TRAINING CLINICAL EMPATHY: A BEHAVIOR ANALYTIC APPROACH

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By
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CERTIFICATION OF APPROVAL

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DEDICATION

I would like to dedicate this thesis to my family for their ongoing love and support. Without them, I would not be the person I am today.

ACKNOWLEDGEMENTS

I would like to acknowledge all those individuals who supported me on what seemed like an impossible journey. Specifically, I would like to thank Dr. Hesse, my thesis committee, and my research assistants, as this project would not have been possible without them. Further, I would like to acknowledge Zachary Nyquist for supporting me and motivating me throughout the course of this project.

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ABSTRACT

Empathy is identified as a necessary trait among helping professionals. Research indicates that empathy is important to treatment outcomes and client satisfaction. However, little consensus on defining and training empathy in helping professionals exists. The present study sought to define and train empathetic behaviors from a behavior analytic perspective. The present study asked two questions: (a) Can behaviors indicative of empathy be trained using video modeling and feedback, and (b) do client and third person ratings of an individual's level of empathy increase after such training? Results indicated that behaviors defined as empathetic increased for 3 out of 4 participants. Client clinical empathy ratings increased for all participants and client general empathy ratings increased for 3 out of 4 participants. Third person ratings were mostly consistent, demonstrating only minimal increases and decreases. Results were discussed using Skinner's analysis of verbal behavior, multiple causation, stimulus control, conditioned reinforcement, and rule governed and contingency shaped behavior concepts. Limitations of the current study and future research directions were noted.

INTRODUCTION

Empathy is one of the most researched, cited, and widely identified components of treatment in various fields within the helping professions including medicine, mental health, and social work. Studies in this area of research have focused on client perceptions of the provider-patient relationship, impact of perceived empathy on therapeutic outcome, and the effect of verbal and non-verbal components of empathy on subsequent ratings. Research in this area of study has been limited by lack of general agreement on the philosophical and behavioral dimensions of the term itself.

Empathy has been highlighted as a necessary and significant trait among counselors, social workers, doctors, and other helping professionals. Carl R. Rogers (1957), for example, identified empathy as one of the three necessary and sufficient components for the successful development of a strong therapeutic relationship. A strong therapeutic relationship has been consistently found to be predictive of successful patient outcomes, higher levels of treatment engagement, and client retention (Krupnick, Sotsky, Simmens, Moyer, Elkin, Watkins, & Pilkonis, 1996; Meier, Barrowclough, & Donmall, 2004). Similarly, among medical professionals, empathy has been identified as a crucial variable in the doctor-patient relationship and in subsequent ratings of patient satisfaction (Bayne, 2011). The benefits of empathy in the work of helping professionals are further documented as the American Association of Medical Colleges (AAMC) and The American Psychological

Association Task Force on Evidence-Based Therapy Relationships have identified empathy as essential to the work of the helping professional and have recommended the implementation of empathy training in practitioner training programs (Bayne, 2011; Norcross & Wampold, 2011). Although research within and without the field of psychology has accepted empathy as a trait necessary to successful client outcomes, few studies have been conducted indicating the development of such a trait in helping professionals.

Defining Empathy

To date, several definitions of empathy have been developed. Rogers (1959) described empathy as involving an accurate understanding of the client's personal frame of reference as well as the ability to vocalize the perceived frame of reference back to the client to confirm or disconfirm said understanding. Rogers (1975) asserted that empathy involves various elements. These include (a) entering the private perceptual world of another, (b) moment-to-moment sensitivity to client emotions, (c) temporarily and non-judgmentally living in the other's life, (d) communicating therapist's sensings of the other's private world, and (e) frequently checking with the client as to the accuracy of said sensings. Although Roger's (1959) definition of empathy is complex, Rogers (1975) suggested the possibility of developing and training the "empathetic way" via other empathetic individuals. In this way, Rogers emphasized empathy as a skill to learn and not a trait that an individual is simply born with.

More recently, a distinction between general empathy and clinical empathy has been made. General empathy is defined as an automatic involuntary response in reaction to the emotional signals of an interaction partner, similar to what the other is experiencing (Brugel, Postma-Nilsenova, & Tates, 2015). This includes a cognitive and an affective component. In contrast, clinical empathy is defined as a clinical skill to be instrumentally and deliberately applied in practice (Brugel et al., 2015). In congruence with Roger's (1975) perspective, the distinction between general empathy and clinical empathy in the current literature further suggests that clinical empathy is trainable as a skill to be applied in practice, where general empathy is not.

To facilitate the scientific study of empathy, researchers have developed various definitions of clinical empathy. Most recently Brugel et al. (2015) defined clinical empathy as comprised of cognitive, motivative, and behavioral components where perceived empathy was dependent on the professional's ability to recognize and understand the feeling involved, motivation to communicate that understanding, and competence to convey the understanding using effective communication. Similarly, Morse et al. (1992) defined clinical empathy as comprised of affective, moral, cognitive, and behavioral components. The offered definitions have been functional in the development of questionnaires for patients or clients reporting perceived levels of empathy when interacting with helping professionals. However, little research has been conducted on the systematic training of the various components of clinical empathy described. As such, the question remains: how can trainees in the helping professions develop the skills necessary to implement clinical

empathy effectively in practice? The use of unobservable and difficult to measure mentalistic terms such as morality, affective, or motivation in defining clinical empathy have created barriers in conducting a valid study and analysis of empathy training programs.

In addition to Roger's (1975) call to action for the development of an effective empathy training program for helping professionals, further research demonstrates the need for such a program. For example, it has been suggested that sharing or participating too much in a client's emotional experience such as in general empathy may compromise the professional's objectivity (Smajdor, Stockl, & Salter, 2010). Still, other research has found a significant positive correlation between emotional empathy and emotional exhaustion or "burn-out" (Williams, 1989).

Skinner's Approach to Empathy

In contrast to components of Roger's (1975) breakdown of empathy, B. F. Skinner (1974) emphasizes that a person cannot make direct contact with the feelings or covert behavior of another individual. Client verbal reports, as in clinical psychology, facilitate the communication of feelings. However, three limitations to verbal report exist, (a) the terms used to describe private events may be inexact depending on the learning of the feeling terms in describing internal states, (b) certain feeling states may be beyond the reach of verbal description where understanding may only be achieved by undergoing the relevant history that produces these feelings, and (c) the meaning derived from the verbal report is different for the speaker and the listener where meaning for the speaker is derived from the circumstances under which

the verbal response is emitted and meaning for the listener is related to the speaker's comments about the feeling and not the feeling itself (Skinner, 1974). Empathy, then, would be defined by the listener's appropriate response to the speaker's situation as communicated by the speaker.

Among the mentalistic community, empathetic behavior is often considered to be an automatic and involuntary response in reaction to the emotional signals of an individual (Brugel et al., 2015). Terms utilized in such a definition including "automatic," "involuntary," and "reaction" suggest a lack of operant control and thus an inability to train, study, and analyze empathy in a valid way such that the listener reports to feel what the speaker is reporting to experience. By defining empathy as an appropriate response by the listener to the speaker's described situation, training, study, and analysis become viable.

Previous Training Programs

In response to the need for empathy training across various populations and professions, some empathy training programs have been developed. Varying training methods have been applied. Some focus on the professional's verbal response to client disclosure (Truax & Carkhuff, 1967). Others implement didactic training (Bayne, 2011), and still others include what is broadly defined as experiential learning including videotape simulation, lecture, and modeling (Vinton & Harrington, 1994).

Truax and Carkhuff's (1967) empathy training program is one of the most cited and widely recognized in the empathy training research. This program was

developed based on Roger's (1957) three necessary and sufficient therapeutic characteristics for psychotherapy. Focus is placed on the proposed empathy scale.

Truax and Carkhuff's (1967) empathy training program emphasizes the therapist's ability to gain insight on client emotions. To begin, trainees are introduced to Truax and Carkhuff's (1967) Accurate Empathy Scale. This scale includes nine levels of empathetic responding ranging from high to low. The scale is designed to measure empathy where empathy is defined as the therapist's sensitivity to [the client's] current feelings and his or her verbal facility to communicate that understanding in a language attuned to the client's current feelings (Truax & Carkhuff, 1967). Ratings are completed by a third person observer. Trainees are further provided with practice rating empathetic responses from previously audiotaped or live counseling sessions. This is meant to develop an operant discrimination of the various levels of empathetic responding included in Truax and Carkhuff's (1967) Accurate Empathy Scale. When discriminative mastery is achieved, trainees are required to make verbal empathetic responses to tape-recorded client statements. Students are then taped engaging in role-playing exercises and are once again evaluated by various third party students on the empathetic response emitted. Lastly, trainees are evaluated in a single interview with a client.

More recently, Vinton and Harrington (1994) conducted an evaluation of the use of videotape in teaching empathy. Two instructional packages were utilized to teach emotional and expressed empathy. Emotional empathy was defined as the ability to be affected by a client's emotional state. Expressed empathy was defined as

the translation of such feelings into words. Instructional packages included a 100-minute lecture, a written exercise on affect and empathy, modeling, role-playing, and a videotaped simulation. One instructional package included feedback via self-recording. Emotional empathy was evaluated using The Questionnaire Measure of Emotional Empathy (QMEE; Mehrabian & Epstein, 1972) while expressed empathy was evaluated using Carkhuff's Level of Empathy Scale. Participants were provided with a hypothetical client statement to which they were to respond in written form pre- and post-training. Results indicated that no significant increases in emotional empathy were made. However, the instructional package including feedback yielded a higher mean level of empathetic responding in expressed empathy compared to pre-test measures. Follow-up gains in empathetic responding were also better maintained by the group who received feedback along with the instructional package.

Other empathy training models have been developed specifically aimed at medical professionals. Individuals in this population have been largely criticized for undergoing significant decreases in empathy across the course of their careers (Hojat et al., 2009). Mandatory courses and workshops have been developed within the medical profession specifically addressing empathy (Aggarwal & Guanci, 2014; Stepien & Baernstein, 2006). Typical components utilized include goal setting, lecture, discussion, and reflection. Other interventions utilized include the use of narrative and creative arts (Muszkat, Yehuda, Moses, & Naparstek, 2010; Shapiro, Morrison, & Boker, 2004), writing (Shapiro, Rucker, Boker, & Lie, 2006), drama (Lim, Moriarty, & Huthwaite, 2011), communication skills training (Bombeke, Van

Roosbroeck, De Winter, Debaene, Schol, Van Hal, & Van Royen, 2011) problem-based learning (Karaoglu & Seker, 2011), interpersonal skills training (Tiuraniemei, Läärä, Kyrö, & Linderman, 2011), and experiential learning (Varkey, Chutka, & Lesnick, 2006). Mixed results have been found. Specifically, some reported increases in empathy (Bombeke et al., 2011; Lim et al., 2011; Muszkat et al., 2010; Tiuraniemei et al., 2011), while others did not (Karaoglu & Seker, 2011) at times even finding conflicting results dependent on the measure used (Shapiro et al., 2004).

One intervention that is gaining notoriety within the medical field is Bayne's (2011) empathy training program. This program includes the use of didactic and experiential content applied to third-year medical students in a small group format. The measurement tool used to assess empathy was The Consultation and Relational Empathy scale (CARE; Mercer, Watt, Maxwell, & Heaney, 2004). CARE consists of a ten-item questionnaire to be completed by the treated patient rating the physician on a six-point scale ranging from poor to excellent. Cognitive, moral, and behavioral components of empathy were addressed within Bayne's (2011) training program. Didactic content was designed to target moral and cognitive empathy and experiential content was designed to target behavioral empathy. Didactic content included discussion on various topics surrounding empathy including the differences between empathy and sympathy, empirical evidence on the impact of empathy on the physician-patient relationship, and empathetic verbal and non-verbal techniques. Experiential content included modeling and role-playing various possible scenarios involving difficult patients. Results demonstrated significant increases in the

physician's ratings on the CARE scale from pre- to post- intervention. An analysis of training components implemented in Bayne's (2011) training program found that discussions that included modeling and role-play opportunities were most beneficial to training outcomes.

Other empathy training programs are aimed at developing empathetic responding in the at-risk youth population. To exemplify, The Center for Safe Schools and Communities developed The PEACE Curriculum through which students with aggressive behaviors underwent five phases of instruction (Salmon, 2003). These included parent empowerment, empathy training, anger management, character education, and essential social skills. Emphasis is placed on empathy training as a necessary lifelong skill. In this portion of the program, students engage in the HEARS model through which they learn to hold the correct posture, maintain appropriate eye contact, assess the person's feelings correctly, respond appropriately with their face, and say the person's feelings in their own words. Truax and Carkhuff's (1967) Accurate Empathy Scale is utilized within this program so that students may learn to say the other person's feelings in their own words. This training model emphasizes the development of a "feeling vocabulary" and is primarily based on student engagement in classroom activities. An example may include students selecting a feeling word and acting it out non-verbally so that other students may guess the feeling. Although not specifically mentioned, it may be that the activities implemented served to provide the youth with modeling, role-playing, and feedback opportunities.

Measurement Tools

Given that a universal operational definition of empathy has not been developed and accepted, it is important to note the differences between the various measurement tools utilized in the mentioned empathy training programs. Traux and Carkhuff's (1967) Accurate Empathy Scale, for example, includes an evaluation of therapist empathy based on the observations of a third person observer. The assumption is that the third person observer is accurately able to access the client's feelings and rate whether the therapist is feeling or reflecting these in an empathic manner focusing on the helper's verbal response. From the behaviorist's perspective, this is not a valid measure, as the third-person rater does not have access to the private events or feelings being experienced by either the client or the therapist. Vinton and Harrington (1994) further cited Traux and Carkhuff's (1967) measure as questionably valid.

Other studies have included the use of the helping professional's self-rating or evaluation of empathy (Hojat, Gonnella, Nasca, Mangione, Vergare, & Magee, 2002). Though seemingly helpful, the professional's self-rating of empathy may not be consistent with the client's rating of the professional's empathy (Moyers & Miller, 2013). Other measures such as the CARE scale used in Bayne's (2011) study are aimed at the client's perceptions of the professional's empathy. Although this measure does not directly evaluate the moral, cognitive, or emotive components of empathy, measures directed at patient or client perspectives are of value as research

has demonstrated the significance of client perceptions of helper empathy on treatment outcomes (Moyers & Miller, 2013).

Overall, empathy ratings can significantly differ between counselor, client, and independent observers within the same session (Moyers & Miller, 2013). Where client assessment of empathy is typically considered more powerful, it is important to note that both independent observer and client assessments of helper empathy are useful in predicting treatment outcome (Moyers & Miller, 2013). Although third-person observers may not be able to accurately access and evaluate the feelings of the client or whether these are being addressed by the helping professional, third person observers are able to assess overt responses that are generally indicative of empathy.

Empathy Training Program Limitations

The empathy training models presented are not without limitations. In Traux and Carkhuff's (1967) program, for example, various factors cited as significant to empathy ratings are not systematically implemented into training. First, the frequency of therapist responses made to the client is cited as significant to the likelihood that a high level of accurate empathy will be perceived and communicated (Truax & Carkhuff, 1967). Frequency of therapist responses, however, is not included or specifically measured in the Accurate Empathy Scale. Further, focus is placed on only the verbal response. Next, Truax and Carkhuff's (1967) training program emphasizes the recognition of both verbal and non-verbal communications emitted by the client to the professional's accurate interpretation of the feeling involved. However, little regard is made to the therapist's non-verbal behavior. Unlike Traux and Carkhuff

(1967), Rogers (1975) emphasizes the significance of only the professional's behavior on the level of empathy communicated in session. As such, therapist's verbal and non-verbal cues may also influence the client's ultimate rating of empathy. Lastly, the Traux and Carkhuff (1967) training program did not account for possible modeling effects of verbal and non-verbal behaviors emitted by individuals ranked as high in empathy by others during observational and auditory assessment activities.

The need for the development of an empathy training program across helping professions is highlighted in the literature. Although various training programs have been developed across varying populations, there is little consensus in definition, intervention, and assessment. Several training programs presented include a combination of both experiential and didactic training. Topics and behaviors addressed in training, however, vary based on the definition of empathy being used. Several definitions utilized in the current literature include mentalistic terms to address empathy. These terms are difficult to operationalize in research and complicate measurement and assessment. The present study seeks to address empathy training from a behavior analytic point of view by including only those previously proposed components of empathy, which are observable and measurable.

The Current Study

The current study sought to define, train, and assess empathy from a behavior analytic point of view. This study set up a client-peer advisor interaction in the form of a mock peer advisor session to analyze the effects of video modeling and feedback in training clinical empathy. Participants of this study took on the role of the peer

advisor and various confederates posed as clients. Participants were rated on the level of empathy emitted pre- and post- intervention. Modeling and feedback were selected as most of the cited training programs either intentionally or unintentionally included some form of modeling and feedback in their intervention.

Clinical empathy was treated as a skill to be developed and defined as an appropriate verbal or non-verbal response by the listener to the speaker's verbal and/or non-verbal behavior. Empathetic verbal behavior was trained and assessed based on Carl Rogers' (1975) reflective listening. Reflective listening was selected as it was conveyed by Rogers (1975) as a way for the therapist to communicate empathy. Reflective listening further encourages the client to continue talking non-judgementally and non-directively by verifying understanding of the client's verbal report (Rautalinko & Lisper, 2004). Non-verbal empathetic behaviors were selected based on the current literature on empathetic non-verbal behavior. Ratings of empathy were completed by both the confederate clients and third-party individuals. In this study, confederate client and third person ratings of empathy were selected over other forms of assessment as trainees in the helping professions will often receive feedback from professors, other helping professionals, or their clients when in training.

The present study asked two questions: (a) Can behaviors indicative of empathy be trained using video modeling and feedback, and (b) do client and third person ratings of an individual's level of empathy increase after such training?

It was hypothesized that behaviors judged to indicate empathy will increase in response-to-opportunity after implementing video modeling and feedback. It was also predicted that both confederate client and third-party ratings of the participants' level of clinical empathy would increase after training.

METHODS

Participants

Four participants (Camila, Ruth, Abagail, and Harper) were recruited for the purpose of this study. Participants were recruited through the California State University, Stanislaus Psychology department's online subject pool, flyers, and in classrooms where professors gave consent. Camila was 26 years old and identified as Hispanic; Ruth was 38 years old and identified as White; Abagail was 29 years old and identified as White; and Harper was 21 years old and identified as White. All participants were psychology majors, female, and enrolled as students at California State University, Stanislaus. Participants were required to be enrolled in a helping profession major (sociology, psychology, nursing, child development, etc.) or in coursework related to a helping profession to participate in the study. Participants diagnosed with an intellectual disability were excluded to control for possible confounding variables.

Setting

All research sessions were conducted in a private room on the California State University, Stanislaus campus. The room was equipped with a one-way mirror, two chairs, and the materials needed for the mock psychotherapy session (video camera, clock). Chairs were positioned to be five feet apart and were angled to face one another.

Materials

Demographic Questionnaire

A demographic questionnaire (Appendix A) was created for the purposes of this study. The questionnaire included questions on participant age, major, year in university, as well as other variables.

Video Camera

A video camera was used to obtain permanent product data on participant baseline and post-intervention verbal and non-verbal empathetic behaviors during the mock psychotherapy sessions. The video camera was placed on a tri-pod and positioned to record both the client and the therapist from the third-person perspective and in a way that the entirety of their bodies was visible. Both the participants and confederate clients were asked to sign a waiver allowing the use of the videos collected for research purposes.

Topic Scenarios

Various topic scenarios (Appendix B) were devised for confederate clients to use and deliver in a non-scripted manner when interacting with the participant. Though various topic scenarios were pre-selected, non-scripted delivery ensured the set-up of a more naturalistic client-helper interaction. Session-to-session scenario topics varied. Confederate clients were asked to refrain from engaging in conversation about personal and high-risk topics including suicide, abuse, and trauma when in session with the participant. A full list of topics to refrain from can be found in Appendix B.

Modeling Video

A modeling video was created for the purpose of this study. The modeling video was recorded from the third-person perspective and in a way that the entirety of the individuals' bodies was visible. It included a depiction of both verbal and non-verbal empathetic behaviors emitted in response-to-opportunity within a scenario of a helping professional and client interaction.

Social Validity Questionnaire

A social validity questionnaire (Appendix C) was created to assess the social validity of the modeling and feedback intervention implemented. The social validity questionnaire included ten items to be answered on a five point Likert scale.

Empathy Rating Forms

Client and third person empathy rating forms (Appendix D and E) were created for the purposes of this study. The empathy rating forms included eight items to be answered on a four point Likert scale as a well as a comments section. The eight items were divided into two sections (a) clinical empathy, and (b) general empathy.

Design and Measurement

The present study used a single-subject multiple baseline across participants to evaluate the effectiveness of a package intervention comprised of video modeling and feedback on participant (e.g., peer advisor) emitted empathetic behaviors. The independent variable was a training package consisting of video modeling and feedback. The dependent variable was participant emitted empathetic behavior comprised of both verbal and non-verbal behavior measured as a response-to-

opportunity ratio. Response-to-opportunity ratio was calculated by dividing the number of participant emitted empathetic responses by the number of verbal opportunities to respond plus the number of non-verbal opportunities to respond.

Empathetic verbal behavior was operationally defined as the use of a reflective listening statement, and/or question when presented with an opportunity-to-respond. Reflective listening was defined as the summarization or restating of the content in another's verbal report to verify that the report has been understood correctly (Heim, 2012). Reflective listening can include minimal responses such as "Uh-huh," "Sure," and "Right," direct encouragement such as "Go on," "Continue" and "Tell me more," or the reflection of fact or emotion with or without the use of common reflective listening sentence starters (Rautalinko & Lisper, 2004). Examples of reflective listening sentence starters include but are not limited to, "It sounds like…," and "What I hear you saying is…."

Empathetic non-verbal behaviors were operationally defined as mirroring change in tone of voice, forward trunk lean, close distance (36 in.), and head nodding when an opportunity-to-respond was presented. These behaviors were selected as research has demonstrated that each of these independently contribute to higher levels of judged empathy and patient satisfaction (Haase & Tepper, 1972; Pawlikowska, Zhang, Griffiths, Van Dalen, & Van Der Vleuten, 2011).

An opportunity-to-respond was defined as verbal and non-verbal behaviors emitted by the client either in combination or independently. Verbal opportunities to respond included verbal disclosure of personal life circumstances and/or feelings,

change in tone of voice, and questions about understanding directed at the helper (i.e., Does that make sense?, Do you get what I'm trying to say?, etc.). Non-verbal opportunities to respond were defined as client lack of eye contact for more than 5 seconds, body rubbing as defined by Meadors and Murrary (2014; i.e., "the use of one or both hands to continuously rub any body part including the arms, legs, torso, neck, and hands"), and closed off body posture as defined by Meadors and Murray (2014; i.e., "any stable position that involves the covering or clasping of the body and/or crossing of limbs such as in crossing of one arm, hand leg, or foot to its opposite").

Data on verbal and non-verbal empathetic behaviors emitted by the participants when presented with an opportunity-to-respond was collected via permanent product video using data sheets (Appendix F) created for the purposes of this study.

Interobserver Agreement (IOA)

A secondary independent observer collected data from permanent product videos for 30% of sessions. Interobserver agreement was calculated for empathetic responses made and for opportunities to respond. IOA was calculated by dividing the number of agreements by the number of agreements plus disagreements and multiplying by 100.

General Procedure

Participants were given an informed consent sheet (Appendix G). The researcher reviewed the sheet with the participant verbally, letting the participant know of their rights as a participant, explicitly stating the use of video recording and

observation, and answering any questions that arose. If the participant chose to continue, he or she signed one copy of the form and return it to the researcher. Signed consent forms were stored in a folder separate from all other data sheets. A second (blank, unsigned) copy of the consent form was handed to the participant for his or her own records. As a part of the informed consent, participants were also asked to sign a consent to video recording form (Appendix H) indicating their consent to the use of video recording during research sessions and the use of such video recordings for research purposes.

Participants were initially given a demographic questionnaire (Appendix A). Participants were told that they should not write their names or any other identifying information on the questionnaire. Participants were told that they may skip any questions that made them feel uncomfortable. In addition, they were told to return the questionnaires blank if, after further consideration, they decide not to participate. The researcher exited the room while the participant completed the questionnaire to ensure participant privacy.

Participants were asked to participate in twenty 30-minute research sessions. Each research session included a 5-minute mock psychotherapy session with a confederate client. The 5-minute mock psychotherapy session involved the participant taking on the role of a peer advisor with the confederate as a client. Sessions were video recorded and observed via a one-way mirror. Various confederate clients were used. Participants took part in only one session per day. Baseline sessions provided a measure of both verbal and non-verbal empathetic behaviors emitted by the

participant in response-to-opportunity without the implementation of the intervention. Intervention sessions provided a measure of verbal and non-verbal empathetic behaviors emitted by the participant in response-to- opportunity with the training package in place. Participants were told that he or she would be a peer advisor with another student to talk about stressors.

Baseline Sessions

Participants were escorted to the assigned room by the researcher and provided with the instruction, "Have a seat and do your best to listen and be there for the client. The client will be with you shortly. Remember to watch the clock and conclude the session after five minutes." Within two to five minutes the confederate client entered the room. Confederate clients were provided with and allowed to select from pre-selected "safe" example client scenarios prior to entering the session. Confederate client used the topic scenarios and freely acted as if he or she were the client from the scenario during the mock session. Participants were not provided with any form of feedback on their performance at the conclusion of baseline sessions.

Intervention Sessions

Prior to entering the intervention session, participants watched the modeling video created. Next, participants watched the video of their own last mock peer advisor session. The researcher, then, provided the participants with feedback. Feedback included participant's percentage of empathetic responding and pointing out examples of both empathetic and non-empathetic responding from their last peer advisor session video. Participants were provided with a 5-minute break, if desired.

Procedures to follow were the same as baseline. Participants were asked to fill out the social validity measure at the conclusion of their last mock peer advisor session.

Participation in each research session concluded once the mock peer advisor session with a confederate client had been recorded. At the conclusion of the video recording, participants were told that that was all for the day. The researcher immediately took the video recorded clip, downloaded it onto her personal computer, and placed it in a password-protected file. At that point, clips on the video camera were immediately deleted to ensure confidentiality.

Empathy Ratings

Both confederate clients and third-person professionals rated the participant's conveyed level of empathy. Confederate clients completed the empathy rating form (Appendix D) immediately after their first and last session with the participant. Likewise, third-person raters were provided with videos of participants' first and last session (pre- and post- intervention) to complete the third person empathy rating form (Appendix E). Third person raters qualified as raters by having completed a masters degree with a background in psychology. Third-person raters were instructed to watch each video in whatever order they chose and rate the helper depicted in the video. All raters signed a confidentiality form (Appendix I) indicating that they should not disclose any information about the individuals depicted in the videos prior to watching the videos.

At the conclusion of their participation in the study, participants, raters and confederates were orally debriefed and given a debriefing form (Appendix J). The

debriefing form included information on what the study was about, the use and purpose of confederate clients in the study, and who to contact or where to go for the results on the study once the research is completed. The debriefing form also included counseling contact information in the case that the participant or confederate required it. All completed videos and forms were stored securely to ensure confidentiality.

Risks and Benefits

The present study may contribute to the development of the research literature regarding empathetic skills training. Participants were provided with a $50 gift card for their participation in the entirety of the study or the equivalent to their participation as well as the possibility of earning extra credit. Raters who filled out the empathy rating form had no direct benefit from this study but helped to contribute to the current research literature involving empathetic skills training. Further, participants had the opportunity to learn about research in this area of study, and may have learned something about how research studies are conducted.

Participants and confederate clients were asked for permission to be video recorded and observed via a one-way mirror in a client-peer advisor situation. Such video recordings were viewed and rated by individuals with a completed masters degree and background in psychology. Some participants or confederate clients may have felt uncomfortable or embarrassed. Confederate clients may have also experienced discomfort or distress if the topic addressed during the client-peer advisor situation was relevant to their life. Contact numbers for the counseling center

on campus provided an outlet for those persons who felt uncomfortable as a result of their participation in the study.

RESULTS

The present study proposed that the implementation of a package intervention consisting of video modeling and feedback would increase the percentage of empathetic response-to-opportunity across all four participants as compared to baseline. Further, it was also expected that increases in the percentage of empathetic response-to-opportunity would result in higher client and third person empathy ratings as compared to baseline.

Overall Results of the Multiple Baseline Research Design

A multiple baseline design across participants was used to demonstrate experimental control. In adherence to the multiple baseline design, all participants were initially placed on baseline and the intervention was sequentially applied across participants. Figure 1 depicts the multiple baseline graph for Camila, Ruth, Abagail, and Harper. Camila remained on baseline for sessions 1 - 4. Upon introduction of the intervention (session 5), Camila demonstrated a significant increase in percent of empathetic responding to opportunity, while continued baseline data for Ruth and Abagail remained stable. However, unlike Ruth and Abagail, Harper's continued baseline data demonstrated an increase in empathetic responding-to-opportunity. Ruth remained on baseline for sessions 1 – 8 and was introduced to the intervention on session 9. Upon introduction of the intervention, a significant increase in empathetic responding to opportunity was replicated with Ruth. Continued baseline data for Abagail remained stable. Harper's continued baseline data, again, demonstrated a

significant increase in empathetic responding to opportunity. Abagail remained on baseline for sessions 1 – 13 and was introduced to the intervention on session 14. A significant increase in empathetic responding to opportunity was replicated. However, continued baseline data for Harper demonstrated an increase in empathetic responding to opportunity. Harper remained on baseline for sessions 1 – 16 and was introduced to the intervention on session 17. Harper demonstrated only a small increase in percent empathetic responding to opportunity from session 16 to 17.

Detailed Results for Each Participant

Of the four individuals that participated in the present study, three out of four participants demonstrated an immediate and significant increase in level in percent of empathetic responding to opportunity immediately after the implementation of the intervention. Data for all participants, with the exception of Harper, remained stable during baseline as the training package was sequentially implemented across all four participants.

Camila

Camila remained on baseline for sessions 1- 4. The training package was implemented for sessions 5-20. Two data points were not available for session 13 and 19 as Camila was unable to attend those sessions. A significant increase in level of percent of empathetic responding-to-opportunity occurred between baseline and the implementation of the training package from 43% to 100%. Data for session 6 indicate a drop in empathetic responding to opportunity from 100% to 60% where thereafter an increasing trend is noted across sessions 6 – 9, leading into steady state

responding in sessions 9 – 20 with a range of 86% to 100%. Low variability was noted during both baseline and intervention phases.

Ruth

Ruth remained on baseline for sessions 1 – 8. The training package was implemented across sessions 9 – 20. Data for session 5 is unavailable for Ruth as Ruth was unable to attend the research session. A significant increase in level of percent of empathetic responding to opportunity occurred between baseline and the implementation of the training package from 22% to 69%. Empathetic responding to opportunity ranged from 14% to 56% in the baseline phase and 69% to 100% during the intervention phase. An increasing trend in percent of empathetic responding to opportunity is demonstrated by the data during the intervention phase. Low variability was noted during both baseline and intervention phases.

Abagail

Abagail remained on baseline for sessions 1 – 13. The intervention package was implemented across sessions 14 – 20. Data for Abagail is unavailable for sessions 8 and 17 as the she was unable to attend the research session. A significant increase in level of percent of empathetic responding to opportunity occurred between baseline and the implementation of the training package from 4% to 88%. Empathetic responding to opportunity ranged from 0% - 45% in the baseline phase and 47% to 88% during the intervention phase. Low variability and a decreasing trend were noted during the baseline phase. However, some variability was noted during the intervention phase.

Harper

Harper remained on baseline for sessions 1 – 16. The intervention package was implemented across sessions 17 – 20. Data for Harper is unavailable for session 12 as she was unable to attend the research session. Data on Harper demonstrated a high amount of variability throughout baseline sessions ranging from 17% to 83% empathetic responding to opportunity. No significant increase in level was demonstrated after the intervention was implemented with 33% empathetic responding to opportunity in session 16 and 44% empathetic responding to opportunity in session 17. However, once the intervention package was implemented, data for Harper demonstrated a stable increasing trend in percent of empathetic responding to opportunity across sessions 17 – 19 with a final drop in percent of empathetic responding to opportunity in session 20.

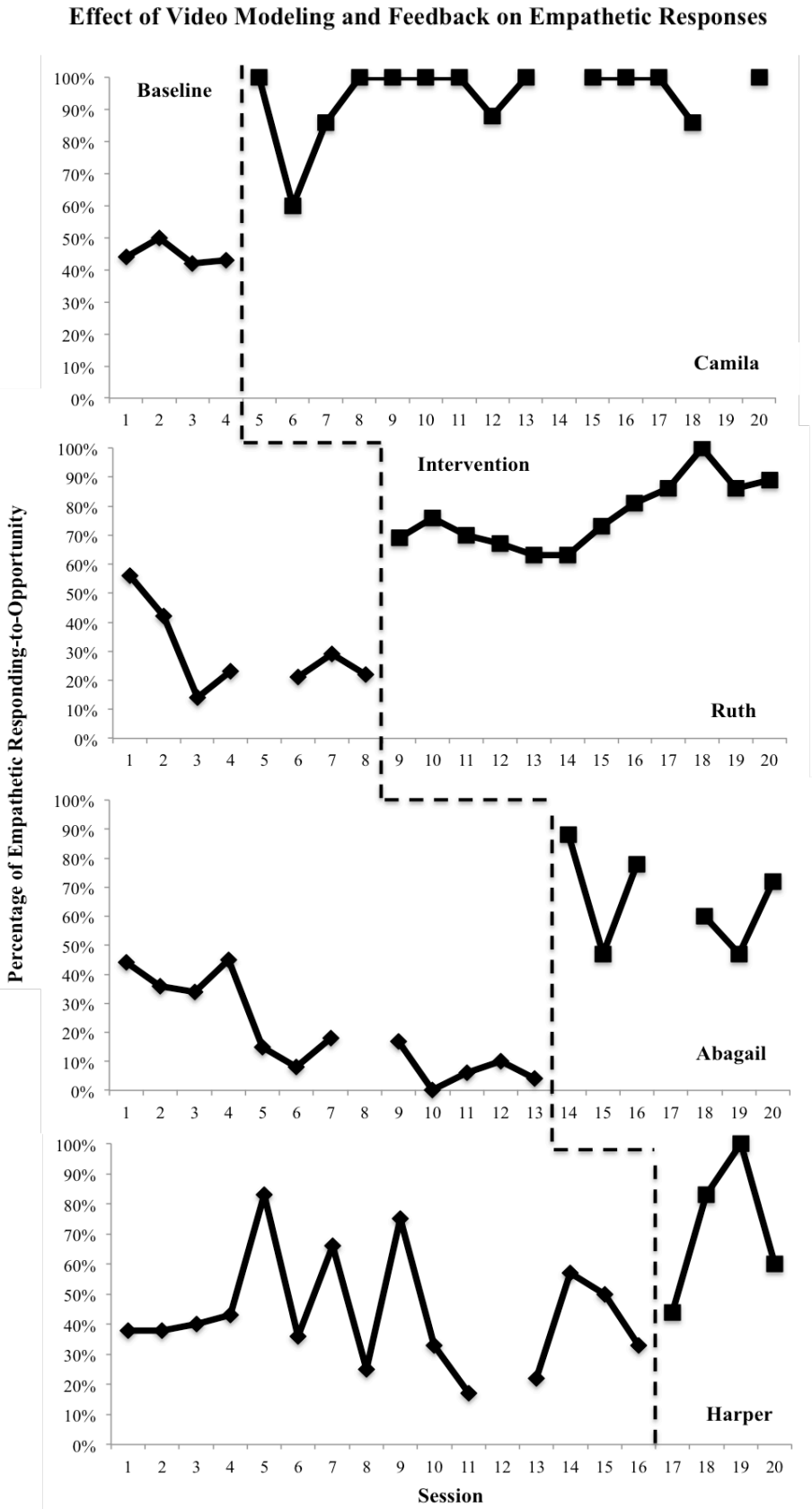

Figure 1. A multiple baseline graph across four participants depicts the effects of an intervention package comprised of a modeling video and feedback.

Client Empathy Ratings

Clinical Empathy

Data on client ratings of participant clinical empathy were analyzed for the first and last mock peer advisor sessions. See Figures 2 - 5. It was predicted that client ratings of participant clinical empathy would increase when comparing baseline (session 1) and intervention (session 20).

Three participants were all rated to at least a level of "agree" to questions on participant empathetic verbal responses, body language, verbal cue recognition, and non-verbal cue recognition. This suggests that Ruth, Abagail, and Harper were all perceived as empathetic prior to the implementation of the intervention package. After the intervention, all three were rated at least one Likert scale point higher, moving from "agree" to "strongly agree."

One participant was not rated as empathetic in session 1 yielding "disagree" measures when clients were asked about participant's ability to emit empathetic body language, verbal cue recognition, and non-verbal cue recognition. These ratings increased from "disagree" to "strongly agree" after the intervention. These data suggest that Camila was perceived as more clinically empathetic at the conclusion of the intervention.

General Empathy

Data on client ratings of participant general empathy were collected at the first and last mock peer advisor sessions. Three participants demonstrated increases in rating by at least one Likert scale point across at least 1 of 4 questions related to

general empathy. Questions that did not demonstrate an increase in rating remained the same. This suggests that Camila, Abagail, and Ruth were perceived as more generally empathetic at the conclusion of the intervention.

One participant had a decrease in rating in 2 of the 4 questions related to general empathy when comparing session 1 to session 20. Where Harper was rated "strongly agree" to questions on "The helper seems to be able to imagine him/herself in my shoes really well," and "I think that the helper was feeling what I was feeling." at the conclusion of session 1, ratings decreased to "disagree" and "agree" at session 20. Ratings on questions about helper understanding and caring remained at "strongly agree" when comparing session 1 to session 20. See Figures 2 – 5.

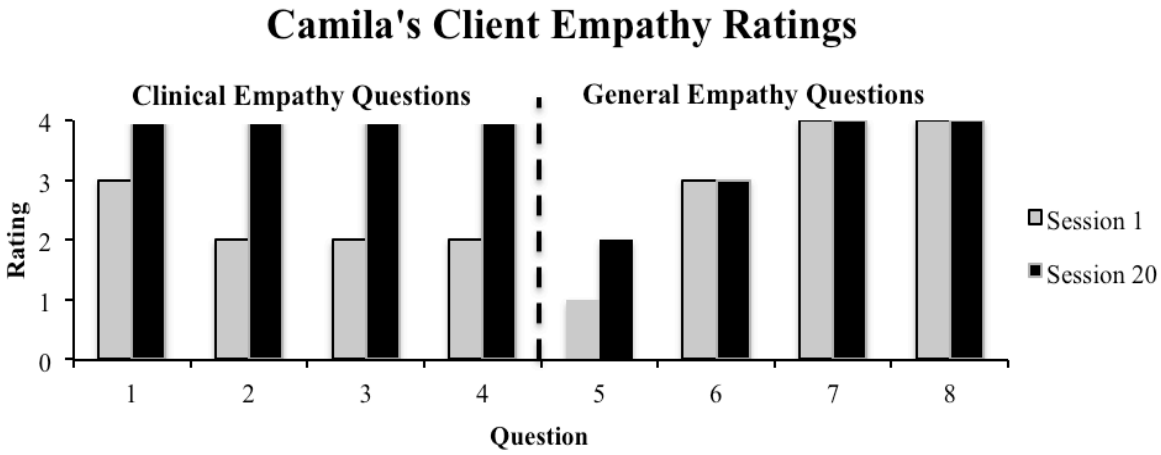

Figure 2. A bar graph depicting Camila's client empathy ratings for session 1 and 20.

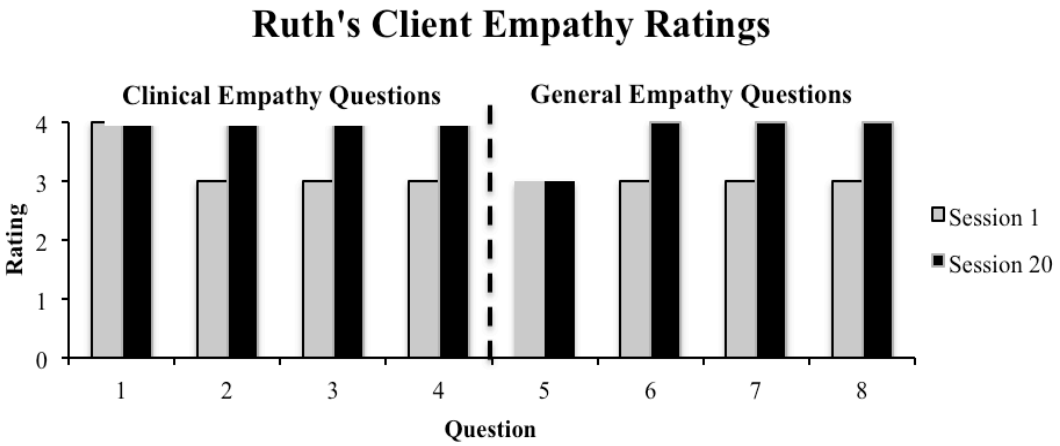

Figure 3. A bar graph depicting Ruth's client empathy ratings for session 1 and 20.

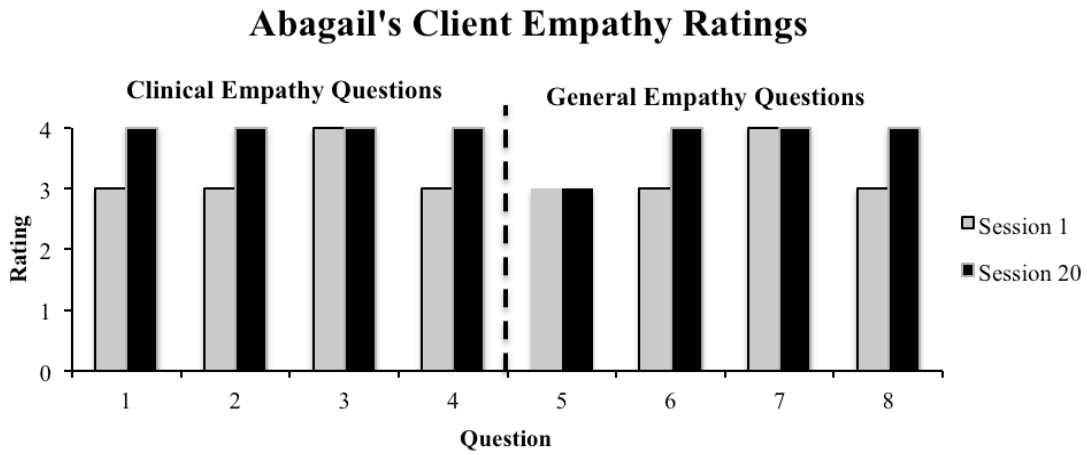

Figure 4. A bar graph depicting Abagail's client empathy ratings for session 1 and 20.

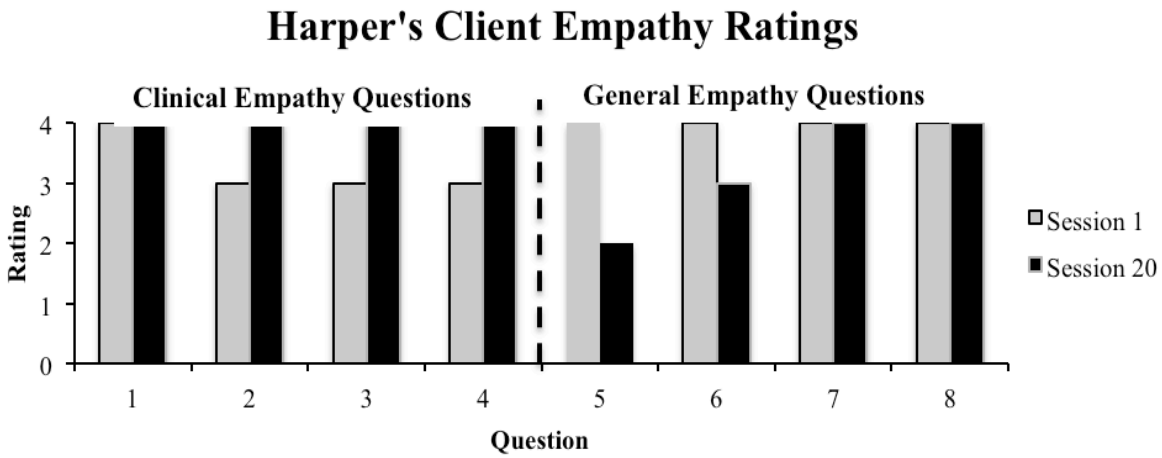

Figure 5. A bar graph depicting Harper's client empathy ratings for session 1 and 20.

Third Person Empathy Ratings

Three individuals with a master's degree and a background in psychology rated each participant's first and last peer advisor session. See Figures 6 – 9. It was predicted that third person ratings of participant clinical empathy would increase when comparing baseline (session 1) to intervention (session 20). Data across all three raters were averaged for the first and last session. Mostly, third person ratings of participant empathy remained consistent. Specifically, 7 questions on clinical empathy across participants remained consistent, 5 increased, and 4 decreased. Similarly, 7 questions on general empathy across participants remained consistent, 4 increased, and 5 decreased. No patterns on clinical or general empathy ratings across participants were noted.

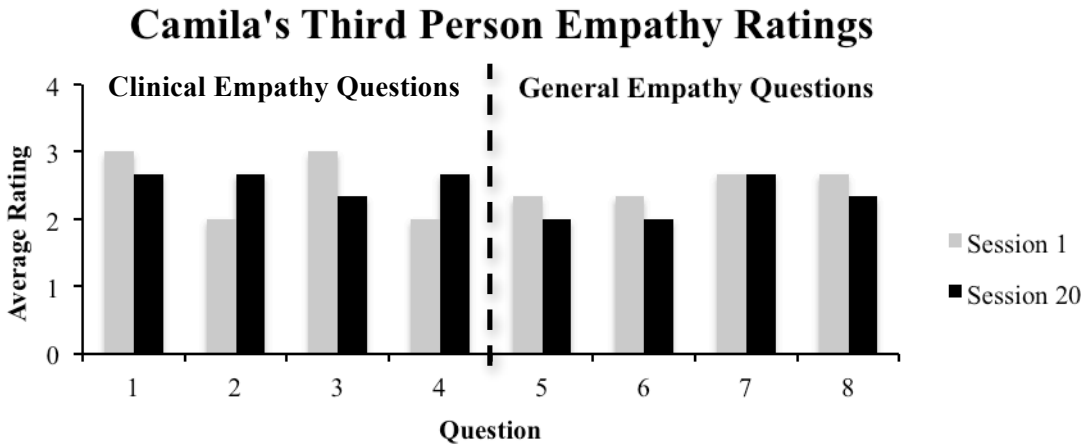

Figure 6. A bar graph depicting Camila's average third person empathy ratings for session 1 and 20.

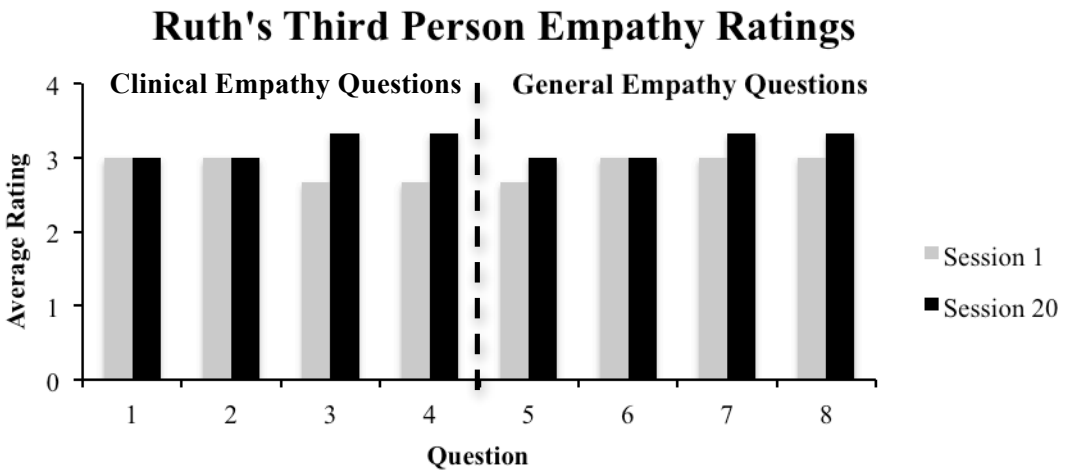

Figure 7. A bar graph depicting Ruth's average third person empathy ratings for session 1 and 20.

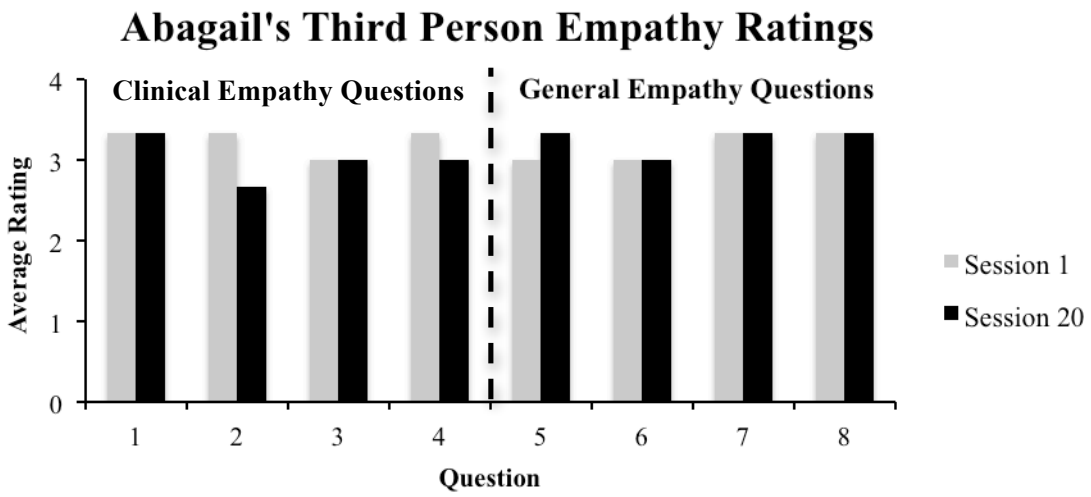

Figure 8. A bar graph depicting Abagail's average third person empathy ratings for session 1 and 20.

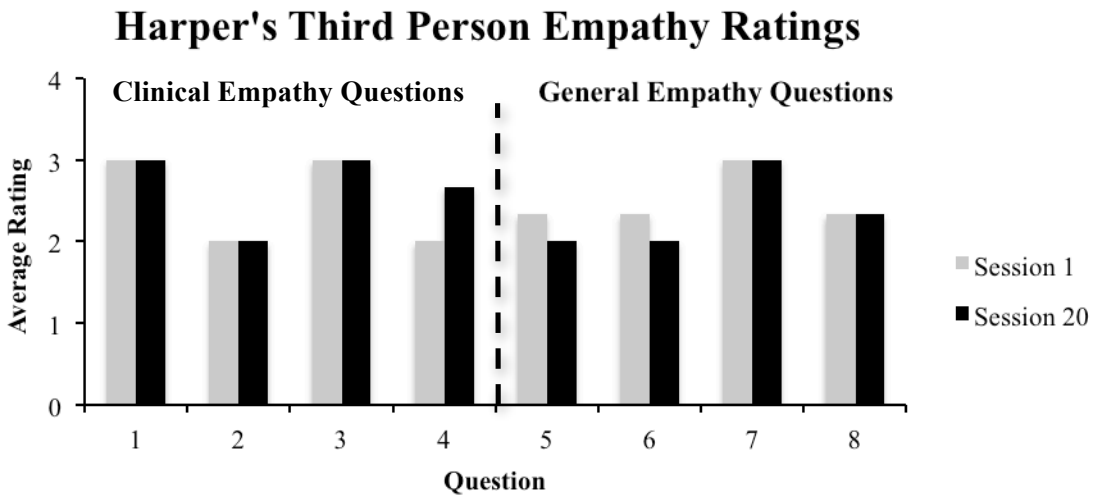

Figure 9. A bar graph depicting Harper's average third person empathy ratings for session 1 and 20.

Interobserver Agreement (IOA)

Interobserver agreement data were collected across both baseline and intervention phases and across all participants. IOA data were collected for 30% of sessions. IOA was calculated for both opportunities to respond and for empathetic responses made per session. IOA for empathetic responses across all participants was 71%. IOA for opportunities to respond across all participants was 82%.

Treatment Integrity

A treatment integrity checklist was utilized for 75% of research sessions. Treatment integrity remained at 100% in both baseline and intervention phases across all participants.

Social Validity

A social validity questionnaire was developed for this study to determine how participants would rate the modeling and feedback package on acceptability, feasibility, and understanding.

Acceptability

All four participants either agreed or strongly agreed that the implemented training package was a good way to train helping professionals and would recommend this type of training to other future helping professionals. Further, all participants strongly agreed that they understood the benefit of empathetic skills training, liked this type of training, and would participate in a similar training again.

Feasibility

Three out of four participants either disagreed or strongly disagreed that the training package took too long to do. One participant did not agree nor disagree. Three out of four participants further disagreed that this type of training would be difficult to use in a real-world setting. One participant did not agree or disagree.

Understanding

All participants rated that they were able to use the skills taught in the training and that the training was clear in what was required of them to implement empathetic skills in practice.

While the intervention package implemented in the current study was rated high on acceptability, feasibility, and understanding three out of four participants noted that more variation in the modeling video would be preferred. Also, one participant did not like watching her own video, while two participants specifically noted liking receiving feedback on their performance.

DISCUSSION

The present study took a behavior analytic approach to defining, training, and assessing clinical empathy. It sought to determine whether a training package including video modeling and feedback would increase the percent of empathetic responses-to-opportunity by the participants. Further, the current study questioned whether ratings of participant empathy completed by clients and third person observers would increase after the training package was implemented.

Empathetic Responding

Data collected in the current study indicate that percent of empathetic responses made to opportunity increased after the training package was implemented for three of the four participants (Camila, Ruth, and Abagail). Whereas Harper's data demonstrate an initial increasing trend in percent of empathetic responding to opportunity after the training package was implemented, high levels of variability were noted during baseline sessions in addition to a significant decrease in empathetic responding on session 20. Although no known research has analyzed percent levels of empathetic responses-to-opportunity, it may have been that other personal variables relevant to Harper could have influenced responding. This includes Harper's learning history related to prior mentoring experience and her reported diagnosis of attention deficit disorder (ADD). Further, variation in the data may have occurred due to changes in the confederate client from session to session. Perhaps client characteristics (i.e., cultural background, sex, rate of speech, etc.) influenced

participant responding. More specifically, high variability from session to session was observed when Harper was paired with Confederate Client 2. Harper alternated sessions based on confederate client availability between Confederate Client 1 (CC1) and Confederate Client 2 (CC2). Baseline differences in percent of empathetic responding to opportunity from session to session when paired with CC1 was, on average, 12% with a range difference of 2% – 35%. In contrast, the average baseline difference in percent empathetic responding to opportunity from session to session when paired with CC2 was, 32% with a range difference of 5% - 50%.

Client Ratings

Data indicate that client ratings on a Likert scale of participant empathy increased when comparing the first and last mock peer advisor session. While all participants demonstrated an increase in client ratings of empathy, data showed that all participants were also rated as empathetic to some extent in session 1. In session 1, empathy may have been perceived as involving advice giving and personal experience sharing with the client. These behaviors may be considered empathetic in the general sense. However, these are not recommended or typically trained in individuals pursuing a career in the helping profession (i.e., therapists; Amada, 2010). In addition, some helping professionals will not have similar experiences to share with the client so other empathetic methods are needed. Further, Williams (1989) found that burnout was correlated with relating too much to client experiences. As such, it may be that engaging in behaviors such as advice giving and personal experience sharing can lead to burnout.

Third Person Ratings

Third person ratings of participant empathy did not significantly change when comparing first (baseline) and last (intervention) mock peer advisor sessions. Client ratings of participant empathy, however, did demonstrate an increase when comparing the first and last mock peer advisor sessions. This finding agrees with Moyers and Miller's (2013) study indicating the empathy ratings can significantly differ between client and independent observers within the same sessions. In line with the differences in ratings found, data further indicated significant differences in client and third person observer open-ended empathy ratings based on the last question of the empathy rating form. When asked to give an open-ended response, third person raters often provided feedback such as "too much advice giving," or "had hands in pocket the whole time." In contrast, client responses included general comments such as "seemed uncomfortable," or "was able to relate to me." Differences in client and third person open-ended data may be indicative of client and third person raters' expectations and learning history. More specifically, as third person raters were selected for their background and education in psychology, open-ended comments seem to be indicative of the third person raters' learning history and behavioral expectations of the peer advisor in the video, while client comments seemed to relate more to the general "feeling" of the session.

In addition to differences in client and independent observer ratings, Moyers and Miller (2013) cited the significance of client ratings of empathy on treatment outcomes over that of self-ratings or third person ratings. As such, it may be that

client perceptions of empathy are significant sources of feedback in relation to client satisfaction, while third person ratings are relevant when considering specific skill acquisition. To further exemplify, Truax and Carkhuff (1967) relied solely on the ratings of third person observers. Use of third person observers and the feedback these provided helped trainees achieve discriminatory mastery of the various levels of responding using Traux and Carkhuff's (1967) scale. However, it is unclear whether the trained responses influenced client ratings of therapist empathy.

Feedback as Conditioned Reinforcement

While the current study did not attempt to discriminate between the effects of video modeling and the effects of feedback on changes in empathetic responding, results were consistent with those of Vinton and Harrington (1994) who found that a training package including feedback yielded a higher mean level of empathetic responding in expressed empathy compared to pre-test measures. In the current study, feedback was provided in the form of a percentage of empathetic responding to opportunity by pointing out specific instances of empathetic responding and non-empathetic responding in the participant's video from the previous session. All participants were recruited from university classes where they probably encountered the conditioned reinforcing or punishing functions of "passing" or "failing" percentages. Feedback in the form of a percentage may have served as a source of conditioned reinforcement or conditioned punishment to engage in behaviors defined as empathetic and refrain from behaviors defined as non-empathetic.

Verbal Behavior as Reinforcement

Verbal behavior is defined as any behavior that is reinforced through the mediation of another person (e.g., verbal behavior, gestures, written language, etc.; Skinner, 1957, p. 14). This usually involves a speaker and a listener who have a common history of mediated reinforcement for their verbal interactions. Deviating from the traditional Rogerian perspective, Skinner (1974) reasoned that a person cannot make direct contact with the feelings or covert behavior of another. They can only make direct contact with the overt behavior. Empathy, as such, is no longer a mutual sharing of feelings, but an appropriate response made by the listener to the speaker's comments. In a verbal interchange, such as in the peer advisor-client context, both the client and the peer advisor alternate in the role of the speaker and the listener. In this context, peer advisor verbal behavior is typically utilized to "show that the peer advisor understands what the client is going through." Similar to Roger's (1975) reflective listening as a technique to communicate empathy, Skinner posited that understanding is defined as the extent to which the listener appropriately responds to the speaker's circumstances as perceived by the speaker (Skinner, 1957, p. 277). The behavior of the listener has the potential to reinforce the behavior of the speaker. In other words, the client has the potential to reinforce the peer advisor's verbal behavior (empathetic or non-empathetic) based on how he or she responds to what the peer advisor says or does. In the same way, the peer advisor's response to a client's verbal behavior has the potential to reinforce what the client says or does.

In reference to participant data, the present study calls into question the value

of the delayed reinforcing functions of feedback given outside of sessions for empathetic responding when compared to immediate client responses during the session. Anecdotally, some participants were able to watch the video clip of their previous mock peer advisor session and identify instances of non-empathetic responding before these were pointed out by the primary researcher. This indicates that participants were able to discriminate between an empathetic and non-empathetic response, but were not putting this into practice.

Participants were provided feedback and video modeling of reflective listening responses typically indicative of empathy. Functionally, reflective listening responses are to be confirmed or disconfirmed by the client with a possible elaboration. Appropriate responses made by the participant are assumed to be typically reinforced through generalized conditioned reinforcers such as praise or escape from an aversive situation. In the context of this study, reinforcement is achieved through some form of a client confirmation of understanding (i.e., “yes,” “exactly,” “right,” client elaboration, etc.) or punished through some form of a client rejection (i.e., “no,” “kind of,” “not really,” etc.). While potentially reinforcing, it may be that competing response classes (i.e., advice giving, experience sharing, direct questions, etc.) were emitted by the participant because these were a more significant part of their social, verbal reinforcement history relevant to the current context than the “active listening” verbal responses. In the same way, many of the participant’s scores of empathetic responding to opportunity decreased in instances of silence during the mock sessions. Silence, in a social context, may be a conditioned aversive

event that leads to escape or avoidance responses. Typical escape responses included asking direct questions and/or changing the topic of conversation. Overall, the immediacy of the reinforcement provided by the client or the immediacy of the avoidance or escape of the aversive situation may have, in some sessions, overpowered the delayed conditioned reinforcing functions of the percentage feedback to be provided in the next session. More immediate feedback from the third person observer could be helpful in training empathetic responding. Use of "bug in the ear" electronic devices or other technology would make the feedback more immediate.

Verbal Community

Although the present study attempted to approximate a typical client/helper situation in the applied setting, it should be noted that the recruitment of confederate clients in the same demographic as the participants might have influenced participant responding. All participants and confederate clients were recruited from the university campus, were female, and identified as psychology majors. As such, confederate clients and participants shared the same verbal community where a verbal community is defined as, "the customary ways in which people reinforce the behavior of the speaker" (Pierce & Cheney, 2013, p. 362). Although participants were not aware that clients were confederates, participants were informed that clients were individuals who volunteered to have a peer advisor session on the university campus. In this case, the special social community established is that of students. Through a shared verbal community, the participant is likely to have an established behavioral

repertoire for interacting with a fellow student talking about typical student issues (i.e., failing a class, time management issues, financial issues, etc.). As such, participants may have responded to clients according to their history with the common verbal community and its conventions related to empathetic responding.

Multiple Causation and Stimulus Control

Multiple variables may have influenced participant responding. The present study attempted to bring empathetic responding evoked by participants under the stimulus control of specific client cues indicating an opportunity to respond. These included client verbal disclosure, questions of understanding, body rubbing, and closed off body language. Although data did demonstrate significant increases in empathetic responding to opportunity for three out of the four participants, it should be noted that verbal behavior is typically a function of multiple variables (Skinner, 1957, p. 227). In other words, multiple environmental variables (i.e., the room, client's tone of voice, client's culture, etc.) have the potential to evoke targeted empathetic behavior or other verbal behavior. Likewise, a single variable has the potential to evoke various responses (Skinner, 1957, p. 227).

To elaborate on the influence of environmental variables on verbal behavior, verbal behavior in the context of a verbal community must be understood. Verbal behavior is behavior whose reinforcement is mediated by an appropriate verbal community. Specifically, an individual will emit the verbal behavior relevant to the current verbal community. For example, a bilingual speaker will speak Spanish with her Hispanic family members but English with her colleagues at work. Likewise, the

verbal community of students has a particular reinforcement history. Based on this history, students (e.g., the clients) as discriminative stimuli set the occasion for previously reinforced “student” variations of verbal behavior (i.e., asking direct questions, sharing like experiences, advice giving, etc.) to be evoked by the participant. Anecdotally, participants were often challenged to refrain from such verbal behavior in the presence of another student (e.g., the client). In this case, empathetic responding needs to be under the stimulus control of other variables. For example, empathetic responding can be brought under the stimulus control of a specific place (i.e., counseling office, hospital environment, etc.) through continued reinforcement of the desired verbal behavior within that context (Skinner, 1957, p. 181). While reinforcement within a specific context would best be provided by the client, in a true client/helping professional context, the client would not systematically reinforce and punish desired and undesired variations of empathetic verbal behavior. However, planned reinforcement may be possible in training situations. For example, in line with previous research (Bayne, 2011; Varkey, Chutka, & Lesnick, 2006; Vinton & Harrington, 1994) and the present study, experiential learning may be helpful when training helping professionals. More specifically, it may be that experiential training in the applied environment or in a similar environment increases the likelihood of bringing the desired behavior under the control of relevant stimuli (i.e., office environment and certain client responses).

Ruled-Governed Behavior vs. Contingency-Shaped Behavior

Feedback provided by clients via the empathy rating form may indicate differences in the shaping and acquisition of participant empathetic responding. Although three of the four participants in this study demonstrated increased empathetic responding to opportunity after the training package was implemented, client feedback often included remarks such as, "[the participant] was difficult for me to talk to but she was understanding what I was saying and summarizing" and "She pays attention to what I'm saying really well, but it feels like I end up repeating myself a lot." Descriptive data such as these may indicate that the use of feedback including the identification of empathetic and non-empathetic responses may have functioned to develop empathetic responding as rule-governed behavior, where rule governed behavior is defined as responses controlled by a verbal description of a contingency rather than the naturally occurring contingency itself (Cooper, Heron, & Heward, 2007, p. 553). In other words, participants may have been able to emit empathetic responses-to-opportunity based on the rule, "My score will increase if I _____ when _____", and not immediate environmental contingencies. While the primary researcher did not explicitly state a rule, participants may have extracted their own rule over time as feedback was provided. As is noted by Pierce and Cheney (2013), rules influence the topography of responding, meaning that the topography of the response is controlled by the verbal description of the rule (p. 347). Anecdotally, participants seemed to mimic previously reinforced or modeled reflective listening sentence starter response topographies (e.g. "what I hear you saying is" or "it sounds

like”), such that little variability or deviation occurred. This lack of variability could be indicative of responding largely controlled by a self-stated rule.

In addition to the response topography effects of a rule, creation of such a rule may have had function-altering effects. In other words, the rule may have altered the function of other stimuli in the environment (Schlinger & Blakely, 1987). In the context of the client/peer advisor situation, the altered stimuli may have been instances of confederate client disclosure, specific client body movements, or other variables. Where these variables may have previously set the occasion for behaviors such as the sharing of a similar experience, particular facial expressions, or direct questions, it is possible that the created rule altered the discriminative stimulus functions of these variables and set the occasion for empathetic responding instead.

Whilst effective for three out of four participants, training stimuli (i.e., video modeling and feedback) should be faded out to allow naturally occurring stimuli to acquire control of empathetic responding. In contrast to rule-governed behavior, contingency-shaped behavior is behavior learned through direct contact with naturally occurring environmental consequences and comes under the control of the naturally occurring contingencies of reinforcement (Cooper, Heron, & Heward, 2007, p. 623). In the present study, participants were provided with specific contingencies in the form of video modeling and feedback to potentially increase empathetic responding to opportunity. While successful in 3 out of 4 participants, stimulus control should gradually be transferred to the naturally occurring consequences in a typical clinical context, such that the training contingencies are no longer required or at least are

required less often. Further, participants should undergo additional training to expand their clinical repertoires. In this way, participants may learn additional functional skills to be used when presented with varying and possibly novel client responses.

While the overall goal is to make it more likely that helping professionals will emit empathetic behaviors under naturally occurring contingencies, the present study demonstrated that novel empathetic responses could be increased with inexperienced individuals. Learning this basic skill within the complex clinical repertoire of helping professionals is beneficial and may facilitate the acquisition of other clinically useful verbal and nonverbal behaviors. In this way, continued training and contact with naturally occurring contingencies in the clinical environment may help the participant respond appropriately to variations of client verbal and nonverbal behavior (Cooper, Heron, & Heward, 2007, p. 531).

Limitations

The present study is not without limitations. First, interobserver agreement data on empathetic responding was slightly below the desired 80% (71%). Though a weakness, low IOA may have been the result of the complexity related to scoring verbal behavior. More specifically, typical IOA data collection involves agreement on the occurrence of obvious topographies of behavior (i.e., exactly what the behavior looks like), while data collection on verbal behavior involves determining the function of various topographies of verbal behavior. For example, the participant might say, “It seems like you’re a little bit confused about that.” or, “That sounds like a really confusing situation!” While topographically different, both serve the same

empathetic function. Both are conditional on the client's confirmation or negation of the understanding. Beyond the complexity of data collection, secondary observers may have needed more training.

A second limitation may have been the use of several confederate clients. Confederate clients participated in sessions with participants based on availability. Participant performance may have been influenced by changes in confederate client from session to session. Further, it is possible that client empathy ratings may have differed if participants had a consistent confederate client from session to session.

Lastly, another limitation could have been the influence of the data recording methodology. Participants may have experienced some reactivity to the presence of a video camera in the room and being observed via a one-way mirror. Where immediate scoring of empathetic responses to opportunity through the one-way mirror would have been desirable, this was not practical due to the complexity of data collection. Data collection methodology could have been made less obvious by, for example, hiding the camera.

Future Research

Future research should address the limitations of the present study (i.e., low IOA, controlling for reactivity, etc.). In addition, future research might compare the effects of immediate feedback via "bug in the ear devices" and delayed feedback such as was provided in the present study. Additional research should consider other dimensions of the specific overt responses made by helpers (not only what was said but how it was said in the context of the session) and client ratings of empathy. This

may help identify the behaviors in a context that were perceived as most empathetic and may help operationally define empathy in the literature. Additionally, a component analysis of video modeling and feedback should be conducted to determine the relative effects of each on empathetic behavior.

Implications and Conclusions

The present study found that a training package comprised of video modeling and feedback was effective in increasing the percent of empathetic responding to opportunity in three out of four participants. Based on these results, it is suggested that video modeling and feedback are effective training methods in the development of clinical empathy in training helping professionals. Further, the results of client and third person ratings suggest that both client and third person ratings are relevant to the training of a future helping professionals. Specifically, third person feedback may be helpful in training specific skills (e.g., empathetic responding), while client feedback may be indicative of client satisfaction.

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APPENDICES

APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

1. Participant Number: _____
2. Date of Birth: _____
3. Gender
    a. Female
    b. Male
4. Ethnic/Racial Background
    a. African American/Black
    b. Asian
    c. White Caucasian (Non-Hispanic)
    d. Hispanic or Latino
    e. American Indian, Alaskan Native
    f. Unknown or not reported
    g. Decline to answer
    h. Other _____
5. Major
    a. _____

6. Number of years in undergraduate education
    a. 1-2
    b. 3-4
    c. 5-6
    d. 7 or more
7. Are you currently diagnosed with an intellectual disability?
    a. Yes
    b. No
8. Do you have any experience working in a helping profession (nursing, counseling, peer mentor, etc.)?
    a. Yes
    b. No
9. If "Yes" to question #7, please explain.
    a. _____

APPENDIX B

EXAMPLE "SAFE" TOPIC SCENARIOS

1. Academic Stressors
    a. You are concerned about failing a difficult class that you need to graduate.
    b. You are concerned about your career choice.
    c. You don't feel like college is for you but a friend/family member is pushing you to go through it.
2. Financial Stressors:
    a. You have recently been fired from a job.
    b. You are overwhelmed with the dues you must pay to stay in school and are considering dropping out.
    c. You would like to move out of your parents house but you are not financially ready for it.
3. Interpersonal Relationships
    a. You have had a recent break-up with your boyfriend/girlfriend/partner.
    b. Your parents do not approve of your career choice.
    c. Your parents do not believe in pursuing academic ventures.
    d. You feel anxious about making friends in college.
    e. You feel alone after having moved a long distance to attend college.
    f. Your roommate is being irritating/rude/hurting your feelings, etc.

g. You would like to move out of your parents house but they do not approve.

Topics to REFRAIN from:

1. Personal Topics/Issues/Conflicts
2. Sexual Orientation
3. Trauma
4. Sexual Abuse
5. Suicidal Ideation
6. Substance Abuse

APPENDIX C

SOCIAL VALIDITY QUESTIONNAIRE

Directions
Please complete the following questions in reference to your participation.
Circle the number that best reflects your agreement with each statement below

	Strongly Disagree	Disagree	Do not Agree or Disagree	Agree	Strongly Agree
I understand why empathetic skills training is beneficial to future helping professionals (therapists, nurses, social workers)	1	2	3	4	5
I could see myself participating in this type of training again in my career.	1	2	3	4	5
This is a good way to help train helping professionals.	1	2	3	4	5
This took too long to do.	1	2	3	4	5
I would recommend this type of training to other future helping professionals.	1	2	3	4	5
This type of training could be difficult to use in a real-world setting.	1	2	3	4	5
I would volunteer to participate in this type of training again.	1	2	3	4	5
This training was clear in what I needed to do to implement empathetic skills in practice.	1	2	3	4	5
I was able to use the skills taught in the training.	1	2	3	4	5
I liked this training.	1	2	3	4	5

Open Ended Questions:

1. Which aspects of the empathetic skills training did you like most? Why did you like these aspects?

   _____
   _____
   _____

2. Which aspects of the empathetic skills training did you like least? Why did you not like these aspects?

   _____
   _____
   _____

3. How could we change the empathetic skills training to make it better, more acceptable, or easier to implement?

   _____
   _____
   _____

4. Do you thinking that providing empathy training for helping professionals is an effective way to develop empathetic skills needed in helping professions? Why or why not?

   _____
   _____
   _____

APPENDIX D

CLIENT EMPATHY RATING FORM

Directions:
Consider the video presented when answering the following statements.
Circle the number that reflects your agreement with the statement.

Clinical Empathy

	Strongly Disagree	Disagree	Agree	Strongly Agree
I think that the peer advisor verbally responded empathetically to my concerns.	1	2	3	4
I think that the peer advisor's body language was attuned to the to my concerns and situation.	1	2	3	4
I think the peer advisor was able to accurately recognize and empathetically respond to what I was saying.	1	2	3	4
I think the peer advisor was able to accurately recognize and empathetically respond to my body language.	1	2	3	4

General Empathy

	Strongly Disagree	Disagree	Agree	Strongly Agree
The peer advisor seems to be able to imagine himself/herself in my shoes really well.	1	2	3	4
I think that the peer advisor was feeling what I was feeling.	1	2	3	4
I think that the peer advisor was understanding.	1	2	3	4
The peer advisor really cared about my situation.	1	2	3	4

Additional Comments (i.e. What stood out about the peer advisor's behavior?; What could the peer advisor do to improve his/her interactions with you?

APPENDIX E

THIRD PERSON EMPATHY RATING FORM

Directions:
Consider the video presented when answering the following statements.
Circle the number that reflects your agreement with the statement.

Clinical Empathy

	Strongly Disagree	Disagree	Agree	Strongly Agree
I think that the helper in the video verbally responded empathetically to the client's concerns.	1	2	3	4
I think that the helper's body language was attuned to the to the client's concerns and situation.	1	2	3	4
I think the helper in the video was able to accurately recognize and empathetically respond to verbal cues from the client.	1	2	3	4
I think the helper in the video was able to accurately recognize and empathetically respond to non-verbal cues from the client.	1	2	3	4

General Empathy

	Strongly Agree	Disagree	Agree	Strongly Agree
The helper seems to be able to imagine himself/herself in the client's shoes really well.	1	2	3	4
I think that the helper in the video was feeling what the client was feeling.	1	2	3	4
I think that the helper in the video was understanding.	1	2	3	4

The helper in the video really cared about the client's situation.	1	2	3	4

Additional Comments (i.e. What stood out about the helper's behavior?; What could the helper do to improve his interactions with the client?)

APPENDIX F

DATA COLLECTION SHEET

Participant #	Date:	Session:	Obs. Initials:	Client:	Cond:

HELPER RESPONSES										
Opportunities										Score
										Opp. with ER – Opp. with O/NR / Total # of opportunities
V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	
V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	
V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	
V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	V NV O NR	

Session Comments:

_____

_____

_____

APPENDIX G

INFORMED CONSENT FORM

1. **Summary:** This research study will examine the effects of a training including video modeling and feedback on behaviors related to clinical empathy. If you agree to participate, you will be asked to participate in twenty research sessions for 30 minutes to 1 hour. Five minutes of each session will include a one-on-one videotaped interaction with a client in a peer advisor situation. These sessions will be observed by the primary researcher using a one-way mirror. Some days you will need to watch a modeling video of a client-peer advisor interaction and receive feedback on your performance before meeting with your client. Other days you will not.

2. **Your right to withdraw/discontinue:** You are free to discontinue your participation at any time without penalty. You may also skip any survey questions that make you feel uncomfortable. Even if you decide to withdraw from the study, you will receive any entitlements that have been promised to you in exchange for your participation, such as an experimental credit in SONA and a gift card in the amount equivalent to your participation.

3. **Benefits:** Participation in this research study has the benefit of a $50 gift card at the end of the study. You must attend all twenty sessions to receive the gift card in the total amount of $50. If you choose to discontinue, you will receive a gift card in the amount equivalent to your participation in this study. Other possible benefits include the fact that you may learn something about how research studies are conducted and you may learn something about this area of research (i.e., empathy development in helping professionals).

   An additional benefit, although not guaranteed, is the possibility of receiving extra credit through the SONA website.

4. **Additional information:** If you need any additional information outside of this consent form, please feel free to contact the main researcher, Berenice Ascencio, with any of the contact information given in part 8 of this form.

5. **Time commitment:** The current study will last for the length of 4 weeks (Monday-Friday). One session will be run every day at a time convenient to both the participant and the researcher. Each session will last between 30 minutes to 1 hour. You are asked to commit to all 20 sessions in order to maximize all possible benefits.

6. **Guarantee of Confidentiality:** All data from this study will be kept from inappropriate disclosure and will be accessible only to the researcher and the faculty advisor. Data collected in the form of video will be stored on the researcher's computer and be password protected. Data collected in person will be kept in a locked file cabinet, separate from consent forms, and all materials will be destroyed after 3 years.

   In addition, in a final write-up of the results any references to a specific participant's data will exclude any possible identifying information. All participants will be given fake names or participant numbers to protect your identity.

7. **Risks:** The present research is designed to reduce the possibility of any negative experiences as a result of participation. Risks to participants are kept to a minimum. However, if your participation in this study causes you any concerns, anxiety, or distress, please contact the Student Counseling Center at (209) 667-3381 to make an appointment to discuss your concerns.

8. **Researcher Contact Information:** This research study is being conducted by Berenice Ascencio to fulfill requirements for a Master's degree in Psychology at California State University, Stanislaus. The faculty supervisor is Dr. Bruce Hesse, Professor of Psychology at California State University, Stanislaus. If you have questions or concerns about your participation in this study, you may contact Berenice Ascencio by email at bascencio1@csustan.edu or Dr. Hesse at 209-667-3255 or by email at bhesse@csustan.edu.

9. **Results of the Study:** You may obtain information about the outcome of the study at the end of the academic year by contacting Dr. Hesse.

10. **Campus Compliance Officer Contact Information:** If you have any questions about your rights as a research participant, you may contact the Chair of the Psychology Institutional Review Board at California State University, Stanislaus, Dr. Kelly Cotter at kcotter@csustan.edu or at 209-664-4432.

11. **Personal Copy of Consent Form**: You will be provided with a blank, unsigned copy of this consent form at the beginning of the study to keep for your records.

12. **Verification of Adult Age:** By signing below you attest that you are 18 years old or older.

13. **Verification of Informed Consent:** By signing below, you are indicating that you have freely consented to participate in this research study.

PARTICIPANT NAME (PRINT) _____ DATE: _____

PARTICIPANT'S SIGNATURE: _____ DATE: _____

APPENDIX H

CONSENT TO USE OF VIDEO RECORDING

In addition to agreeing to participate, I also consent to the use of video recording during the client-peer advisor interaction portion of this study. I understand that this video recording including my image and voice may be released to others (research assistants, faculty advisor, etc.) **explicitly for the use of research purposes** such as are relevant to this study. Those individuals who have access to the video recordings will sign a confidentiality form prior to viewing the video indicating that they are not to disclose or distribute any of the information, images, or audio in the video. This material will otherwise be kept in a password-protected file on the researcher's computer for your confidentiality and will be destroyed after a three-year period.

Signature _____ Date _____

Name (printed) _____

APPENDIX I

CONFIDENTIALITY AGREEMENT

Title of Study: Training Clinical Empathy: A Behavior Analytic Approach

Primary Researcher: Berenice Ascencio **Faculty Advisor**: Dr. Bruce Hesse

As an **observer/rater/confederate client** (circle one), I understand that I will have access to confidential information and data relevant to this study. By signing this agreement, I agree to the following:

- I will keep all information relevant to this study confidential.
- I will not discuss or distribute information relevant to this study in any form or format with anyone other than the primary researcher.
- I will not share the identity of any participant(s) that may be revealed in my role in this study.
- I will not duplicate any information or data in any form or format including disks, data sheets, and/or other files.
- I will keep all data that contains identifying information secure using a password-protected file or a locked cabinet while it is in my possession.
- I will use headphones when watching/listening to data that is in the form of video or audio.
- I will close my computer or close out of the video/data when away from my computer.
- I will return all materials shared with me (disks, data sheets, etc.) to the primary researcher when my role in the study is complete.
- I will destroy all materials shared with me that are not returnable (e-mails, computer files, etc.) to the primary investigator when my role in the study is complete.

Printed Name: _____

Signature: _____ Date: _____

Contact Information:

Phone Number: _____

E-mail: _____

For any questions or concerns please contact the primary researcher, Berenice Ascencio, at bascencio1@csustan.edu.

APPENDIX J

DEBRIEFING FORM

Thank you for participating in this study! This study takes a behavior analytic approach to empathy training. In this study, we are interested in understanding the effects of a training including video modeling and feedback on helper use of empathetic behaviors. Specifically we predicted that participation in the training would increase the use empathetic behaviors in response to opportunity. We also wanted to see if ratings of the helper's level of empathy judged by objective observers changed after the intervention was implemented.

Prior research conducted on empathy training programs within the helping professions (counselors, social workers, and medical professionals) varies. No single empathy-training program exists. Variations on empathy training include lecture, communication skills training, experiential learning (role-play), and many more. Mixed results have been found. Some research has found modeling and role-play, which may include feedback, to be most effective in training empathetic skills. As such we expect that behaviors indicative of empathy will increase with the training implemented in this study. Further, we expect others' ratings of the helper's level of empathy to increase after the intervention.

All the information we collected in this study will be kept safe from inappropriate disclosure. Data will be stored on the researcher's computer in a password-protected file or in a secure filing cabinet. In the final write-up, your name will not be used. Instead, you will be given a fake name or participant number. We ask that you do not discuss the nature of the study with others who may participate in it, as this could affect the validity of our research conclusions.

If you have any questions about the study or would like to learn about the results of the study, you may contact Berenice Ascencio at bascencio1@csustan.edu or Dr. Bruce Hesse, at (209) 667-3255 or by email at bhesse@csustan.edu. If you have questions about your rights as a research participant, you may contact the Chair of the Psychology Institutional Review Board at California State University, Stanislaus, Dr. Kelly Cotter at kcotter@csustan.edu or at 209-664-4432. If participation in the study caused you any concern, anxiety, or distress, you may contact the Student Counseling Center at (209) 667-3381.

If you would like to learn more about this research topic, we suggest the following references:

Bayne, H. (2011). Training medical students in empathetic communication. *The Journal for Specialists in Group Work, 36*(4), 316-329.