to understand how she is feeling, that is why she called. However, in addition to being understanding of our friends feelings, we also need to understand what we are experiencing. If we get self-absorbed in making meaning out of our own emotions and ignore the situation of the other, then we are not experiencing empathy.”

(Segal et al., 2017)

2.4.5 Emotional Regulation

According to the literature as a stimulus triggers an unconscious Affective Response, then crosses into conscious interpretation, a person is forced to make sense of the incoming experience(Segal et al., 2017). The level of intensity of the incoming stimulus as well as what other thoughts and emotions it may trigger within a person is unpredictable. If the level of intensity is too high for someone to psychologically handle, it can cause distress. This can interfere with reacting empathically or even overwhelm the person (Segal et al., 2017).

Emotional Regulation is the ability to regulate both our own feelings as well as the feelings coming in from the outside in order to prevent the latter named problems from occurring (Segal et al., 2017). People will more often respond empathically to the plight of others if they have a strong ability to regulate their own emotional states (Eisenberg, Smith, Sadovsky & Spinrad, 2004).

Example:” Consider observing the physical pain of someone you visit in hospital or the emotional pain of someone who has just experienced the death of a parent, or on a positive note, the joy of a friend getting a new job after months of unemployment. These are strong emotions to process empathically. In order to step into their shoes, we need to keep our own emotions in check. If we do not, we lose track of the other person, and become consumed with our own feelings”

(Segal et al., 2017)

2.5 Social Work Model of Empathy

Despite all the breakthroughs in the study of empathy from other fields, in order for this new understanding of empathy to be useful to social work it needs to be contextualized in social work theory. In terms of this paper the researcher was of the opinion that the Social Work Model of Empathy does this successfully . The models inclusion in this study helps to contextualize and deepen
the understanding of the findings within this research paper. This model in conjunction with the social cognitive neuroscientific definition of empathy as described in section 2.4, thus forms the theoretical frame within which this research project was implemented.

When the need to study and operationalize empathy in social work was identified by Segal and Gerdes (2009) they first needed to create a Social Work Model of Empathy that would be useful to social workers and is based on the latest research from multiple disciplines. This model contains three components, each one forming a step in the empathic process and reliant on the input of the previous one. The Social Work Model of Empathy also includes suggested methods on developing these three components. The three components that form the Social Work Model of Empathy were Affective Response, Cognitive processing and finally Conscious Decision Making (Gerdes & Segal, 2009). It needs to be kept in mind that the Affective Response component in the Social Work Model of Empathy is not entirely the same as the Affective Response component found in the EAI despite sharing the same name. They share a similar definition; however, the Affective Response component for the Social Work Model of Empathy includes Affective Mentalizing under its conceptualization and does not have it as a separate component.

The Affective Response step in the Social Work Model of Empathy is an involuntary physiological response to emotional stimulus coming from another person. It is affected by physiological processes. Mirroring is one of these physiological processes (Gerdes & Segal, 2009).

Mirroring according to Decety and Ickes (2011) is an involuntary experience which starts at birth already and never declines as we age and it is the biophysical component that is involved in the function of empathy (Iacoboni, 2008). When we observe someone else’s actions, we experience to various degrees similar physiological reactions as if we were taking these actions ourselves (Iacoboni, 2008). This phenomenon according to Iacoboni is known as mirroring which forms a large part of a modern neuroscientific understanding of what empathy actually is and how it functions.

The actual neural pathway that allows us to do this “mirroring” is known as mirror neurons (Iacoboni, 2008). These are neuron cells that fire both when we take an action as well as when we observe any action by another being (Kaplan & Iacoboni, 2006). This allows us to imitate others which has a large impact on not only our ability to learn to speak but also on processes such as learning how to socialize, empathize and interact with others (Decety & Ickes, 2011).

Affective Response according to Gerdes and Segal (2009) can be influenced and improved by promoting healthy neurological pathways. Research shows that for children growing up nutrition, parenting skills and environment play a large role in developing healthy neurological pathways (Pem,
2015). Much more research will be needed to know how healthy neurological pathways can be stimulated in adults in order to increase a person’s level of Affective Response.

The second step in the Social Work Model of Empathy is cognitive processing (Gerdes & Segal, 2009). According to Gerdes and Segal this is the conscious consideration and processing of the information received from the Affective Response stage. In this step a person considers and makes meaning of the information they have gained from the Affective Response step. Cognition is then used to put ourselves in the shoes of others and to consider things from their perspective (Gerdes & Segal, 2009).

The cognitive processing step according to Gerdes and Segal (2009) can be developed or expressed through various activities. Practicing mindfulness, boundary setting skills as well as roleplaying (Gerdes & Segal, 2009). These are all ways Gerdes and Segal propose to develop cognitive processing.

The final step in this model is Conscious Decision Making (Gerdes & Segal, 2009). This is the process, according to the Social Work Model of Empathy, by which we take voluntary actions in relation to our conclusions made from cognitive processing. This component is where we consciously guide our actions using empathy according to Gerdes and Segal. This manifests in the form of altruism, empathic actions, our morality and social empathy (Gerdes & Segal, 2009).

Conscious Decision Making can be influenced and developed according to Gerdes and Segal (2009) by taking social action, standing up for others who cannot do it for themselves, advocacy, organizing actions or simply helping others.

Below in Table 2 is a summary of the Social Work Model of Empathy. For ease of reference the table below, as created by Gerdes and Segal (2009), summarises the components described in this section.

Table 2- Social Work Model of Empathy

<table>
<thead>
<tr>
<th>Component</th>
<th>Definition</th>
<th>Key Aspects</th>
<th>Ways to Develop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Response</td>
<td>Involuntary, physiological reaction to another’s emotions and actions.</td>
<td>Mirroring, Mimicry</td>
<td>Promote healthy neurological pathways</td>
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<tr>
<td></td>
<td></td>
<td>Conditioning</td>
<td></td>
</tr>
<tr>
<td>Cognitive</td>
<td>Voluntary mental thought processes used to interpret</td>
<td>Self-awareness, Mental flexibility</td>
<td>Set boundaries, Practice mindfulness</td>
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<tr>
<td>Processing</td>
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</tbody>
</table>

According to Gerdes and Segal (2009), simply experiencing empathic feelings and then taking the perspective of another is not the full extent of empathy. From a social work perspective, according to the Social Work Model of Empathy, empathic action based on the information gained due to an empathic reaction is also needed. If empathy is experienced without any steps to manifest it, according to social work theory, that is not truly empathy (Gerdes & Segal, 2009).

This is why unlike the work of Decety and colleagues, the Social Work Model of Empathy includes Conscious Decision Making as a third step (Gerdes & Segal, 2009). The first two components of the Social Work Model of Empathy encapsulates the work of Decety and is measured by the EAI, however using this model also allowed the researcher to contextualize empathy in this study within social work theory.

Various pieces of social work literature state that being empathic plays a role in more effective social work interventions (Gerdes & Segal, 2011, Forrester, Kershaw, Moss & Hughes, 2008). According to Engelbrecht (1999) it is important for social workers to be able to find practical solutions to problems.

<table>
<thead>
<tr>
<th>Conscious Decision-making</th>
<th>Voluntary choices for action made in response to cognitive processing.</th>
<th>Empathic action</th>
<th>Helping</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Voluntary choices for action made in response to cognitive processing.</td>
<td>Empathic action</td>
<td>Helping</td>
</tr>
<tr>
<td></td>
<td>Role taking</td>
<td>Emotion regulation</td>
<td>Social empathy</td>
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<td></td>
<td>Labelling</td>
<td>Judgment</td>
<td>Morality</td>
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<td></td>
<td>Perspective Taking</td>
<td>Self-agency</td>
<td>Altruism</td>
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<td>Use role plays</td>
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<td>Advocacy</td>
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<td>Organizing</td>
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<td></td>
<td></td>
<td></td>
<td>Social Action</td>
</tr>
</tbody>
</table>

(Gerdes & Segal, 2009)
and he also emphasizes the role of the person in the intervention. The Social Work Model of Empathy not only operationalizes empathy in such a way that makes practical interventions regarding empathy possible. It also considers a person’s inherent ability to feel and act on empathic experiences (Gerdes & Segal, 2009).

The Social Work Model of Empathy states that each component interacts dynamically with the others. Having a good ability in only one component does not allow someone to experience the full range of an empathic experience (Gerdes & Segal, 2009). Similarly only feeling or thinking about someone empathically does not help them.

This study tests the inherent ability of second year social work students to experience empathy. Based on their EAI scores, the Social Work Model of Empathy helps us to understand their strengths and deficits beyond just numbers. It also offers methods on how a person’s level of empathy can be improved upon.

According to the authors of the EAI, in its current state it is designed to give a general impression of someone’s level of empathy (Segal et al., 2017). However in order to understand what that level of empathy means practically to social workers, the model the instrument is based on, needed to be understood. The next section looks more in depth at the importance of empathy in social work.

2.6 Importance of Empathy in Social Work

According to the literature the importance of empathy as a concept for effective practice in social work settings is commonly accepted amongst social workers (Hepworth et al., 2009, Shulman, 2008). Gerdes and Segal (2009) found that the importance of empathy in social work has also been extensively researched. Both non-social work and social work researchers indicate that empathy makes people better at caring professions by making them more intuitive with good emotional intelligence (Stanley & Bhuvaneswari, 2016, Goleman, 2006), but what is it that makes empathy so important for social work practice specifically.

In her book on necessary social work skills and knowledge Trevithick (2011) lists empathy as an important skillset. Its uses are listed several times in her book, each time highlighting its importance to social work practice. She lists empathy as vital to building good working relationships. She states that empathy allows a social worker to step into another’s shoes, come closer to their experience and gain greater understanding into the client situation. This, according to Trevithick, allows a social worker to also show that they have an understanding of the client, which helps build rapport, trust and creates a sense of safety within the client. Finally this understanding gained from empathy can also
allow the social worker to put client feelings into words that may be hard for the client to do for themselves, leading to insight and solutions (Trevithick, 2011).

Various studies conducted on practitioner to client relations (Gerdes & Segal, 2011) found the presence of empathy to be beneficial. A direct link has been shown between higher quality outcomes for interventions and higher levels of empathy in the social worker facilitating the intervention (Forrester et al., 2008). A higher level of empathy thus increases the likelihood of a positive outcome for general social work interventions.

Social workers are also taught counselling skillsets in order to perform their duties (Hepworth et al., 2009). In terms of therapeutic interventions specifically, research highlights that a client has a better prognosis when they have an empathetic therapist that understands their needs (Norcross, 2011). According to Norcross, empathy also plays a more specific role in increasing the effectiveness of therapeutic interventions.

Based on this section it can clearly be seen that empathy plays a large role in effective social work practice. It is found in various pieces of social work literature and its positive relationship with good social work outcomes has been demonstrated. However, understanding how empathy is measured is also important to this study, considering this study’s aim was to measure empathy in second year BSW students. The following section will look at how empathy was measured in general and how it was measured in this study.

2.7 Measuring empathy

Over the years there have been various attempts to measure empathy. Self-Report methods were used commonly, as well as direct observation of reactions in relation to a stimulus (Segal et al., 2017). Other methods also included measuring physiological traits such as the somatic reactions of children being exposed to certain situations (Zhou, Eisenberg, Losoya, Fabes, Reiser, Guthrie, Murphy, Cumberland & Shepard, 2002). All these methods had their limitations as they usually relied on the subjective experience of the respondent or even the observations of an external person to identify and even grade the level of empathy someone experiences (Segal et al., 2017).

Examples of more common modern tests are the Hogan Empathy Scale and the Interpersonal Reactivity Index. These methods were not without their own problems. The Hogan Empathy Scale and the Questionnaire Measure of Emotional Empathy was found to test valid yet completely separate parts of empathy (Chlopan, McCain, Carbonell & Hagen, 1985). Thus they do not cover empathy in its entirety as we understand it today. The Interpersonal Reactivity Index has been fairly successful however it was also only found to test part of empathy along with things such as sympathy and
compassion. Constructs that are not empathy (Segal et al., 2017). Various attempts at other instruments where made but they all use various combinations of the above three instruments as opposed to designing a new instrument entirely. This means they also have similar flaws without a clear and direct definition of empathy (Segal et al., 2017).

For this paper the researcher has used the EAI, as it is based in social cognitive neuroscience. This instrument uses a much more clearly defined and operationalized definition of empathy and has been recommended by other researchers for research with social work students (Greeno, Ting & Wade, 2017). The various components have been researched in the social neurosciences, found measurable and the instrument is based on the model of empathy as created by Gerdes and Segal (Gerdes, Lietz & Segal, 2011, Gerdes & Segal, 2009). This instrument will be further explained in detail in chapter 3.

2.8 Bachelors in Social work Degree & BSW students

Initially in South Africa social work qualifications looked much different than they do today. The first ever social work qualifications in South Africa took 3 years to complete (De Jager, 2014) and started in 1938 in various institutions (Nicholas, Rautenbach & Maistry, 2010). After 1987 the degree was expanded to 4 years. Some institutions added the fourth year as part of undergrad while others made it a standalone one year honours qualification done on top of another three year bachelor’s degree. This arrangement however did not seem to be optimal and there was concern over the effectiveness of this method of training social workers (De Jager, 2014).

Through the meeting of various stakeholders an alternative was found, namely the 4 year closed bachelors of social work degree. The process started in 2001 when the standards generating body for social work was established according to the South African Qualification Authorities (SAQA) guidelines (De Jager, 2014). In 2007 the 4 year closed professional degree program known as the Bachelors in Social work became mandatory across South Africa in 17 universities for all persons who wanted to become qualified social workers. The first BSW students educated by these new standards qualified in 2010 and started working in 2011 (De Jager, 2014).

According to the new standards the students are required to meet the following criteria (South African Qualifications Authority Standards Generating Body For Social Work (SAQA), 1998). The students need to enrol at one of the 12 facilities that are currently registered with SAQA. The students need to comply with the outcome based education requirements of SAQA by proving that they have met all ELO’s pertaining to the BSW degree. There are a total of 27 ELO’s (see Table 1) as setup by the social work standards generating body, spanning various categories that will ensure that a newly trained social worker meets all the necessary criteria (South African Qualifications Authority Standards Generating Body For Social Work (SAQA), 1998).
The criterion is met in various ways and depends on the institution. Every year of study the various modules adhere to various sections of the exit level outcomes in order to ensure compliance to standards and optimal training outcomes (De Jager, 2014). Students will achieve this through attending classes, assignments, essays and written examinations. The students also participate in practical education in the form of internships, doing field work at various agencies, submitting reports and applying theory under the supervision of qualified social workers.

2.9 Empathy research pertaining to the level of empathy in social workers and social work students

As stated previously in Chapter 1 there has not been a lot of research done on empathy in social work (Gerdes & Segal, 2011). However thanks to researchers such as Gerdes, Segel and Lietz (2011, 2009) the new movement for a neuroscientifically based definition of empathy in social work has yielded further studies. To date there have been a few studies utilizing the EAI to measure empathy (Greeno, Ting & Wade, 2017, Stanley & Bhuvaneswari, 2016, Inzunza, 2015, Wagaman, Geiger, Shockley & Segal, 2015, Gerdes et al., 2012) and four of the five existing studies looked at social workers in particular.

Gerdes and colleagues (2012) compared the EAI scores of a group of social service providers to a group of offender social service recipients in order to further test the validity of the instrument. Based on the literature it was expected that the group containing the social workers would score far higher than the groups of offenders and violent offenders.

The above hypothesis as well as known-groups validity was confirmed for the EAI. The relationship that was specifically prominent was between the Self/Other Awareness and Emotional Regulation components and demonstrated that boundary setting skills as well as Emotional Regulation training should form part of efforts to train empathic skillsets (Gerdes et al., 2012).

In the next study Wagaman and colleagues (2015) investigated the link between burnout, compassion satisfaction, secondary traumatic stress and empathy among social workers. The findings showed that higher levels of empathy directly influences both a social workers ability to cope with secondary traumatic stress and it also functions as a protective factor for effective long-term self-care (Wagaman et al., 2015).

The Wagaman study also linked some of the empathy components directly to their benefits. The Self/Other Awareness component was found to play a role as a protective factor against secondary traumatic stress as well as burnout (Wagaman et al., 2015). It is suggested that training social workers during their training and careers in SOA along with boundary setting skills could help social workers
avoid the implications of poor boundaries with clients (Wagaman et al., 2015). Emotional Regulation, which according to Wagaman is also a trainable skill, plays a role in conjunction with SOA to help Social Workers prevent burnout and secondary trauma. Emotional Regulation skills can serve as a protective factor and allow a social worker to not become overwhelmed by the content of their work (Wagaman et al., 2015).

Finally according to the Wagaman (2015) study a high level of Affective Response is linked to higher levels of compassion satisfaction which also increases work satisfaction and motivation. It is however cautioned that Affective Response needs to be regulated. This is because unregulated Affective Response could cause a social worker to consistently take on heavy emotional loads while working with and listening to traumatic client content (Wagaman et al., 2015).

The next study by Stanley and Bhuvaneswari (2016) specifically investigated social work students, investigating the levels of empathy and emotional intelligence of each of the first three BSW year groups at an all-female college in India. The researchers found that there is a correlation between the level of empathy and a respondent’s level of emotional intelligence. The findings indicated that the level of empathy was higher for third year students than first year students. The researchers indicate that first year students may need more support with empathy skill sets (Stanley & Bhuvaneswari, 2016). The importance of Self/Other Awareness and boundary setting is once again emphasized, highlighting its role in preventing burnout and weak boundaries.

The final study that will be described was done by Greeno, Ting and Wade (2017). Their study highlights both the growing need for training more empathic social workers and the lack of research in terms of determining the level of empathy among social work students. They specifically investigated the relationship between empathy, self-esteem and work engagement among bachelors of social work (BSW), masters of social work (MSW) and nursing students.

The study found that all three groups had high levels of affective empathy (Greeno, Ting & Wade, 2017). The nursing students and MSW students were found to have significantly higher scores in general than the BSW students, with the MSW and nursing students having similar scores. The researchers that conducted the study speculate that the reason for the low scores amongst the BSW student group is because they have spent less time working with clients and building practical experience than the other two groups (Greeno, Ting & Wade, 2017).

According to the researchers from the above mentioned study the EAI is a very comprehensive empathy measure and they found that more work engagement, affective empathy and field experience was good predictors of higher total empathy scores on the EAI (Greeno, Ting & Wade, 2017).
Despite the sparse research on the topic, certain patterns have started to form in the literature available. According to the above research, empathy is important to social workers and social workers in training for a variety of reasons. A social workers skill in the different components measured by the EAI play a role in effectively implementing empathy in a social work setting. Furthermore it shows that there are methods to teach and improve these skills. This important role empathy plays within social work needs to be strongly considered from a teaching point of view in order to try and improve the skills and training of social workers in general. The next section describes training policy and legislation for social workers in South Africa and how it is related to empathy.

2.10 Policy and Legislation

The SAQA guidelines were relevant in terms of this study, containing information intended to directly guide the curriculums, education and training of social workers in South Africa (South African Qualifications Authority Standards Generating Body For Social Work (SAQA), 1998). In the following section the researcher explains this policy, its purpose and its limitations pertaining to empathy, training and social work practice.

SAQA requires for all educational sectors to have a quality assurance body that allows monitoring of qualifications. If this is lacked a quality assurance body needs to be created in order to ensure a national standard (Republic Of South Africa, 1995). Due to the above mentioned ACT, in 2001, the Standards Generating Body (SGB) for social work was created and registered with the National Qualifications Framework. All social workers were required from this point on in 2007 to do a four year social work bachelor’s degree that complies with SAQAS outcomes-based education. They also had to comply with the twenty seven exit level outcomes (see Table 1), designed to ensure a high national standard for social workers, as created by the social work SGB (De Jager, 2014).

The researcher felt that the creation of the exit level outcomes was a step in the right direction for quality assurance but what difference does it make if we are not sure that the social workers being trained do not meet all these criteria as effectively as possible. In a recent study it was found that qualified social workers (n=80) felt they had not been adequately trained in terms of statutory work and were struggling to apply what they had learned at university in the field (De Jager, 2014). This is despite exit level outcome number 25 (see Table 1) clearly stating that they should be able to demonstrate an understanding of statutory work. There is nothing wrong with the exit level outcome policy, however better measurements may be needed in order to ensure that they are adhered to.

Since social work is a very practical profession a high standard of practice would not only involve the appropriate knowledge but also equipping students with the appropriate abilities. This study looked at what the level of empathy within a second year social work class is , but the researcher is sure there
may be other skills that students are simply expected to have without direct in depth training. If these skills are not accurately measured it will be very difficult to identify problem areas where students may need more direct input and not simply more book knowledge in order to be highly effective social workers. According to the various parts of social work practice that this study has highlighted as being affected by empathy, high levels of empathy could be important for proper execution of (see Table 1) exit level outcome one, two, three, four, seven, ten, twelve and fourteen. Simply knowing what you should be doing may not be enough.

The change to the four year bachelors of social work degree has been well received and it upgraded the curriculums of social work training institutions across the country due to the new minimum standards (Earle, 2008). The researcher feels this was a good step in the right direction however new ways to increase standards of practice even more needs to be found. This research contributes to the understanding of how empathy can be measured and how it can be used to ensure that social workers are equipped for optimal practice with this skill. It highlights the need for a more accurate set of measurements and research into a social work competency model in order to further lift the social work standard of practice in South Africa.

2.11 Conclusion

All relevant literature has been covered in the literature review, giving a theoretical outline for the topic being researched in this research project. The literature review describes the history of empathy, how it is measured, the relationship with social work and its relevance to this research project. Considering that this research paper is commenting on the use of empathy in social work training, the literature review also looked at the four year Bachelors of social work degree, social work students and policies relating to the training of social work. The next chapter contains all relevant research methodology used in this study.
CHAPTER 3

3.1 Introduction

In this chapter the researcher will discuss, in terms of this study, the research methodology used. It will include the research setting, research approach, research design, instrument, data analysis methods, ethics and the limitations of the study.

3.2 Research setting

The study was conducted at a South African university, one of the twelve institutions registered with SAQA to train social workers (South African Qualifications Authority Standards Generating Body For Social Work (SAQA), 1998). The university is situated in the Western Cape and the study was conducted in their social work department. The university offers a four year undergraduate BSW program in social work.

The setting was chosen for the following reasons. The institution has a large body of BSW students in training. Access to the training institution and ethical clearance was convenient for the researcher in terms of travel and accessing resources. The institute is one of the larger institutes training social workers in the Western Cape, with a fairly large social work department.

3.3 Research approach

The following section will describe the research approach as well as the paradigm used in this study.

3.3.1 Quantitative research approach

This study used a quantitative research approach. The quantitative method uses scales and instruments to allow researchers to measure and assign numeric values to a natural phenomenon. These values can then be codified and variables can be compared in order to gain a deeper understanding of the natural world through maths (Bless, Higson-Smith & Kagee, 2006).

The quantitative approach was chosen as it was the optimal approach to use in conjunction with the EAI instrument. The EAI will be explained later in this chapter (see section 3.4.3). It quantifies empathy, which can then be analysed using the appropriate statistical analysis methods (Howell, 2016, Muijs, 2010). The advantage of numerical values is that they can be very precise, the values mean the same thing regardless of context and they allow for both inferential and descriptive statistical analysis (Bless, Higson-Smith & Kagee, 2006).
3.3.2 Positivist paradigm

The paradigm that best pairs with quantitative research is the positivist approach. Positivism is the application of the natural science research model to social phenomena (Denscombe, 2002). Positivism postulates that the methods used to research natural sciences can also be used in social sciences. Despite the complexities of man, positivism feels that cause and effect relationships can still be proven under social circumstances as there exists a measurable objective reality over and above the personal experiences of individuals (De Vos et al., 2011).

The researcher applied the positivist paradigm in terms of a structured, methodical and deductive approach to the study of empathy. This was achieved by using the EAI to measure empathy, an instrument that defines and measures empathy as a neurobiological process as opposed to a subjective experience (Lietz et al., 2011).

According to the positivist paradigm knowledge is observable and can be deduced from accumulated and verified empirical facts (De Vos et al., 2011). The researcher built this study on the observable empirical facts gathered by social cognitive neuroscientists and furthered by the research of social workers in terms of how empathy functions and also how it can be effectively measured.

3.4 Study research design

The researcher used what is referred to by De Vos et al (2011) as a one-group post-test only design. This design is utilized normally to see if an independent variable has had any effect on the dependent variable. Most importantly in this type of research design the dependant variable has no control group nor is it measured more than once. This is the weakness in using this approach, the researcher using it only has a single data set (De Vos et al., 2011).

Despite this weakness highlighted by De Vos, the researcher chose this approach for the following reason. Various pre and post testing and measuring the effectiveness of BSW training on empathy was outside the scope of this study. However by seeing what level of empathic functioning students had midway through their BSW degree, following the current social work curriculum, has allowed the researcher to speculate where further research is needed and how dire the need is for improving the method of teaching empathy in social work.

The researcher utilized the EAI questionnaire for the single collection of data on the dependant variable. This survey approach to data collection allowed for a time and cost effective method that reached the maximum number of respondents available to the study while also preserving their anonymity (Brink, Van der Walt & Van Rensburg, 2006).
3.4.1 Sampling Method, Study population and Study sample

Sampling is the process by which a researcher chooses, based on their research question, who or what needs to be included in their study as well as how the subjects of their study needs to be chosen (Alston & Bowles, 2003). The researcher used convenience sampling, meaning that the researcher chose the sample group based on the resources that was available (De Vos et al., 2011).

The researcher included all second year BSW students at the university. The researcher included the entire year group as that is the maximum sample size that could be acquired while still only using second year BSW students. The researcher did not expand the study to first, third and fourth year BSW students as he did not have access to those year groups.

The second year BSW group at the time of data collection contained 51 students. The researcher attempted to include the entire population of second year BSW students at the university. However, some students were not present on the data collection day and students where offered the opportunity to opt out of the study which means the entire population did not participate. The final sample size was N=40, constituting 78% of the total population.

The sample was predominantly female; this was in keeping with the South African National trend. By 2012 only 30% of registered social work students were male (Khunou, Pillay & Nethononda, 2012). Only 7% of respondents in the study was male. The average age of the researchers sample was 21. No data was available for the average age of enrolled BSW students. The council of higher education shows that the average age of university enrolments according to the last data gathered in 2013 was between twenty and twenty four years old (Council on Higher Education South Africa, 2013). Despite an accurate comparison not being possible using this report it is worth it to note that most of the sample population for this study fell under the twenty to twenty four year old category.

3.4.2 Procedure for data collection

Ethical approval was first gained for the research study. An appropriate date that would not interfere with the studies of the students was arranged with the lecturer of the second year BSW class. Both the instrument (see Appendix 1) and the consent form (see Appendix 2) were prepared beforehand. The data was collected in a single sitting on 17 March 2015 at the university. It was arranged to occur after their class. This ensured that the research would not take any more time out of their schedule than what they were willing to give.

The researcher explained to the second year BSW class what the study was about. It was highlighted that the students were by no means obligated to participate in the study. It was explained that not
participating in the study would have no impact on their grades and if they did not wish to participate they were free to leave the class while the study was conducted. It was also explained to the students that their confidentiality would be protected and that the researcher and his supervisor where the only people with access to the data. All questions about the study were answered. The students who stayed to participate where given the letter of consent (see Appendix 2) to fill out, this showed that they agreed with the terms.

The instrument was explained to the class. They understood that it was a 6 point Likert scale and that they needed to mark the appropriate number that reflected how they felt about each item. It was explained to the students that they have 10 minutes to complete the instrument. Each student was handed a copy of the EAI (see Appendix1).

The class filled out the paper work. The researcher collected it and safely stored all papers in a designated folder.

3.4.3 Instrument

This study used an instrument that was researched and designed by Lietz and colleagues (2011). The instrument is called the EAI and it was based on the Social Work Model of Empathy (Gerdes & Segal, 2009). The instrument has been recommended for research with social work students by other researchers (Greeno, Ting & Wade, 2017). Permission to use the EAI in this research paper was gained via e-mail along with the latest copy of the instrument. The authors forwarded an unpublished document to the researcher containing a summary of the EAI with all the latest up to date research, citations , development information and instructions for use as well as the instrument itself (Gerdes, 2012). Later this information would be updated and found in the book Assessing Empathy (Segal et al., 2017).

The EAI (see Appendix 1) consists out of 22 items measuring 5 separate components. Items were answered using a 6 point Likert scale to show level of agreement with that particular items statement. The range of the Likert scale was as follows:

\[ I = Never \; ; 2 = Rarely; \; 3 = Sometimes; \; 4 = Frequently; \; 5 = Almost \; always; \; 6 = Always. \]

The components measured was Affective Response, Affective Mentalizing, self/other awareness, Perspective Taking and Emotional Regulation.

Affective Response contains five items. These items measure a person’s level of automated Affective Responses. Items such as “When I see someone being publicly embarrassed I cringe a little” and “When I see someone receive a gift that makes them happy, I feel happy myself” indicate emotions
automatically triggered by viewing these feelings in another person. The items consider both negative and positive emotions and experiences that can be automatically triggered by both positive and negative outside stimulus.

Affective Mentalizing uses four items to measure a person’s automatic ability to identify, conceptualize and feel emotions from an outside stimulus. This is limited to imagining what another person is feeling and then experiencing the feeling partially yourself but it is not fully taking their perspective cognitively. Items such as “I am good at understanding other people’s emotions” and “When I see a person experiencing a strong emotion I can accurately assess what that person is feeling” is testing for the ability to identify and feel what another person may be experiencing.

Perspective Taking is measured with five items. This component measures the cognitive identification and understanding of another’s experiences more deeply as opposed to Affective Mentalizing that is limited to identifying and experiencing only the others emotion or feeling. Items like “I can consider my point of view and another person’s point of view at the same time” attempt to measure the ability to take another person’s perspective. Other items such as “I can imagine what it’s like to be in someone else’s shoes” and “I can agree to disagree with other people” consider a person’s ability to cognitively understand another person’s feelings and its context.

The Self/Other Awareness component contains four items. This component measures a person’s ability to differentiate between their own feelings and the feelings of others. The item “I can tell the difference between someone else’s feelings and my own” encapsulates what this component is measuring. It also considers this differentiation in terms of ability. The item “I can explain to others how I am feeling” demonstrates this, since a person needs to be able to identify their own feelings and that of others properly in order to clearly explain what they are feeling.

The final component Emotional Regulation has four items. This component measures the person’s ability to regulate the level of emotions being experienced from incoming stimulus. The item “Emotional stability describes me well” considers general temperament and a person’s general ability to keep calm despite more intense emotional experiences. Other items such as “When I am upset or unhappy, I get over it quickly” measures a person’s ability to control their feelings after they have been overly stimulated. Together these items consider the ability of a person to not be overwhelmed by their own emotional experiences or the feelings of others.

Together all components give a general impression of a person’s level of empathy (Segal et al., 2017).
3.5 Data analysis

Data was obtained from the EAI questionnaires filled in by the second year BSW students. All questionnaires were checked to determine if they were correctly filled out and if there were any that needed to be excluded on the basis of being incomplete. The data from 40 questionnaires were captured in a single excel document and then entered into the statistical package for social sciences (SPSS) version 24 for further statistical analysis of the quantitative data.

3.5.1 Descriptive Data Analysis

The study used descriptive data analysis techniques. Descriptive statistics describes the various basic features of the data set (Howell, 2016). It simplifies the data sets into a much more easily accessible format. This allowed the researcher to deduce findings from the data in order to answer the research questions. The researcher used descriptive statistics in order to summarise and describe the data from all five components of the EAI questionnaire as well as the demographic data of the respondents (see chapter 4).

The type of descriptive data analysis technique used was univariate analysis. This means that the researcher individually analysed the variables gained from data gathering. The analysis done in Chapter 4 was only on the individual variables and no quantitative data analysis was done between two or more variables. Univariate analysis simply describes the data as it is (Muijs, 2010).

Univariate analysis was found to be appropriate to this study for the following reasons. The data did not allow for nor was the scope of the study large enough to use inferential statistics or bivariate analysis (Howell, 2016). The EAI was an already created and researched questionnaire with proven validity and reliability according to its creators (Segal et al., 2017). The researcher made no changes to the format before implementing it and the study was simply interested in the single variable outputs of the instrument in order to answer the research question posed by the study. Univariate analysis is sufficient for analysing the data in order to answer the research question.

Before looking at the details of what univariate analysis was done it needs to be noted that for ease of reference this research paper will from here on forward refer to each item in the EAI (see Appendix 1) in the following way. First the abbreviation for the component measured is stated and then the number indicating the position of the item in the EAI. For example ER5 measures Emotional Response and it is the fifth item on the EAI.

As part of the analysis the population frequency distribution was calculated using SPSS for each answer of all respondents, to all twenty two items in the EAI. Attention was paid to data from item ER5 and ER10; requiring recoding due to the fact that they are reverse scored items. The item
statements also needed to be recoded to the opposite meaning for ease of reference. This was only done for chapter four and five for data analysis purposes and not on the instrument itself.

Item ER5 of the Emotional Regulation states “When I get angry, I need a lot of time to get over it” and was recoded to “When I get angry, I don’t need a lot of time to get over it”. The second reverse scored item ER10, also from the Emotional Regulation component states “Friends view me as a moody person”. It was recoded to “Friends don’t view me as a moody person”. SPSS was also utilized in order to output the data in the form of a percentage as well as a bar graph. Bar graphs help simplify the data for analyses.

The researcher also realized that the data set was still too large to effectively analyse and therefore also recoded the 6 point Likert scale into a dichotomous variable using SPSS. 1 = Never; 2 = Rarely; 3 = Sometimes was recoded to 1 = Low and 4 = Frequently; 5 = Almost always; 6 = Always was recoded to 2 = High. The data was then also described in terms of the recoded scale. Research has shown that this can lead to a loss of variance in order to simplify the data (Cohen, 1983). However other newer research has shown that dichotomization can greatly simplify data, making it easier to understand without misleading results or greatly altering the strength of the findings (Farrington & Loeber, 2000). Considering the small size of the sample and the inclusion in this paper of the full 6 point Likert scale results, the researcher found dichotomization added to analysis without producing misleading results. All data has been described and analysed in Chapter 4.

3.5.2 Analysis of Instrument Reliability and Validity

This section describes and considers the EAI reliability and validity. It briefly describes these concepts and their relation to the EAI and this research study. What follows is a description of reliability and validity, the reliability and validity as proven by the creators of the EAI instrument as well as tests administered by the researcher in order to ensure the reliability and validity of the study.

Validity in an instrument is the indicator of to what degree an instrument actually tests the constructs that it has set out to measure (Pallant, 2013). Reliability of an instrument measures how reproducible results are, in other words will the output of the instrument be the same for all uses (Coaley, 2014). This study considers both the steps the authors have taken to ensure reliability and validity upon creating the instrument and will also conduct a Cronbach analysis for all components as well as the instrument in its entirety in order to ensure trustworthy results.

According to Segal and colleagues the EAI was administered 8 times to a total of 3500 respondents over four years during its development (Segal et al., 2017). An exploratory factor analysis was done initially in a fifty four item preliminary version of the EAI (Gerdes, Lietz & Segal, 2011). The next round of testing would eliminate non-essential items and improve on the remaining items, thus
increasing over all reliability and validity (Lietz et al., 2011). A further research study showed criterion validity in a comparison study between social service providers and social service users being treated for anger management, sexual offences as well as perpetrators of domestic violence (Gerdes et al., 2012). According to the creators of the instrument the final test conducted with a test sample of 450 college students found the instrument to be valid and reliable (Segal et al., 2017).

In order to determine reliability of the EAI a Cronbach alpha analysis was run on all five components and the whole instrument using SPSS. Cronbach’s Alpha is one of the most common methods for calculating internal consistency and reliability of a scale (Cooley, 2014) and for a scale to be declared as reliable it is generally required to have an Alpha of .7 or higher (Nunnally & Bernstein, 1978). Despite this general cut off there is also other research that needs to be considered in terms of this study.

Cronbach’s Alpha can be affected under certain conditions. When the amount of items in a scale is less than ten, the alpha scores can be very low (Pallant, 2013). Despite the suggestion of Nunnally (Nunnally & Bernstein, 1978) there are researchers that indicate that an alpha score between .5 and .7 can be classified as moderately reliable, an Alpha score above .7 has high reliability and above .9 has excellent reliability (Hinton, McMurray & Brownlow, 2004).

Table 3 indicates that the Affective Mentalizing and Self/Other Awareness components have high reliability according to the above literature. It further indicates that Perspective Taking and Emotional Regulation have moderate/acceptable reliability. Affective Response is the only component that has low reliability according to the work of Hinton (Hinton, McMurray & Brownlow, 2004).

The researcher considered the Affective Response if certain items were deleted, however removal of none of the items would raise the components Cronbach Alpha score. Considering that the Affective Response Alpha score is close to the cut off of .5 and that the literature states scales with less than ten items can have low alpha scores (Pallant, 2013) the researcher finds the components reliability acceptable despite it not being optimal.

Table 3 - Cronbach Alpha Analysis

<table>
<thead>
<tr>
<th>Component:</th>
<th>Cronbach Alpha:</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Response</td>
<td>.474</td>
<td>5</td>
</tr>
<tr>
<td>Affective Mentalizing</td>
<td>.706</td>
<td>4</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>.626</td>
<td>5</td>
</tr>
</tbody>
</table>
The researcher looked at other studies utilizing the EAI in terms of reliability and validity. A study conducted by Greeno (2017) using the EAI reports a Cronbach Alpha score of .86, which appears to be an Alpha score for the entire instrument. Considering the limitations highlighted in the literature for testing less than ten items with a Cronbach Alpha test and the example of the above named research paper, the researcher tested all twenty two items. The result was a Cronbach’s Alpha of .836 which indicates high reliability according to the literature (Hinton, McMurray & Brownlow, 2004).

The researcher also considered running a factor analysis test in order to test validity. After reviewing the literature the researcher found several problems with this test pertaining to this paper. The EAI contains twenty two items and the research sample is N=40. According to the literature this is a very small sample size for a factor analysis, best practice being at least a sample size of a hundred (Harrington, 2009). Other authors suggest ten respondents for every item in the instrument (Nunnally & Bernstein, 1978), criteria which this study again does not meet.

The above outcomes in conjunction with the data available from the creators of the EAI indicate two things. Firstly the Affective Response and Emotional Regulation components should be investigated again in a study with a larger number of respondents to determine if some of the items may need to be improved. Despite these findings, considering both the test findings and the literature, the reliability of the EAI seems to be at an acceptable level for this study.

3.6 Ethical considerations

During the entirety of the research process the researcher held to strict ethical guidelines in order to ensure the wellbeing of all involved. The research was supervised by an experienced researcher and ethical clearance was obtained in order to ensure the quality of the research. The researcher considered non-maleficence, beneficence and autonomy (Bless, Higson-Smith & Kagee, 2006).

*Non-maleficence* is the practice of not harming others during the research process (Bless, Higson-Smith & Kagee, 2006). No one was harmed during the execution or because of the content of this research study. Care was taken with the data of respondents to protect their identities.
Beneficence involves a positive outcome for others directly or indirectly because of this research paper (Bless, Higson-Smith & Kagee, 2006). This study hoped to contribute to a discussion on current social work education policy that could benefit the profession as a whole.

Autonomy is the right of individuals to decide their own actions (Bless, Higson-Smith & Kagee, 2006). Participation in the study was voluntary and did not harm the individuals in any way if they chose not to participate.

3.7 Limitations of the study

The biggest limitation of this study was the sample size. This made reliability and validity testing as well as conclusive inferences from the data difficult. The sample size is large enough to make rough estimations and see starting trends but this study was limited to mostly indicating new avenues of possibly fruitful research. However the researcher did not have access to a larger sample.

There were no more second year BSW students to include at the Western Cape university that was approached, however if the data gathering had been done at other universities as well, this would have increased the sample size. Stratified random sampling could also have been used by approaching various institutions in the Western Cape. This would give a richer picture of the level of empathy of second year BSW students across the Western Cape (De Vos et al., 2011). Each year group for the BSW degree could also have been tested and comparisons done in order to see if there was an increase in empathy over time. All of the above however was not feasible due to time, scope and resource constraints for this study.

The demographic data gathered was also very limited. This also makes comparisons and inferences difficult. The researcher should have gathered more demographic data and linked the demographic data of each respondent to their questionnaire while retaining their anonymity. This would have made a much richer analysis of findings possible.

The EAI did not have cut off scores and this was problematic. Despite the EAI creators indicating that the EAI is designed to give a general impression of empathy, the researcher feels that more research into cut off scores and the meaning of exact values within the general population would add much more depth to the findings obtained by the EAI.

Finally the researcher realises that the research paper is limited by only having a single round of data gathering. Pre and post-tests, testing all four year groups or testing social work student scores against social workers already in the field would have yielded better results. Having only one data set is a limiting factor for this study.
3.8 Conclusion

This chapter discussed the research methodology used in this study. It discussed the use of a quantitative approach within the positivist paradigm. It gave an in depth explanation on how data was collected, and analysed. It looked at the sampling method, procedures and the instrument used to collect the data. The next chapter will describe the data obtained through this study and also discuss the results.
CHAPTER 4

4.1 Introduction

The first half of this chapter will describe the nature of the sample used in this study as well as the results obtained from the EAI. The results will be presented using both graphical and text descriptions. The second half of this chapter will discuss the results in depth as well as the meaning of the findings.

4.2 Nature of the Sample

The following section describes the sample realization and the demographics of the respondents in the study.

4.2.1 Sample realization

There were a total of fifty one second year BSW students available in the year group that was approached by the researcher. Forty (n=40, 78%) of the available second year BSW students agreed to do the study while eleven (n=11, 22%) of the students either declined or were not present on the day the research was conducted. All of the questionnaires (n=40, 100%) were all fully and properly completed, bringing the sample size to forty respondents.

4.2.2 Demographics

Most of the sample were female (n=37, 93%), there were only three (n=7 %) respondents that were male (see Table 4).

Table 4-Gender of Respondents

<table>
<thead>
<tr>
<th>Gender:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (n ,% )</td>
<td>3(7%)</td>
</tr>
<tr>
<td>Female (n ,% )</td>
<td>37(93%)</td>
</tr>
<tr>
<td>Total number of respondents (n ,% )</td>
<td>40(100%)</td>
</tr>
</tbody>
</table>

It can be seen in Table 5 that the respondents had an average age of 20.9(sd 3.8). The lowest age category was twenty years old and the highest age category was forty four. Most of the respondents (n=32, 80%) were twenty years old and seven (n=7, 18%) of the respondents fell between the ages of twenty one to twenty three. Only one respondent (n=1, 3%) was older than twenty three (see Table 5).
### Table 5-Age of Respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>(n, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>32 (80%)</td>
</tr>
<tr>
<td>21</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>22</td>
<td>3 (8%)</td>
</tr>
<tr>
<td>23</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>44</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>Average age (SD)</td>
<td>20.9 (3.8)</td>
</tr>
</tbody>
</table>

### 4.3 Empathy Assessment Index Results

In order to answer the research objectives of this study the researcher utilized the EAI to obtain the data described in this chapter. Below in Table 6 is the descriptive statistics for all the EAI components.

### Table 6-Descriptive Statistics for All Variables

<table>
<thead>
<tr>
<th></th>
<th>ARAVG</th>
<th>AMAVG</th>
<th>SOAVG</th>
<th>PTAVG</th>
<th>ERAVG</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>N Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>4.9700</td>
<td>4.7063</td>
<td>4.4625</td>
<td>4.7850</td>
<td>4.1188</td>
</tr>
<tr>
<td>Median</td>
<td>5.0000</td>
<td>4.7500</td>
<td>4.3750</td>
<td>4.8000</td>
<td>4.1250</td>
</tr>
<tr>
<td>Mode</td>
<td>5.60</td>
<td>4.75</td>
<td>4.25</td>
<td>4.60a</td>
<td>3.75a</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.63173</td>
<td>.67674</td>
<td>.86334</td>
<td>.63793</td>
<td>.80858</td>
</tr>
<tr>
<td>Minimum</td>
<td>3.40</td>
<td>3.00</td>
<td>2.00</td>
<td>3.20</td>
<td>2.25</td>
</tr>
<tr>
<td>Maximum</td>
<td>5.80</td>
<td>5.75</td>
<td>6.00</td>
<td>6.00</td>
<td>5.75</td>
</tr>
</tbody>
</table>

* a. Multiple modes exist. The smallest value is shown

Table 7 contains the overall rating of the 22 items answered by the 40 respondents from the highest to the lowest score ratings. This table also summarizes and contains each items mean, median as well as the standard deviation.
The EAI items with the top five ratings were: *I can imagine what it’s like to be in someone else’s shoes* (n=38, 95%), *I am aware of other people’s emotions* (n=38, 95%), *When I see someone being publicly embarrassed I cringe a little* (n=37, 93%), *When I am with someone who gets sad news, I feel sad for a moment too* (n=37, 93%) and *When I see someone receive a gift that makes them happy, I feel happy myself* (n=36, 90%).

The items with the five lowest ratings were: *When I get angry, I don’t need a lot of time to get over it* (n=30,75%), *Emotional stability describes me well* (n=27,68%), *I can explain to others how I am feeling* (n=24,60%), *I am aware of what other people think of me* (n=22,55%), *When I am upset or unhappy, I get over it quickly* (n=16,40%). The results of each item will be fully described under each of the appropriate headings under the items corresponding component.

**Table 7-EAI Variables and Outputs**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Item Code</th>
<th>Item:</th>
<th>Rated High n (%)</th>
<th>Rated Low n (%)</th>
<th>Mean (SD)</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT13</td>
<td>I can imagine what it’s like to be in someone else’s shoes</td>
<td>38(95%)</td>
<td>2(5%)</td>
<td>5(0.8)</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>AM22</td>
<td>I am aware of other people's emotions</td>
<td>38(95%)</td>
<td>2(5%)</td>
<td>5(0.8)</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>AR7</td>
<td>When I see someone being publicly embarrassed I cringe a little</td>
<td>37(93%)</td>
<td>3(8%)</td>
<td>5.3(1.1)</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>AR16</td>
<td>When I am with someone who gets sad news, I feel sad for a moment too</td>
<td>37(93%)</td>
<td>3(8%)</td>
<td>5.1(0.9)</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>AR1</td>
<td>When I see someone receive a gift that makes them happy, I feel happy myself</td>
<td>36(90%)</td>
<td>4(10%)</td>
<td>5.1(1)</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>ER10</td>
<td>Friends don’t view me as a moody person</td>
<td>36(90%)</td>
<td>4(10%)</td>
<td>4.9(1.2)</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>SOA14</td>
<td>I can tell the difference between my friend’s feelings and my own</td>
<td>36(90%)</td>
<td>4(10%)</td>
<td>4.8(0.9)</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>SOA8</td>
<td>I can tell the difference between someone else’s feelings and my own</td>
<td>35(88%)</td>
<td>5(13%)</td>
<td>4.9(1.1)</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>AM12</td>
<td>When I see a person experiencing a strong emotion, I can describe what the person is feeling to someone else</td>
<td>35(88%)</td>
<td>5(13%)</td>
<td>4.6(1)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>PT15</td>
<td>I consider other people’s points of view in discussions</td>
<td>35(88%)</td>
<td>5(13%)</td>
<td>4.8(1.1)</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>PT19</td>
<td>I can agree to disagree with other people</td>
<td>35(88%)</td>
<td>5(13%)</td>
<td>4.6(0.9)</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>PT4</td>
<td>I can consider my point of view and another person’s point of view at the same time</td>
<td>34(85%)</td>
<td>6(15%)</td>
<td>4.7(1)</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>PT6</td>
<td>I can imagine what the character is feeling in a good movie</td>
<td>34(85%)</td>
<td>6(15%)</td>
<td>5(1.2)</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>AM3</td>
<td>I am good at understanding other people’s emotions</td>
<td>33(83%)</td>
<td>7(18%)</td>
<td>4.7(1)</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>AM9</td>
<td>When I see a person experiencing a strong emotion I can accurately assess what that person is feeling</td>
<td>33(83%)</td>
<td>7(18%)</td>
<td>4.5(0.8)</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td>AR11</td>
<td>When I see someone accidently hit his or her thumb with a hammer, I feel a flash of pain myself</td>
<td>33(83%)</td>
<td>7(18%)</td>
<td>4.7(1.3)</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>AR21</td>
<td>Hearing laughter makes me smile</td>
<td>30(75%)</td>
<td>10(25%)</td>
<td>4.7(1.3)</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>ER5</td>
<td>When I get angry, I don’t need a lot of time to get over it</td>
<td>30(75%)</td>
<td>10(25%)</td>
<td>4.1(1.3)</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>ER2</td>
<td>Emotional stability describes me well</td>
<td>27(68%)</td>
<td>13(33%)</td>
<td>4.1(1.1)</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>SOA18</td>
<td>I can explain to others how I am feeling</td>
<td>24(60%)</td>
<td>16(40%)</td>
<td>4.1(1.3)</td>
<td>5</td>
</tr>
<tr>
<td>21</td>
<td>SOA20</td>
<td>I am aware of what other people think of me</td>
<td>22(55%)</td>
<td>18(45%)</td>
<td>4(1.3)</td>
<td>4</td>
</tr>
<tr>
<td>22</td>
<td>ER17</td>
<td>When I am upset or unhappy, I get over it quickly</td>
<td>16(40%)</td>
<td>24(60%)</td>
<td>3.5(1.2)</td>
<td>3</td>
</tr>
</tbody>
</table>

### 4.3.1 Level of Affective Response

This component measured the level of Affective Response of each respondent using five items. This section will describe the EAI results for this component for all 40 respondents in the research sample. The frequency distribution of the data is summarized in Figure 1, using a bar chart for ease of reference.
Item AR1 is ranked 5th as the most agreed with statement (see Table 7). It is the second highest ranking Affective Response statement and states, “When I see someone receive a gift that makes them happy, I feel happy myself.” Table 7 indicates that 90% (n=36) of respondents scored high on this item and 10% (n=4) scored low. The statement had a median of 5, a mean of 5.1 and a standard deviation of 1 (see Table 7). Most respondents answered either 5=Almost always (n=15) or 6=Always (n=16). The lowest response was 3=Sometimes with four instances (see Figure 1).

AR7 asked “When I see someone being publicly embarrassed I cringe a little”. It ranked 3rd as the overall most agreed with statement (see Table 7), with 93% (n=37) of respondents scoring high and 8% (n=3) scoring low. This is the most agreed with statement in the Affective Response component. On figure 1 it can be seen that twenty three respondents, a little more than half of all respondents, answered 6=always to AR7. Only one respondent answered 2=Rarely. The median was 6 for this item with a mean of 5.3 and a standard deviation of 1.1.

AR11 asked “When I see someone accidently hit his or her thumb with a hammer, I feel a flash of pain myself”. It was ranked much lower on Table 7; it was the 15th highest ranked item. Of the forty respondents that answered this item thirty three (83%) scored high and seven (18%) scored low. It had a mean of 4.7 with a standard deviation of 1.3. The median was 5, the same as AR1, despite being ranked far lower on Table 7. The answer 5=Almost Always and 6=Always received equal amounts of agreement (n=13). One respondent answered 1=Never.

Affective Response Frequency Table

<table>
<thead>
<tr>
<th>Affective Response</th>
<th>Frequency</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Almost Always</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR1 “When I see someone receive a gift that makes them happy, I feel happy myself.”</td>
<td>16</td>
<td>15</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR7 “When I see someone being publicly embarrassed I cringe a little.”</td>
<td>23</td>
<td>21</td>
<td>8</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR11 “When I see someone accidently hit his or her thumb with a hammer, I feel a flash of pain myself.”</td>
<td>13</td>
<td>12</td>
<td>7</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR16 “When I am with someone who gets sad news, I feel sad for a moment too.”</td>
<td>17</td>
<td>14</td>
<td>6</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR21 “Hearing laughter makes me smile.”</td>
<td>14</td>
<td>11</td>
<td>5</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1-Affective Response Frequency
AR16 asked “When I am with someone who gets sad news, I feel sad for a moment too”. It is only one below AR7, ranking 4th on table 7. Of the respondents 93 % (n=37) scored high and 8% (n=3) of respondents scored low. This was identical to the scores of AR7 (see Table 7). However what differs is the following. The mean is 5.1 with a standard deviation of 0.9 and the median of 5. The reason for this difference could be seen in Figure 1. AR16 has a more equal distribution of answers between 5=Almost Always (n=14) and 6=Always (n=17), while AR7 has more respondents answering 6=Always (n=23) and less answering 5=Almost Always (n=8). This meant the distribution of answers were different. The lowest answer chosen was 3=Sometimes with three instances.

AR21 asked “Hearing laughter makes me smile”. It was ranked 16th on Table 7 despite having item content very similar to the item AR1 which was ranked 5th. Of the respondents 70% (n=30) scored high and only 25% (n=10) scored low on this item. This item had a mean of 4.7, standard deviation of 1.3 and a mean of 5.

For the AR21 item eight respondents chose 3=Sometimes as an answer. This was the most times the 3=Sometimes category was chosen in this component. Most respondents for AR21 answered 6=Always (n=14) and second most answered 5=Almost Always (n=11) (see Figure 1). The lowest category for this item was 2=Rarely with two instances.

Table 8 contains the total scores for each respondent for the component Affective Response. The table was also arranged from the highest scores at the top to the lowest scores at the bottom. For the Affective Response component 48% (n=19) of respondents achieved a score higher than 83 % and 43% (n=17) scored below that. Only 10 % (n=4) of the respondents scored equivalent to the average of the group. The group mean score was 83% (n=24.85). Of the 17 (33%) respondents that scored less than 83%, only one respondent scored under 60% and it was the lowest score achieved in this component.

<table>
<thead>
<tr>
<th>Number of Respondents Obtaining result:</th>
<th>Respondent Total Score</th>
<th>Respondent Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=4</td>
<td>29</td>
<td>97%</td>
</tr>
<tr>
<td>n=7</td>
<td>28</td>
<td>93%</td>
</tr>
<tr>
<td>n=4</td>
<td>27</td>
<td>90%</td>
</tr>
<tr>
<td>n=4</td>
<td>26</td>
<td>87%</td>
</tr>
<tr>
<td>n=4</td>
<td>25</td>
<td>83%</td>
</tr>
<tr>
<td>n=4</td>
<td>24</td>
<td>80%</td>
</tr>
<tr>
<td>n=2</td>
<td>23</td>
<td>77%</td>
</tr>
</tbody>
</table>
4.3.2 Level of Affective Mentalizing

The measured component in this section is Affective Mentalizing. It used four items in the EAI and following are the results for all forty respondents in the research sample. The Affective Mentalizing frequency distribution is summarized in Figure 2.

**Figure 2-Affective Mentalizing Frequency**

<table>
<thead>
<tr>
<th>Affective Mentalizing Frequency Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM3 &quot;I am good at understanding other people’s emotions.&quot;</td>
</tr>
<tr>
<td>AM9 &quot;When I see a person experiencing a strong emotion I can accurately assess what that person is feeling.&quot;</td>
</tr>
<tr>
<td>AM12 &quot;When I see a person experiencing a strong emotion, I can describe what the person is feeling to someone else.&quot;</td>
</tr>
<tr>
<td>AM22 &quot;I am aware of other people’s emotions.&quot;</td>
</tr>
</tbody>
</table>

The first item is AM3. This items states that “*I am good at understanding other people’s emotions.*” Table 7 indicates that thirty three (83%) of the respondents scored high on this item and seven (18%) scored low. It has a median of 5, mean of 4.7 and a standard deviation of 1. The 5=Almost Always response was chosen the most, there were sixteen instances. The lowest category picked by respondents was 3=Sometimes and it was chosen a total of seven times.

The statement for item AM9 is “*When I see a person experiencing a strong emotion I can accurately assess what that person is feeling.*” The respondents scored high on this item, 83% (n=33) had a high score and only 18% (n=7) scored low. The median of the item is 5; it has a mean of 4.5 and a standard deviation of 0.8. Only two respondents answered that they always agree with this statement; however
twenty four respondents almost always agree with the above statement. The items AM9 and AM3 have a similar lower frequencies distribution. The lowest two categories picked for both items are 3= Sometimes and 4= frequently; with both categories in both items having seven instances.

Item AM12 uses the statement “When I see a person experiencing strong emotion, I can describe what the person is feeling to someone else” to measure Affective Mentalizing. AM12 is ranked 8th on Table 7 with most respondents (n=35, 88%) scoring high on this item. Only five (13%) respondents scored low. Five respondents chose 6=always and twenty one respondents chose 5=Almost Always. Only two respondents chose 2= Rarely which was the lowest chosen category for this item. AM12 has median of 5, a mean of 4.6 and a standard deviation of 1.

The final item in the Affective Mentalizing component is AM22. This items statement is “I am aware of other people’s emotions”. It is the second highest ranked item on table 7 with 95 % (n=37) of respondents scoring it high. Only two respondents scored low on this item. On Table 7 it is ranked second, however this is arbitrary as in reality it shares the first rank with PT13 from the Perspective Taking component. This is due to the fact that both items have the exact same frequency distribution. Nineteen respondents agreed with this statement almost always, eleven agree always and two agreed only sometimes. AM22 has a median of 5, a mean of 5 and a standard deviation of 0.8.

Below on Table 9 are the total scores for the Affective Mentalizing component. The average total score for this component is 78% (n=18.82). No respondents scored the group average as a total score. However 59% (n=23) of respondents score higher than the group average and 43 %( n=17) scored below the group average. The lowest score for this component of 50% was only achieved by one respondent.

Table 9-Affective Mentalizing Respondent Totals and Group Average

<table>
<thead>
<tr>
<th>Number of Respondents Obtaining result:</th>
<th>Respondent Total Score</th>
<th>Respondent Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=4</td>
<td>23</td>
<td>96%</td>
</tr>
<tr>
<td>n=3</td>
<td>22</td>
<td>92%</td>
</tr>
<tr>
<td>n=5</td>
<td>21</td>
<td>88%</td>
</tr>
<tr>
<td>n=3</td>
<td>20</td>
<td>83%</td>
</tr>
<tr>
<td>n=8</td>
<td>19</td>
<td>79%</td>
</tr>
<tr>
<td>n=5</td>
<td>18</td>
<td>75%</td>
</tr>
<tr>
<td>n=6</td>
<td>17</td>
<td>71%</td>
</tr>
<tr>
<td>n=2</td>
<td>16</td>
<td>67%</td>
</tr>
<tr>
<td>n=1</td>
<td>15</td>
<td>63%</td>
</tr>
</tbody>
</table>
4.3.3 Level of Perspective Taking

The component measured in this section is Perspective Taking using five items. This section contains the Perspective Taking components description of findings for all 40 respondents in the research sample. The Perspective Taking components frequency distribution is summarized in Figure 3.

Figure 3-Perspective Taking Frequency

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT4</td>
<td>&quot;I can consider my point of view and another person's point of view at the same time&quot;</td>
</tr>
<tr>
<td>PT6</td>
<td>&quot;I can imagine what the character is feeling in a good movie&quot;</td>
</tr>
<tr>
<td>PT13</td>
<td>&quot;I can imagine what it’s like to be in someone else’s shoes&quot;</td>
</tr>
<tr>
<td>PT15</td>
<td>&quot;I consider other people’s points of view in discussions&quot;</td>
</tr>
<tr>
<td>PT19</td>
<td>&quot;I can agree to disagree with other people&quot;</td>
</tr>
</tbody>
</table>

Item PT4 measures Perspective Taking using the statement "I can consider my point of view and another person’s point of view at the same time". Thirty four respondents scored high (85%) on this item and six (15%) scored low. Most respondents (n=21) agreed with the statement. Only one respondent rarely agrees with this item.2= Rarely was the lowest category chosen for this item and six respondents chose 6 = Always, the highest category chosen for this item. PT4 has a median of 5, a mean of 4.7 and a standard deviation of 1.

In the EAI item PT6 states "I can imagine what it’s like to be in someone else’s shoes". Of the respondents thirty four (85%) scored high and highly agreed with the statement, six respondents scored low on this item. PT6 is similar to PT4 in this regard. However PT 6 has a median of 5, mean of 5 and a standard deviation of 1.5. This means PT6 has a slightly higher mean and standard
deviation than PT4. In PT6 more respondents (n=18) chose category 6=Always than the six respondents that chose that category in PT4. Only one respondent rarely agreed with the PT6 statement.

“I can imagine what it’s like to be in someone else’s shoes” is the statement for PT13. On Table 7 the highest ranking item is PT13. It should be noted that in reality PT13 shares the first rank with AM22 from the Affective Mentalizing component as they share the exact same frequency distribution. Only two (5%) respondents scored low and thirty eight (95%) respondents scored high on this item. Two respondents picked the 2=Rarely category which was the lowest category chosen and eleven chose the 6=Always category which was the highest chosen category. Most respondents (n=19) chose the 5=Almost Always category on the Likert scale. PT13 also shares the same median (5), mean (5) and standard deviation (0.8) as item AM22.

The item PT15 uses the statement “I consider other people’s point of view in discussions”. Five respondents (13%) did not agree strongly with this statement, however the remaining thirty five respondents (88%) did agree strongly. Thirteen respondents chose the 6=Always category and twelve chose the 5=Almost always category. The lowest category chosen was 2=Rarely, this was chosen by only two respondents. This item has a median of 5, a mean of 4.8 and a standard deviation of 1.1.

The final item in the Perspective Taking component is PT19. PT19 states “I can agree to disagree with people.” Of the respondents 88 % (n=35) scored high and 13 % (n=5) scored low. This is similar to PT15 however their frequency distributions differ as can be seen in Figure 3. Many respondents (n=17) almost always agreed with the statement while five respondents always agreed. Thirteen respondents frequently agreed while only five agreed sometimes with the PT19 statement. PT19 has a median of 5, a mean of 4.6 and a standard deviation of 0.9.

The total scores for the Perspective Taking component can be found below on Table 10. The group average is 80% (n=23.95) and three respondents (8%) scored on the group average. Of the respondents nineteen (48%) scored above the group average. Eighteen respondents (45%) scored below the group average. The lowest score was 53%.

Table 10-Perspective Taking Respondent Totals and Group Average

<table>
<thead>
<tr>
<th>Number of Respondents Obtaining result:</th>
<th>Respondent Total Score</th>
<th>Respondent Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=1</td>
<td>30</td>
<td>100%</td>
</tr>
<tr>
<td>n=3</td>
<td>29</td>
<td>97%</td>
</tr>
<tr>
<td>n=4</td>
<td>27</td>
<td>90%</td>
</tr>
</tbody>
</table>
4.3.4 Level of Self/Other Awareness

This component measured Self/Other Awareness using four items. This section contains the data gathered from the 40 respondents. Frequency distribution of the Self/Other Awareness component is summarized in Figure 4.

Figure 4-Self/Other Awareness Frequency

<table>
<thead>
<tr>
<th>Self/Other Awareness Frequency Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOA8 “I can tell the difference between someone else’s feelings and my own”</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>SOA14 “I can tell the difference between my friend’s feelings and my own”</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>SOA18 “I can explain to others how I am feeling”</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>SOA20 “I am aware of what other people think of me”</td>
</tr>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

1= Never  2 = Rarely  3 = Sometimes  4 = Frequently  5 = Almost always  6 = Always

The SOA8 item measures Self/Other Awareness using the statement “I can tell the difference between someone else’s feelings and my own”. Most respondents scored high, thirty five (88%) in total. Few respondents scored low, there were five (13%) in total. The most respondents (n=15) always agree with the statement and only marginally less respondents (n=14) almost always agree. The lowest category chosen was 2=Rarely by only one respondent.SOA8 has a median of 5, a mean of 4.9 and a 1.1 standard deviation.
SOA14 states the following. “I can tell the difference between my friend’s feelings and my own”. Respondents scored very high on this item, 90% (n=36) scored high. Only 10 % (n=4) scored low. The largest number of respondents (n=23) almost always agreed with the statement and seven respondents always agreed with the statement. Only one respondent rarely agreed with this statement, this is the lowest rating for this item. SOA14 has a median of 5, a mean of 4.8 and a 0.9 standard deviation.

“I can explain to others how I am feeling” is the statement for item SOA18. The most respondents (n=24, 60%) scored high on this item, however it is a far lower score compared to other items in the 70% plus range. Almost half (n=16, 40%) of the respondents scored low, a trend very different from other items covered. Most respondents (n=16) almost always agreed with this statement but a fairly large amount of respondents (n=12) only sometimes agreed with the statement. One respondent chose the 1=Never category. This item has a median of 5, a mean of 4.1 and a 1.3 standard deviation.

The final item in the Self/Other Awareness component is SOA20. The statement for this Likert scale item is “I am aware of what other people think of me”. This item is the second lowest on table 7. The largest number of respondents(n=22, 55%) scored high on this item but this is the smallest amount of respondents scoring high on all Self/ Other Awareness items. Eighteen respondents (45%) scored low on this item. The biggest amount of respondents (n=15) only sometimes agree with this items statement. The second largest number of respondents (n=13) choosing a category is the 5=Almost Always category on the scale. A single respondent never agrees with this items statement. This item has a median of 4. This is the lowest median for this component. It has a mean of 4 and a 1.3 standard deviation.

Table 11 contains the total scores for the Self/Other Awareness component. The mean for this components total score is 74 % (n=17.85). No respondents scored the group average as a total score. Twenty respondents (50%) scored higher than the average for this group. One respondent scored 33%, which is the lowest score achieved in this component. This is a very low score as the second lowest score is 50%.

<table>
<thead>
<tr>
<th>Number of Respondents</th>
<th>Respondent Total Score</th>
<th>Respondent Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=1</td>
<td>24</td>
<td>100%</td>
</tr>
<tr>
<td>n=2</td>
<td>23</td>
<td>96%</td>
</tr>
<tr>
<td>n=3</td>
<td>22</td>
<td>92%</td>
</tr>
<tr>
<td>n=5</td>
<td>21</td>
<td>88%</td>
</tr>
</tbody>
</table>
4.3.5 Level of Emotional Regulation

This component used four items to measure Emotional Regulation. The following section contains the data gathered from the 40 respondents. Frequency distribution of the Emotional Regulation component is summarized in Figure 5.

Figure 5-Emotional Regulation Frequency

<table>
<thead>
<tr>
<th>Group Average:</th>
<th>17.85</th>
<th>74%</th>
</tr>
</thead>
</table>

The ER2 item measured Emotional Regulation using the statement “Emotional stability describes me well”. Twenty seven respondents (68%) scored high on this item while thirteen (33%) scored low. Most respondents chose the 5=Almost Always category for this item. The second highest (n=11) choice was 3=Sometimes and the lowest was 1=Never chosen by one respondent. ER2 has a median of 4, a mean of 4.1 and a 1.1 standard deviation.
The next item is ER5. It needs to be noted again that this was a reverse score item. The statement for this item was also reversed from “When I get angry, I need a lot of time to get over it” to “When I get angry, I don’t need a lot of time to get over it”. The largest amount of respondents scored high (n=30, 75%) and ten respondents (25%) scored low. Equal amounts of respondents (n=13) chose 4= Frequently and 5= Almost always. Four respondents chose 1= Never. It is the lowest category chosen. This item has a median of 4, a mean of 4.1 and a 1.3 standard deviation.

ER10 is the second and last reverse scored item in the EAI. The statement for this item was reversed from “Friends view me as a moody person” to “Friends don’t view me as a moody person”. A total of 90 % (n=36) of respondents scored high on this item and 10% (n=4) scored low. The highest number of respondents agreed always with the statement and only one respondent stated that they never agree with this statement. ER10 has a median of 5, a mean of 4.9 and a 1.2 standard deviation.

The last item in the Emotional Regulation component is ER17. ER17 uses the statement “When I am upset or unhappy, I get over it quickly”. It is the lowest ranked item on table 7. Most respondents (n=24, 60%) scored low on this item and 40% scored high. Sixteen respondents stated that they only sometimes agree with this items statement. Most responses fell in the never, rarely and sometimes categories. Only three respondents stated that they always agree with this statement.

Emotional Regulation total scores can be found below on Table 10. The group mean is 52% (n=12.57) and this is the lowest group average among all the components. No respondents had a total score equal to the group average. Nineteen respondents (48%) had more than the group average and twenty one (53%) had less than the mean. The lowest score of 42% was achieved by three respondents.

<table>
<thead>
<tr>
<th>Number of Respondents Obtaining result:</th>
<th>Respondent Total Score</th>
<th>Respondent Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=1</td>
<td>17</td>
<td>71%</td>
</tr>
<tr>
<td>n=1</td>
<td>16</td>
<td>67%</td>
</tr>
<tr>
<td>n=3</td>
<td>15</td>
<td>63%</td>
</tr>
<tr>
<td>n=3</td>
<td>14</td>
<td>58%</td>
</tr>
<tr>
<td>n=10</td>
<td>13</td>
<td>54%</td>
</tr>
<tr>
<td>n=12</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>n=6</td>
<td>11</td>
<td>46%</td>
</tr>
<tr>
<td>n=3</td>
<td>10</td>
<td>42%</td>
</tr>
<tr>
<td>Group Average:</td>
<td>12.575</td>
<td>52%</td>
</tr>
</tbody>
</table>
4.3.6 Overall level of Empathy
This section contains the data pertaining to overall performance on the EAI of the forty respondents. As has been highlighted in Chapter 3, the creators of the EAI instrument have not developed cut off scores and instead opt for a general impression of a person’s level of empathy. This section gives the reader an impression of the general level of empathy in this particular second year BSW group.

Figure 6 contains the overall mean for each component in terms of answers. Affective Response has the highest mean of all the components. Followed by Perspective Taking, Affective Mentalizing, Self/Other Awareness and finally Emotional Regulation. Emotional Regulation has the lowest mean of all the components. All means range between four and five.

Below Table 13 contains the total score of all respondents for the EAI as a whole. It has also been arranged from highest to lowest score. The group mean is 74% (n=98.02) and only one respondent had a total score equal to the mean. Eighteen respondents (45%) scored higher than the mean and twenty one respondents (53%) scored less than the mean. The lowest score is 60% and was achieved by one respondent.

<table>
<thead>
<tr>
<th>Number of Respondents Obtaining result:</th>
<th>Respondent Total Score</th>
<th>Respondent Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=1</td>
<td>121</td>
<td>92%</td>
</tr>
<tr>
<td>n=2</td>
<td>113</td>
<td>86%</td>
</tr>
<tr>
<td>n=1</td>
<td>111</td>
<td>84%</td>
</tr>
<tr>
<td>n=1</td>
<td>109</td>
<td>83%</td>
</tr>
<tr>
<td>n=5</td>
<td>107</td>
<td>81%</td>
</tr>
<tr>
<td></td>
<td>Score</td>
<td>Percentage</td>
</tr>
<tr>
<td>---</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>n=3</td>
<td>106</td>
<td>80%</td>
</tr>
<tr>
<td>n=1</td>
<td>104</td>
<td>79%</td>
</tr>
<tr>
<td>n=3</td>
<td>101</td>
<td>77%</td>
</tr>
<tr>
<td>n=1</td>
<td>100</td>
<td>76%</td>
</tr>
<tr>
<td>n=1</td>
<td>98</td>
<td>74%</td>
</tr>
<tr>
<td>n=5</td>
<td>97</td>
<td>73%</td>
</tr>
<tr>
<td>n=2</td>
<td>95</td>
<td>72%</td>
</tr>
<tr>
<td>n=1</td>
<td>94</td>
<td>71%</td>
</tr>
<tr>
<td>n=1</td>
<td>93</td>
<td>70%</td>
</tr>
<tr>
<td>n=2</td>
<td>91</td>
<td>69%</td>
</tr>
<tr>
<td>n=3</td>
<td>89</td>
<td>67%</td>
</tr>
<tr>
<td>n=2</td>
<td>87</td>
<td>66%</td>
</tr>
<tr>
<td>n=2</td>
<td>86</td>
<td>65%</td>
</tr>
<tr>
<td>n=1</td>
<td>85</td>
<td>64%</td>
</tr>
<tr>
<td>n=1</td>
<td>80</td>
<td>61%</td>
</tr>
<tr>
<td>n=1</td>
<td>79</td>
<td>60%</td>
</tr>
<tr>
<td>Group Average:</td>
<td>98.025</td>
<td>74%</td>
</tr>
</tbody>
</table>

Figure 7 contains the mean for the tallied score of all components as well as the final total mean for empathy. Affective Response scored the highest followed by Perspective Taking, Affective Mentalizing, Self/ Other Awareness and finally Emotional Regulation. As can be seen in both Table 13 and Figure 7, the overall mean for empathy is 74%.

*Figure 7-Average Respondent Total Score*
4.4 Discussion of Results

As has been shown in Chapter 1 and Chapter 2 of this paper, empathy is a widely used concept in social work and yet social work research on the topic is sparse and lacking substance (Freedberg, 2007). According to social work literature empathy is not clearly defined and there are no guidelines for use or best practice (Gerdes et al., 2011). There is however a growing body of social work research (Segal et al., 2017, Gerdes et al., 2012, Gerdes, 2012, Gerdes, Lietz & Segal, 2011, Gerdes & Segal, 2011, Gerdes et al., 2011, Lietz et al., 2011, Gerdes, Segal & Lietz, 2010, Gerdes & Segal, 2009) attempting to remedy this situation and this research paper is contributing to that knowledge.

The aim of this research paper was investigating the level of empathy of a second year BSW class. In order to achieve this, the five objectives of measuring the level of each of the components that the construct empathy consists of needed to be met (see Chapter 1 section 1.5). The EAI was utilized to this end and the resulting data was described in the first half of Chapter 4.

The following half of Chapter 4 will discuss the findings of this research paper, based on the data described in the previous half of this chapter. Each of the five components will be discussed in turn and finally the overall level of empathy of the sample will be discussed.

4.4.1 Discussion of Level of Affective Response

As shown in the literature review in Chapter 2, Affective Response is the process by which an automatic physiological reaction is triggered in response to an outside stimulus a person has experienced (Segal et al., 2017). As has been explained, the research states that Affective Response relies on healthy neurological pathways, starts at birth and never declines as we age (Decety & Ickes, 2011). The literature also showed that the way to promote healthy neurological pathways is through good nutrition, parenting and environment while growing up (Pem, 2015).

Based on the literature the researcher expected the level of Affective Response to be fairly high, with the level of variation to be fairly low for two reasons. Firstly this is due to Affective Response being an automatic and intrinsic empathic component according to the Social Work Model of Empathy (Gerdes & Segal, 2009). If we consider that students with intrinsic traits such as empathy would be drawn to helping professions such as social work (Earle, 2008) it is reasonable to assume a large part of a social work class could have a high level of inherent affective empathy.

The second reason is that the entire sample was second year BSW students. In the Stanley and Bhuvaneswari (2016) research paper the second year social work students scored the highest on the Affective Response component. In their study there was also little to no variation between the second year BSW score in Affective Response and that of the other two BSW year groups that were also
measured. All three groups scored fairly high and also more or less the same. The Greeno (2017) study echoed these results as the Affective Response component in their study had the highest mean of all the EAI components measured in the BSW, MSW and nursing student groups. It is reasonable then to assume that the BSW group studied in this research paper would also score fairly high, similar to the findings of the other two studies.

The findings of this study are the same as in the literature and confirmed the above expectations. The Affective Response component scored the highest on average of all the components measured with an average respondent score of 83% (see Figure 7). The frequency distribution in Figure 1 highlights that most respondents chose the agree always option on the Likert Scale for all five items. In terms of the EAI, the findings indicate a high level of Affective Response among respondents.

The exact reason for a high level of Affective Response in both this study and the other two studies cited is difficult to know. The researcher can only speculate that because everyone in all these samples is tertiary level students studying caring professions it may have to do with level of education and choice of profession. It is possible that students would need a high level of neurological development in order to attain access to and function well at a tertiary educational level. Further due to natural levels of affective empathy they may choose helping professions, such as social work, as a career.

It is a positive result that the students in this study have a high level of Affective Response. If however there were respondents with a low level of Affective Response, it would be difficult to increase it, considering its intrinsic nature. What this highlights is the necessity for positive environmental factors in growing children in order to promote empathy later in life. Much more research is needed on the topic however.

4.4.2 Discussion of Level of Affective Mentalizing

Affective Mentalizing is the process by which a physiological Affective Response is triggered by hearing a story, seeing media or thinking about an experience (Segal et al., 2017). This is not the same as taking another’s perspective or cognitively considering their situation. It is limited to imagining a stimulus that activates a physiological response (Decety & Cacioppo, 2011). Affective Mentalizing can be seen as the bridge between the physiological aspects of empathy and the cognitive consideration that is also involved in the process. Affective Mentalizing is closely related to Affective Response and like AR it is also a more automatic response to a stimulus instead of a deliberate cognition.

In context of the literature, considering the similarities with Affective Response, the researcher also expected that Affective Mentalizing would have a high score. This speculation was confirmed as the average respondent score for the Affective Mentalizing component was 78% (see Figure 7). What is
different however from Affective Response was that most respondents agreed almost always (see Figure 2) with the four items used to measure this component as opposed to choosing the Likert category 6=Always.

This indicates a slightly smaller level of proficiency for this group in their Affective Mentalizing ability than in their Affective Response ability. This finding was similar in the Greeno study (2017). The averages for Affective Mentalizing were also fairly high yet a little lower than the Affective Response component scores.

In practical terms this would reflect in the group’s ability to effectively experience and identify emotions being felt by others or emotions that is being conveyed to them through communication of stories. This is highlighted by Wagaman (2015), social workers listen to many people’s stories, identifying their emotions and engaging in an affective sharing process. This is an important social work skill. However the group of respondents have a fairly high level of Affective Mentalizing and Affective Response, which means they should have a high proficiency in these abilities.

4.4.3 Discussion of Level of Perspective Taking

Perspective Taking can be defined as the cognitive ability a person has to put themselves in the situation of another person and understand their experience (Segal et al., 2017, Decety, 2005). Truly taking the perspective of another person is achieved in conjunction with the Self/Other Awareness and Emotional Regulation components; otherwise the risk is run of imposing your own perspective over someone’s true experience (Segal et al., 2017). This cognitive side of the empathic experience allows for cognitive interpretation (Gerdes et al., 2012).

In the Greeno study (2017) Perspective Taking amongst the BSW respondents was tied with Affective Response for the highest scoring component. The Stanley (2016) study echoes this result with both second and third year social work students scoring second highest on the Perspective Taking Component. The researcher again assumed that the second year BSW class in this study would probably also score high on the Perspective Taking component.

The results confirmed this; the scores were similarly distributed to the studies named above. The respondents had a very high level of Perspective Taking ability, scoring the second highest average (80%) of all components in this study (see Figure 7). Considering how strongly related the three cognitive components are in the literature, the researcher would assume that the findings in the study would reflect this. However they do not entirely.

While the component averages of Perspective Taking and Self/Other Awareness only differ 6%, the difference with Emotional Regulation is 28%. Considering the literature this would mean that as a
group the respondents have a high ability to take the perspective of others but run risks while doing this because of deficits in the Emotional Regulation component (Wagaman et al., 2015). In terms of Perspective Taking this can lead to adopting the view of what they think the other person is feeling instead of what the other person is actually feeling (Segal et al., 2017).

Based on the literature the researcher feels the above statement is a fair assumption, however we must be cautious since there is no cut off scores developed for the EAI. The instrument is relatively new and still needs to be developed more. Currently it is impossible to know for sure if a 28% difference between the two components is significant enough to have practical implications and if so what the level of those implications would be. Further research is needed in order to add more depth to what these results mean.

4.4.4 Discussion of Level of Self/Other Awareness

A person’s ability for Self/Other Awareness comprises of their ability to implement good emotional boundaries. This involves understanding what of the emotions currently being felt belongs to ourselves and which ones belong to others (Segal et al., 2017) It allows a person to maintain their role as an objective observer of an experience while they are part of the empathic process (Decety & Meyer, 2008). SOA also prevents a person from imposing their own views of what they think a person may be feeling onto another (Segal et al., 2017).

As stated in the previous discussion involving the Perspective Taking component, based on the literature the researcher expected the respondents to have a more or less similar level of Self/Other Awareness as both Perspective Taking and Emotional Regulation. This is due to the literature highlighting the relationship between all three as part of the cognitive process of empathy and all three working so closely together during the empathy process (Gerdes, Segal & Lietz, 2010). This assumption was partly supported by the data gathered in this research paper.

The respondents scored an average of 74 % (see Figure 7) on the Self/Other Awareness component. This situates the SOA score for this study relatively close to three of the other component scores. The exception is Emotional Regulation which will be discussed under its own heading.

Based on these findings it can be implied that the second year BSW class measured had a high ability to differentiate between their own and the emotions of others. This is very beneficial to social work students, however other authors have highlighted the fact that these components work in tandem with one another (Gerdes & Segal, 2009) and SOA has been found to be specifically related to Emotional Regulation (Wagaman et al., 2015). A low Emotional Regulation score could in theory influence the effectiveness of this group’s ability to apply Self/Other Awareness. As with the Emotional Regulation
components relationship with the Perspective Taking component, more research is needed to fully understand this connection.

Despite this caution it is apparent that the respondents had a high SOA score, which can easily be seen looking at Figure 4. Most respondents marked that they almost always agree with the statements presented. There was an exception however. The statement “I am aware of what other people think of me” in Figure 4 had fifteen respondents mark that they only sometimes agree.

Reading the statements it became apparent to the researcher that this statement differs slightly from the other three. The other statements in this component all relate to understanding the difference between the emotions of the other person and the self from the perspective of the self. The item SOA20 involves differentiating emotions by guessing the other persons opinion without involving the self.

The researcher speculates that the lower level of agreement with this statement may be due to it being a harder task to differentiate emotions that someone is feeling without the involvement of the self. A statement such as “When I speak to others I am aware of what they are thinking of me” may have received a higher level of agreement from respondents and it may be worth revisiting the wording for this item in future studies.

4.4.5 Discussion of Level of Emotional Regulation

During the empathic process there are incoming emotional stimuli and also emotions that are triggered within a person by these incoming stimuli. When a person becomes overwhelmed by their own emotions or the incoming feelings it becomes difficult to be truly empathic (Segal et al., 2017). Emotional Regulation is a person’s ability to regulate these incoming emotions in order to maintain their role as an objective observer and also to prevent emotional distress to themselves (Segal et al., 2017).

The researcher initially expected a high Emotional Regulation score. This speculation was based on the literature that shows Emotional Regulation has a close connection to the other cognitive components of empathy (Gerdes, Segal & Lietz, 2010) and these components had high scores. Other literature however, that tested all BSW years as a single group, showed that the Emotional Regulation component scored the lowest average of all the components within all the groups that were tested (Greeno, Ting & Wade, 2017). This was not entirely echoed by the Stanley study (2016) that tested the BSW year groups separately. They showed ER as the highest component score for the third year BSW students, second highest for first years and it was the second lowest score for second year BSW students.
As can be seen in the results in Figure 7, Emotional Regulation scored an average in this study almost 20% less than any of the other components. This relates with the findings in both the Greeno and Stanley studies. However in relation to the Stanley study the researcher is unsure why second year BSW students would experience a dip in their ER scores, compared to first and third year students. The researcher can only hypothesize that the longer time spent training and being exposed to practical experience may give first year students a more realistic or different view of their empathic abilities when they reach their second year of BSW. The rise in third year scores may be due to improving those abilities over time through exposure to training.

The researcher also suspected that the low scores may be due to the Emotional Regulation component containing the only two reverse scored items in the EAI instrument. This may have effected how people chose to agree with the reverse scored statements ER5 and ER10. However ER 17 is the lowest scoring item not only in the Effective Response component but also in the entirety of all items found in this study (see Table 7) and it is not reverse scored. ER2, which is not reverse scored, also falls very low on Table 7 and ER 10 that is reverse scored places fairly high. This leads the researcher to conclude that the reverse scoring is irrelevant to the low ER score.

The researcher may conclude that the group has a low level of Emotional Regulation; however there are some other factors to consider first. There are two studies with similar samples that have also experienced low ER scores (Greeno, Ting & Wade, 2017, Stanley & Bhuvaneswari, 2016). However there is also a study using the EAI that comprises of people from helping professions and their clients as a sample (Gerdes et al., 2012) and their resulting averages were fairly uniform between components without the trend of ER scores much lower than the other component scores. Thus the researcher would like to recommend that further investigation is needed into why BSW students appear to have low ER scores as measured by the EAI.

4.4.6 Discussion of Overall level of empathy

As shown in Chapter 1 the aim of this research paper was investigating the level of empathy of a second year BSW class. As explained in Chapter 3 the best available instrument in social work theory for measuring empathy is currently the EAI however it comes with its limitations. No cut off scores have been developed for the EAI and the creators of the instrument states that it is designed to give a general idea of level of empathic functioning (Segal et al., 2017). Thus this section will now discuss the total EAI scores and the component scores found in the data indicating level of empathic functioning according to the EAI.

The researcher expected the group of respondents to have a medium to high level of empathy based on the literature. As stated previously people are drawn to social work because they already have
certain traits such as empathy (Earle, 2008). However the researcher also had to recognize that this may not always be the case and that this research area is relatively new territory in social work. There isn’t enough evidence to conclusively claim that all people drawn to social work will automatically have high empathy. However other studies have indicated relatively high levels of empathy amongst social workers and social work students (Greeno, Ting & Wade, 2017, Stanley & Bhuvaneswari, 2016, Wagaman et al., 2015, Gerdes et al., 2012).

The results established that the second year BSW group did indeed have a fairly high level of empathy, with an average total score of 74 % (see Table 7). However the researcher’s suspicion that we cannot simply assume an effective level of empathy within a group of social work students was also confirmed. The respondents did not score high on all the empathy components. The average level of Emotional Regulation is low within this group.

Due to the limitations of the instrument however, what this means and what constitutes a problematically low level of any of the components, exactly instead of generally, will require more research. However the findings are enough to highlight that certain assumptions may need to be investigated further. It at least warrants a larger study to see if indeed the way we teach and how we teach empathy needs to be reconsidered.

The literature states that these components work in tandem and when one is not functioning properly it causes problems in having a full empathic experience (Segal et al., 2017). Low levels of Emotional Regulation can lead to becoming overwhelmed emotionally which in turn leads to bias and non-empathic actions and reactions (Segal et al., 2017, Wagaman et al., 2015). The researcher can only hypothesize but this raises the possibility of a lower occurrence of true empathic reactions amongst the respondents. This in turn, according to the literature as presented in this study, can impact service delivery later on if it is not corrected.

4.5 Conclusion

This chapter clearly described the findings from the EAI. It described the findings from all five individual components that make up the EAI separately and then displays the answer frequencies using graphs. This chapter also analysed the results of all five components as well as the total results of the data gathered through the EAI. This process helped this chapter to make meaning of the obtained results and in turn achieve the aims and objectives of this study.
CHAPTER 5

5.1 Introduction

The final chapter draws conclusions based on the findings from Chapter 4. It presents all the objectives and the aim of the study with the resulting conclusions. The chapter then presents relevant conclusions and key findings that can be made based on the research data presented in this research study. This chapter will also make recommendations based on these findings in order to inform future research, policy and training.

5.2. Aim and Objectives reached

The purpose of this study was to investigate the level of empathy in a second year BSW class at a South African university. This was reflected in the aim and objectives of this study. The resulting findings are summarized in the following section.

5.2.1. Overall Aim

The overall aim of this research study was to investigate the level of empathy in second year BSW students at a South African university.

The study was successful in meeting this aim. It was found that the group tested had a high total level of empathy with an average of 74%. Considering that the group did not receive any special training in empathy makes the implication possible that these second year BSW students have a high intrinsic level of empathy. The variation in component total scores however brings into question how functional this high level of intrinsic empathy is.

5.2.1.1 Objective 1

The first objective was to measure the level of Affective Response in second year BSW students in a university in the Western Cape.

The study was successful in achieving this objective. It was found that the respondents had a very high level of Affective Response, with an average of 83%. Affective Response appears to be the highest scoring component in both this paper and other similar studies. This indicates a high level of automatic initiation of the empathic response within this group.
5.2.2 Objective 2

The second objective was to measure the level of Affective Mentalizing in second year BSW students in a university in the Western Cape.

This objective was achieved. Respondents had an Affective Mentalizing score of 78%, scoring close to their Affective Response score, which also matched findings in similar studies from other countries. This indicates a strong ability within this group for imagining and then feeling the emotional states of others.

5.2.3 Objective 3

The third objective was to measure the level of Self/Other Awareness in second year BSW students in a university in the Western Cape.

The study achieved this objective. The respondents also scored high on Self/Other Awareness. An average score of 74% was achieved. This indicates a high ability within the group to set boundaries and differentiate their emotions from the emotions of others.

5.2.4 Objective 4

The fourth objective was to measure the level of Perspective Taking in second year BSW students in a university in the Western Cape.

This objective was also achieved within this study. The respondents had an average Perspective Taking score of 80%. This was the second highest score in the study which echoes findings in international studies; their respondents also scored high on this component. This indicates the group has a high ability to take the perspective of another person and understand a situation from another’s perspective.

5.2.5 Objective 5

The fifth and final objective was to measure the level of Emotional Regulation in second year BSW students in a university in the Western Cape.

The study was successful in meeting this objective however the outcome was different from the other objectives. The respondents did not score high on this component as was expected. Their average score for this component was 52%, scoring the lowest of all components. This indicates a low ability to regulate emotions which can interfere with the optimal functioning of other empathy components. Low levels of Emotional Regulation is associated with becoming emotionally overwhelmed which
makes objective Perspective Taking and decision making difficult. This could also indicate a higher possibility of burnout within this group.

5.3 Main Conclusions and Key Findings

This research was the first of its kind in South Africa, using the EAI to measure empathy in second year BSW students. The EAI showed internal consistency within a South African sample with a Cronbach alpha of .836. This is supported by the international findings of Greeno (2017) where the EAI had an Cronbach Alpha of .86. This indicates that the EAI can be effectively used within the South African context.

The successful utilization of the EAI within the South African context opens up the possibility for its use in other local studies. The EAI offers an easy, time efficient and cost effective instrument that measures empathy comprehensively based on the latest empathy research. The researcher did however find the lack of cut off scores problematic and the addition of cut off scores would add greater depth and meaning to the data produced in EAI studies.

The finding of this research study expands our understanding of the level of empathy in second year BSW students. The findings support the view that social work students have at least some level of intrinsic empathy. A further implication however, is that a high level of intrinsic empathy isn’t necessarily always optimally functional. The respondents in this study scored relatively high on their total empathy scores but low on the Emotional Response component. Theoretically a low ER score can interfere with optimal application of empathy and contribute to burnout. Confirming this however is beyond the scope of this study and further research would be required.

The researcher also situated the findings of this research paper within the South African social work training policy. It was highlighted that there has been difficulties ensuring that the current method of enforcing exit level outcomes translates into effective social work practice. Studies showed that for some exit level outcomes, the statutory ELO’s specifically, new social workers felt they were not sufficiently equipped for practice. The findings of this research paper questions if this may not also be the case in terms of empathic skillsets.

This research challenged the assumption that social work students are always equipped with enough empathic skillsets to be effective in practice. The low level of Emotional Regulation scores indicate the possibility that more direct training and interventions may be needed in order to raise empathy levels within social work students. Further studies need to be conducted in order to deduce what are optimal levels for each component of empathy and the effects of having low scores.
5.4 Recommendations

Based on the findings in this research paper this section makes recommendations for improvements to current systems or future research.

5.4.1 Future Research

- A larger scale study on the empathy levels of all BSW year groups should be done at more than one institution in the Western Cape in order to support, confirm or disprove the findings in this study.
- Future research should examine what the optimum level of both empathy and all the corresponding components is. This research should include an understanding of exactly how big a gap between components will have an effect on a person’s empathic abilities.
- The researcher would strongly suggest research into cut off scores for the EAI.
- The EAI has various studies proving Reliability and Validity throughout its creation as an instrument. The research would suggest that the instrument would benefit from a large reliability and validity analysis study on the final instrument as it is now. This would conclusively prove what is currently indicated by many smaller studies, making the EAI easier to use in research.
- The researcher would suggest future research with the EAI also focus on the Emotional Regulation and Affective Response components in order to determine why they have low Cronbach Alpha scores.
- Considering the literature presented in this study, there is a possibility of skills other than empathy that contributes to optimal social work practice. The researcher would like to point out that there appears to be a gap in terms of a social work competency model, especially in the South African context, and would recommend further research on this topic. The creation of a social work competency model and measurement, including skills such as empathy, would have the potential to drastically improve the level of social work practice in South Africa.

5.4.2 Institutions providing BSW training

- It was highlighted in this paper that empathy plays a large role for social workers in many areas such as burnout, service delivery and affective therapeutic interventions. The researcher recommends that institutions re-evaluate the role of constructs such as empathy in their curriculum.
• The researcher recommends the suggestions in the literature for increasing empathy should be worked into the standard curriculum. Utilizing role plays, direct training on what empathy is and its role as well as making it a set topic in supervision.
• The researcher would strongly suggest a revaluation of how ELO’s are met and if students feel they are equipped with all the necessary skillsets when they enter the field.
• The researcher recommends tests such as the EAI could be utilized to find deficits within a curriculum in terms of non-academic skillsets such as empathy.

5.4.3 ELO Policy

• This study has shown empathy is an important construct that affects various aspects of social work practice. Empathy has also been show to form part of various training and social work textbooks. The researcher recommends that empathy is considered to have a more direct place in exit level outcomes.
• Based on the findings in this research paper the researcher feels that consideration and research should go into considering creating a new exit level outcome. This new ELO could contain the various non-academic softs skills, such as empathy, that have a large impact on social work related aspects such as service delivery, self-care and career satisfaction.

5.4.4 Social Work Agencies

• The role of empathy in service delivery has been highlighted. There is no research or time frame that insists interventions in terms of empathy should only occur on a training institutional level. The social worker recommends that social work agencies consider testing for empathy and implementation of training to increase empathy and its various components. Empathy has been indicated to affect burnout, service delivery and career satisfaction. Higher empathy levels among staff could benefit social work agencies immensely.

5.5 Conclusion

This is the final chapter of this research paper. It summarizes and describes the findings from this research study by stating how the aim and objectives were met. This chapter also contains recommendations for future implementations for the results of this research paper. It described the possible use of these findings in research, policy, social work and social work training.
References


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Appendices

Appendix 1

EMPATHY ASSESSMENT INDEX
© Karen E. Gerdes, Elizabeth A. Segal, & Cynthia A. Lietz (2012)
Arizona State University

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Please respond to the following questions by selecting the choice that most closely reflects your feelings or beliefs:

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Almost always</th>
<th>Always</th>
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</table>

1) When I see someone receive a gift that makes them happy, I feel happy myself. [AR]
2) Emotional stability describes me well. [ER]
3) I am good at understanding other people’s emotions. [AM]
4) I can consider my point of view and another person’s point of view at the same time. [PT]
5) When I get angry, I need a lot of time to get over it. [ER]
6) I can imagine what the character is feeling in a good movie. [PT]
7) When I see someone being publicly embarrassed I cringe a little. [AR]
8) I can tell the difference between someone else’s feelings and my own. [SOA]
9) When I see a person experiencing a strong emotion I can accurately assess what that person is feeling. [AM]
10) Friends view me as a moody person. [ER]
11) When I see someone accidently hit his or her thumb with a hammer, I feel a flash of pain myself. [AR]
Please respond to the following questions by selecting the choice that most closely reflects your feelings or beliefs:

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<tr>
<th>Never</th>
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<th>Sometimes</th>
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12) When I see a person experiencing a strong emotion, I can describe what the person is feeling to someone else. [AM]
   2 3 4 5 6

13) I can imagine what it's like to be in someone else's shoes. [PT]
   1 2 3 4 5 6

14) I can tell the difference between my friend's feelings and my own. [SOA]
   1 2 3 4 5 6

15) I consider other people's points of view in discussions. [PT]
   1 2 3 4 5 6

16) When I am with someone who gets sad news, I feel sad for a moment too. [AR]
   1 2 3 4 5 6

17) When I am upset or unhappy, I get over it quickly. [ER]
   1 2 3 4 5 6

18) I can explain to others how I am feeling. [SOA]
   1 2 3 4 5 6

19) I can agree to disagree with other people. [PT]
   1 2 3 4 5 6

20) I am aware of what other people think of me. [SOA]
   1 2 3 4 5 6

21) Hearing laughter makes me smile. [AR]
   1 2 3 4 5 6

22) I am aware of other people's emotions. [AM]
   1 2 3 4 5 6

Contains 5 components: Affective Response [AR], Affective Mentalizing [AM], Self/Other Awareness [SOA], Perspective-Taking [PT], and Emotion Regulation [ER]. AR = 5 items, AM = 4 items, SOA = 4 items, PT = 5 items, and ER = 4 items

Reverse scoring indicated by R
CONSENT FORM FOR PARTICIPATION IN RESEARCH
By Questionnaire

I ........................................................................................................................................

being over the age of 18 years hereby consent to participate as requested in the human relations survey for the research project on human emotional development.

1. I have read the information provided.

2. Details of procedures and any risks have been explained to my satisfaction

4. I understand that:
   • I may not directly benefit from taking part in this research.
   • I am free to withdraw from the project at any time and am free to decline to answer particular questions.
   • While the information gained in this study will be published as explained, I will not be identified, and individual information will remain confidential.
   • Whether I participate or not, or withdraw after participating, will have no effect on any treatment or service that is being provided to me.
   • Whether I participate or not, or withdraw after participating, will have no effect on my progress in my course of study, or results gained.
   • I may ask that the questionnaire be stopped at any time, and that I may withdraw at any time from the session or the research without disadvantage.

Respondent’s signature……………………………………Date……………………

I certify that I have explained the study to the volunteer and consider that she/he understands what is involved and freely consents to participation.

Researcher’s name……………………………………………………………………

Researcher’s signature…………………………………………………………Date………………