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Implementation of Screening and Outcome Measures at a Cancer Specific Mental Health Clinic

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Abstract

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IMPLEMENTATION OF SCREENING AND OUTCOME MEASURES AT A CANCER SPECIFIC MENTAL HEALTH CLINIC

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Abstract

There is limited research examining the overall distress levels of cancer patients and caregivers longitudinally, as well as how to best implement distress surveys into a general community clinic. This study had two aims: (1) To implement surveys in a community-based clinic that serves cancer patients and their family members; and (2) To gain an understanding of the outcome of psychotherapy. The study included 15 participants—eight patients and seven student therapists—over a five-month period in the Center for Oncology Psychology clinic. Patients and therapists were matched in dyads. Surveys were provided to patients at three time points. Additionally, an outcome measure was provided to patients and the student therapist to fill out at the end of the fifth session. While the number of participants precluded the study from producing statistically significant data, the study accomplished its primary objective by implementing the surveys. The study generated several findings. It found that distress and depressive symptoms decreased over the course of psychotherapy. From the outcome measure, the findings indicate that, overall, patients were extremely satisfied with the psychotherapy being provided. Student therapists, however, were less satisfied with the psychotherapy they provided. The results indicate that the study successfully implemented surveys into a community-based clinic. Further, the findings demonstrate that providing psychological services at a community clinic led to reduced levels of depression and anxiety and patients reported being extremely satisfied with numerous aspects of their psychological treatment.

Keywords: Implementation, cancer, distress screening, psychotherapy outcomes, clinical training, community psychology

Implementation of Screening and Outcome Measures at a Cancer Specific Mental Health Clinic

The World Health Organization has reported that, as life expectancy increases, the likelihood that someone will also develop a chronic illness, such as cancer, will increase (Creer, Holroyd, Russell, & Smith, 2004). Presently, 15.5 million Americans have a history of cancer, and in the year 2018, it is expected that about 1.7 million new cases of cancer will be diagnosed (Cancer Facts & Figures, 2018). While the incidence rate of cancer remains high, the mortality rate is decreasing—since 1991, the mortality rate has dropped to 26%. The lower mortality rate, attributable to reduction in smoking and implementation of early detection and treatment, has resulted in about 2.3 million fewer deaths related to cancer between 1991 to 2015. The current rate of survival for all cancers is 69% for patients diagnosed between 2007–2013. This is a 20% increase in survival over patients who were diagnosed forty years prior (Cancer Facts & Figures, 2016). The increasing survival rates require healthcare professionals to understand patient distress and ensure that they are meeting the needs of cancer survivors. It is also important to understand the distress of caregivers and family members as they are essential support for the patient. While we have an understanding that there are elevated distress levels while receiving cancer treatment, there is still more to be understood about how distress changes over time.

Starting in 2015, the American College of Surgeons began to require a distress screen to be given at least one-time during treatment in order to be an accredited cancer site (National Comprehensive Cancer Network, 2016). According to the National Comprehensive Cancer Network (2014), the definition of distress in cancer is:

> Distress is a multifactorial unpleasant emotional experience of a psychological (cognitive, behavioral, emotional), social, and/or spiritual nature that may interfere with the ability to cope effectively with cancer, its physical symptoms, and its treatment.

> Distress extends along a continuum, ranging from common normal feelings of vulnerability, sadness, and fears to problems that can become disabling, such as depression, anxiety, panic, social isolation, and existential and spiritual crisis (P.DIS-2).

Through a variety of studies, it has been found that 30–50% of cancer patients report high distress; however, of those, only 5% have access to services (Miller et al., 2013). Distress is typically described as including both psychological and physical stressors; professionals consider many of the psychological concerns to revolve around fear of recurrence and impact on family (Waldrop, OConner, & Trabold, 2011). Physical stressors are residual side effects or changes from treatment. One study looked at the predictors of higher distress in cancer patients and found that patients who played a passive role had higher levels of anger, depression, and mood disturbances, and ultimately had higher levels of distress (Hack, et al., 2009). The increased distress presented as worry, fear about the future or their illness, sadness, anger, powerlessness, poor appetite, poor sleep, and thoughts about death and dying (Vitek, Rosenzweig, & Stollings, 2007).

Overall, about 30–40% of cancer patients experience symptoms of depression and anxiety, and approximately 15% of cancer patients will meet criteria for Major Depressive Disorder (Wu, Brothers, Farrar, & Andersen, 2014). Adjustment disorder is even more prevalent, being reported in 19.4% of cancer patients (Holland & Breitbart, 1998). In cancer survivors, post-traumatic stress disorder (PTSD) is now being identified, with 10–20% of patients experiencing symptoms.

Within medical oncology settings, distress is being recognized as the sixth vital sign (Holland et al, 2007). It is important to identify distress because patients who have a high level of distress often have a harder time adhering to the treatment. Distressed patients also recover from the oncology treatment slower and describe their quality of life as negative (Holland et al, 2007).

While the distress tools utilized in medical settings are different, the purpose is to identify the distress the patient is experiencing and provide resources to decrease the distress.

In many cancer centers, the use of distress screens typically leads to referrals for additional care. If a patient scores high on a distress screen, they are referred to the supportive care team (Funk, Cisneros, Williams, Kendall, & Hamann, 2016). The supportive care team can provide psychotherapy, practical needs support, nutritional assistance, and spiritual care. While centers have been making these referrals, there is scant evidence illustrating the effectiveness of this support. In addition, the distress of patients is usually only assessed once, providing minimal information about how distress changes over time (Duffy & Valentine, 2011).

A 2015 study examined the use of the distress tool and identified three questions regarding the expansion and effective usage of the distress tool (Salmon et al, 2015). The study identified a lack of information about how to respond to the distress screen and what to do with the information obtained. Additionally, there is no research about the change in distress that a cancer patient experiences based on a distress screen. Other studies have looked at transitions in the degrees of distress and coping strategies; however, there are still no studies that look at the change of distress throughout treatment (Waldrop et al, 2011).

The purpose of this study is to implement outcome measures at a community mental health center that specifically works with individuals with an experience of cancer. The Center for Oncology Psychology Excellence (COPE) started a clinic in fall 2016 that works directly with cancer patients, caregivers, and family members. This clinic is the first of its kind and serves as a training facility for advanced doctoral clinical psychology students to provide mental health care to those with a history of cancer. To better understand the distress levels of the patients, the clinic implemented psychological screeners, similar to those used in hospital settings. Because the clinic is a mental health clinic and does not have medical or nursing support, the distress screens incorporated measures to assess depression and anxiety; however, physical outcomes, such as the outcome of the cancer itself, were not assessed. Additionally, we are interested in evaluating the psychotherapy provided in the clinic through surveying the student therapists and patients separately. This will help us better understand the outcome of the psychotherapy provided in the clinic.

Assessing the outcome of the psychotherapy session can be a complicated process due to the unique nature of each patient-therapist relationship. There are many factors to consider: the patient, the student therapist, the therapeutic relationship, as well as external factors (Hill, Chui, & Baumann, 2013). Additionally, there have been many theories of which factors contribute to an effective psychotherapy session. When utilizing an outcome measure with patients early in treatment, the patient often considers only their personal experiences and do not take the therapist into account when making judgments and assessments (Markel et al., 2014). In contrast, therapists often assess the quality of the psychotherapy session based on their observations and judgments of the therapeutic relationship, as well as their own clinical observations regarding the patient's experience (Lent et al, 2006).

Because COPE is a new program, the use of quantifying outcome measures is important in assessing the effectiveness of treatment performed at the clinic and in providing more information to market the clinic in the future. Patient satisfaction surveys typically identify three areas of interest: (1) whether the patient's needs are fulfilled; (2) whether there are discrepancies between what the patient expected and actually experienced; and (3) whether psychotherapists understand the patient's attitudes. It has been identified that when implementing a survey, it is important that it is only one page, can be filled out in under five-minutes, and should be done at the end of the session (Lunnen & Ogles, 1997).

The study had two aims:

1) Implementing Screeners into the COPE Clinic

   The study used four different screeners to assess the patients' distress level (physical, emotional, social, spiritual) and identify the likelihood of the patient having depression or anxiety symptoms. The following screens were used:

   i. National Cancer Institute Distress Tool (overall distress).
   ii. PHQ-2 (depression). Hinz et al. (2016) assessed the use of the PHQ-9 in cancer patients and found that it is an effective tool for assessing depression in cancer patients. This particular study utilizes only the PHQ-2 to assess for depression. It does not utilize the PHQ-9 because some of those questions are linked with side effects of cancer treatments.
   iii. GAD-7 (anxiety). Esser et al. (2018) assessed the use of the GAD-7 in cancer patients and found that it is an effective tool for assessing generalized anxiety disorder in this population.
   iv. Impact of Event Scale (IES) (intrusive thoughts). One study using the IES found that the level of stress identified on the IES by cancer patients with a recurrence has similar symptomatology to individuals who have more trauma-induced disorders (Cella et al., 1990).

2) Psychotherapy outcomes

   To assess the outcome of the psychotherapy, both the screeners provided to the patients, and an outcome measure that is completed by the patients and student therapists were used. In examining the information, the study sought to answer the following questions:

i. Is the overall distress of the patient decreased through therapy? Does the initial distress number decrease, as well as overall anxiety and depression of the patient?

ii. Is patient glad he/she is attending psychotherapy? Is the student therapist glad the patient was attending psychotherapy?

iii. Were psychotherapy sessions helpful to patients? Did student therapists feel they were providing sessions that were benefiting the patients?

iv. Is there a strong therapeutic alliance between the student therapists and patients? What is the nature of their therapeutic relationship? Does that therapeutic relationship have an effect on the psychotherapy being provided?

Method

Participants

Participants of the survey were patients receiving psychotherapy at the COPE Clinic at the Professional Psychology Clinic at the University of Denver, and student therapists providing psychotherapy. The Professional Psychology Clinic (PPC) is a training clinic for doctoral level students at the Graduate School of Professional Psychology at the University of Denver. The clinic provides sliding scale services and accepts Medicaid. The COPE clinic is embedded in the PPC and provides individual, couples, and family psychotherapy. Student therapists provided services under the supervision of licensed mental health professionals. Students provided individual, couples', family, and group therapy in addition to psychological assessment. The study, however, involved only individual and couples' therapy. All genders were included as well as ethnic backgrounds. Participants were able to read and comprehend the measures in English. All participants were over age 18.

Demographics

There were 15 participants (11 females, 4 males). Eight were patients in the clinic and seven were student therapists. The patients' ages ranged from 20 to 67 years old (M=36.75, SD = 13.55). Participants included seven cancer patients and one caregiver; all but one participant were in individual psychotherapy, and two participants were in couples' therapy. Participants had the following cancer diagnosis: Hematological cancers (Leukemia/ Lymphoma) (*n*=4), Brain tumor (*n*=1), Breast cancer (*n*=1), and Ovarian cancer (*n*= 1). Six of the participants had completed their cancer treatment, while one was in active treatment. One student therapist did not complete the study after initially agreeing to participate. Of the six who completed the study, the range of years in their doctoral program was 1-3 years (M= 2.14, SD=0.9). Age was not collected due to the limited number of participants.

Measures

The full survey with all measures is in Appendix A.

Distress screen. The distress screen is based on the National Comprehensive Cancer Network Distress Screen that is utilized in accredited cancer centers. This is a valid and reliable source (National Comprehensive Cancer Network). This screen was validated in a trial with 319 community-based cancer centers, which showed good psychometric effects. Through the trial, the screener had a high internal consistency (Cronbach's alpha =0.91), as well as a strong retest reliability (ICC ≥ 0.75) (Miller et. al, 2013).

PHQ-2. To assess depression in medical settings, the Patient Health Questionnaire (PHQ-9) is one of the common measures used. This is a valid and normed tool in a general population (Martin et al., 2006). Specifically, studies have found the scale valid when working with patients who have cancer. (Cronbach' s alpha ≥ 0.84) (Hinz et al, 2016). The first two questions of the PHQ-9 make up the PHQ-2 which identifies Criteria A in the DSM-V which is required to have in order to diagnose depression.

GAD. In medical settings, the Generalized Anxiety Disorder 7-item Scale (GAD-7) is utilized to assess anxiety as a valid scale and has also been found to be an effective tool for assessing anxiety in cancer patients (Cronbach's alpha .88) (Esser et al, 2017).

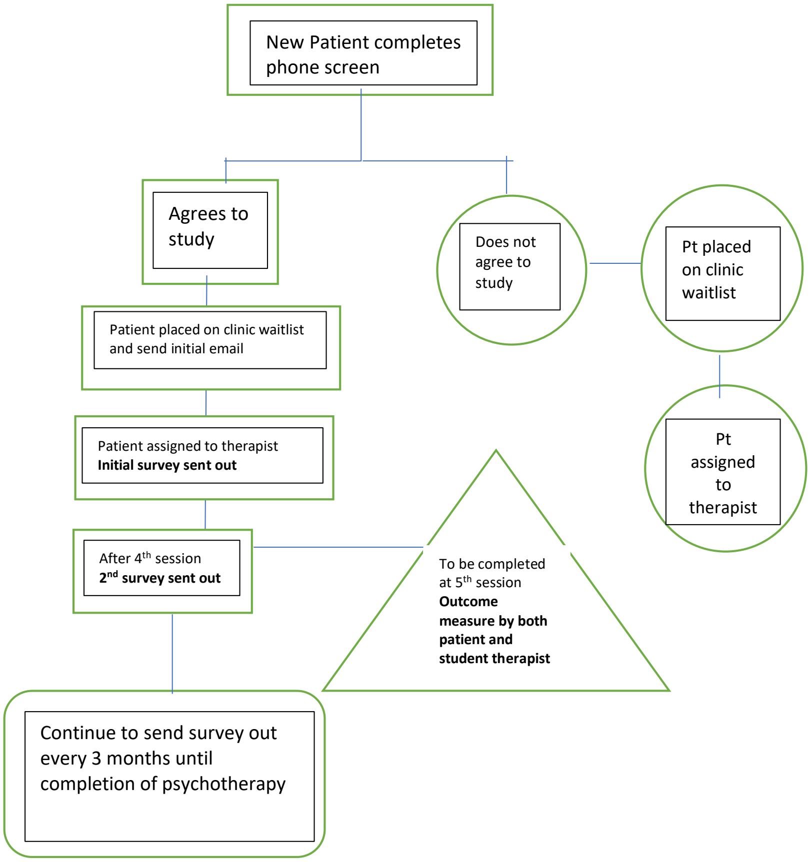
PTSD screen. The Impact of Event Scale is also widely used to identify post-traumatic stress disorder related to a certain event, such as cancer (Horowitz et al., 1979). Specific subscales had a Cronbach's alpha .78 for intrusion and .82 for avoidance on the IES subscales.

Outcome measures. Utilization of a patient satisfaction survey and therapist outcome measure were also provided. Both the patient and therapist surveys were structured the same way, with each asking the patient and therapist to indicate how much each statement reflects their experience with either the psychotherapy or the patient. The patient or student therapist was given five options ranging from 1= strongly disagree to 5= strongly agree. Additionally, the patient was asked questions about their student therapist, such as, "My therapist asked about my medical history," "My therapist helped me understand the reasons behind my thoughts, feelings, and or behaviors," and "My therapist asked questions to help me explore what I was thinking and feeling." The student therapist survey asks questions about what they have done in their sessions thus far, such as, "Have I learned about my patient's medical history," "Have I helped my patient gain a new perspective on the presenting problem," and "Have I helped my patient understand the reasons behind their thoughts, feelings, and or behaviors."

Procedure

Aim one: Implementation. Implementation of the surveys was done in two groups: new patients and current patients.

New patients. All patients completed a phone screening to be put on the waitlist for the COPE clinic. After the conclusion of the phone screen, patients were asked whether they would like to participate in this study. It was made clear that participation is voluntary and that they could discontinue the study at any time. Additionally, patients were informed that they would still be seen at the clinic even if they did not choose to participate. After verbally agreeing to participate in the survey, patients received an email with more information about the study and when they would get the first survey (Appendix B). Upon assignment to a student therapist, patients received an email with the survey attached (Appendix C). Patients were assigned to a student therapist from the wait-list based on a number of factors: the patient and student therapist schedules; a supervisor's request for student to take on a particular patient's case; and student therapist area of interest and experience. Wait-list times for the COPE clinic patients generally varied from one week to two months; however, this was not formally measured for this study. Each patient was given a special identification number to de-identify them. Outcome measures were given to the patient before their first appointment with COPE, before their fourth appointment, every three months after that, and after their last session. An example of the follow-up outcome measure survey email can be found in Appendix F. An example of the last outcome measure survey email can be found in Appendix G.



Current patients. Patients who were already part of the COPE clinic were also recruited to participate in this study (Appendix D). Outcome measure surveys were immediately emailed to participants who agreed to participate (Appendix E). Follow-up outcome measure surveys were sent four sessions later, every 3 months after that, after the last session.

Aim two: Outcome of psychotherapy. The student therapists and patients were given an outcome survey (Appendix H and Appendix I) to fill out at the end of their fifth session for new patients or the fifth session from the initial survey being sent for current patients. Student therapists were recruited for the study and made aware that participation is voluntary. Outcome measures were given at the fifth session. At the COPE clinic, there is a consultation period of three sessions for the patient and therapist to consider fit, treatment goals, and mutually agree on a case disposition before completing a contract for services in the fourth session. Prior to the start of the study, the average length of patient psychotherapy time at the COPE clinic was analyzed, finding patients were utilizing, on average, eight sessions prior to concluding psychotherapy. This study used the fifth session for outcome measurement, as it occurs just after the consultation period while providing enough time to gather outcome data prior to the conclusion of psychotherapy. Since some COPE clients are lost to follow up, medical changes, or death, it was determined that the fifth session would be an appropriate time for the follow up survey.

Results

The first aim of the study focused on implementing surveys into the COPE clinic that would allow for a better understanding of the psychological needs of patients. The second aim began to examine the outcome of the psychotherapy provided at the clinic.

Aim One: Implementation

The four surveys were implemented into the clinic successfully. The following results were collected at three time points directly from the patient.

Distress Screen. The overall distress of the patient can be found in Figures 1–4. Of the patients who completed the survey at multiple time points, the overall distress level either stayed the same as the first time point or decreased. The average level of distress over all three time points was M=5.64, SD = 2.30, on a scale of 0= no distress to 10= highest possible distress. Patients indicated a variety of problem areas. The top three problem areas indicated at the initial visit were worry, fears, and sadness.

PHQ-2. Patients scores on the PHQ-2 can be found in Figure 5. The overall range of scores is 0-2. The range in this sample was 0-2. Scores over 1 are considered “probably depressed.” At the initial time point, the average overall score of patients was M=1.57 and SD= 0.79, and the last time point the average overall score of patients was M=1.00 and SD = 1.41.

Anxiety/Stress.

GAD-7. Patients scores on the GAD-7 can be found in Figure 6. The overall range of scores is 0-21. The range in this sample was 1-19. Scores of 5-9 indicate “Mild Anxiety,” 10-14 “Moderate Anxiety,” and 15 or more “Severe Anxiety.” The average score after the initial time point was M= 9.57 and SD = 5.71, indicating the patients on average were mildly anxious. The overall anxiety decreased from the initial time point to the second time point; however, it remained in the mild anxiety range (M= 5.75 and SD = 2.21). At time point three, the anxiety increased from the second time point, but remained lower than the initial time point (M=8.00 and SD= 7.07). The second time point was the closest to the generalized mean for the GAD-7 in this population, 5.3 (Esser et. al, 2017).

IES. Patients scores on the IES can be found in Figure 7. Scores of 24 or more marks a clinical concern for PTSD, 33 or more PTSD is a probable diagnosis, and 37 or more indicates the immune system functioning is suppressed from stress. The average score after the initial time point was M= 22.43 and SD= 11.22, indicating PTSD is not yet a clinical concern. As the time points progressed, the scores decreased (time point 2, M=14.75 and SD= 6.80, time point 3, M= 9.00 and SD= 0).

Aim Two: Outcome of psychotherapy

At the fifth visit, patients and student therapists completed an outcome measure. The average scores can be found in Figures 8–22. Each question was examined, and of all the questions (scale ranging from 1= strongly disagree to 5= strongly agree), there were only three questions on which the patients’ and students’ average were the same (“I am glad I attend sessions” vs. “I am glad that my patient attended sessions” M= 4.83 and SD= 0.41; “I feel a connection with my therapist” vs. “I feel a connection with my patient” M= 4.67 and SD = 0.52;

and “My therapist asked questions to help me explore what I was thinking and feeling” vs. “I asked questions to help explore what my patient was thinking and feeling” M= 4.83 and SD= 0.41). There was one question where the patients overall average score was lower than the students: “This is what I expected my sessions would be like” M= 3.17 and SD = 1.10 vs. “This is what my sessions would be like” M= 3.50 and SD= 0.55. On the following questions the patients’ overall average score was higher than the student therapist:

- “I feel satisfied with what I got out of sessions thus far” (M= 4.17 and SD= 0.98) vs. “I feel satisfied with what my patient got out of the sessions” (M= 4.00 and SD= 0.00) *Figure 10*
- “I thought that my sessions have been helpful” (M= 4.17 and SD= 0.98) vs. “I thought that my sessions have been helpful” (M= 4.00 and SD= 0.00) *Figure 11*
- “I thought that my sessions have been valuable” (M= 4.50 and SD= 0.84) vs. “I thought that my sessions have been valuable” (M= 4.17 and SD= 0.41) *Figure 12*
- “I like my therapist” (M= 5.00 and SD= 0.00) vs. “I feel like my patient likes me” (M= 4.17 and SD= 0.98) *Figure 15*
- “I trust my therapist” (M= 5.00 and SD= 0.00) vs. “I feel like my patient trusts me” (M= 4.17 and SD= 0.75) *Figure 16*
- “I feel like my sessions have been collaborative with my therapist” (M= 5.00 and SD=0.00) vs. “I feel like my sessions have been collaborative with my patient” (M= 4.00 and SD= 0.63) *Figure 17*
- “My therapist asked about my medical history” (M= 5.00 and SD= 0.00) vs. “Learned about my patient’s medical history” (M= 4.33 and SD=0.82) *Figure 18*

- "My therapist taught me specific skills to deal with the presenting problem I came in with" (M= 4.00 and SD= 1.26) vs. "Taught my patient specific skills to deal with the presenting problem" (M=3.67 and SD= 0.82) *Figure 21*
- "My therapist asked what has changed since a diagnosis of cancer entered my life" (M= 5.00 and SD= 0.00) vs. "I helped my patient gain a new perspective on the presenting problem" (M= 4.17 and SD= 0.75) *Figure 19*
- "My therapist helped me understand the reasons behind my thoughts, feelings, and/or behaviors" (M= 4.33 and SD=0.82) vs. "I help my patient understand the reasons behind their thoughts, feelings, and/or behaviors" (M= 4.17 and SD= 0.41) *Figure 22*

Discussion

Prior to this research, the COPE clinic did not have a system in place to track patients' psychological needs. Additionally, there was no structured way to monitor the outcome of psychotherapy. There were two aims of this study: (1) to implement surveys to assess the psychological needs of the patient and (2) to quantify the outcome of psychotherapy. The process enabled researchers to implement a series of surveys to gather the psychological needs of the patients and to begin to examine the outcome of the psychotherapy provided.

Aim One: Implementation

While the data collected is not statistically significant due to sample size, interesting trends emerged that will provide a foundation for additional research in this area. More specifically, the study assessed the patients' overall distress levels, rates of depression and anxiety, and whether they were experiencing intrusive thoughts. The average level of overall distress was five. Scores of four or higher suggest a level of distress that is clinically significant (National Comprehensive Cancer Network, 2016). The patient population at COPE had a clinically significant level of distress. Among the different problem areas patients were facing, some of them were physical in nature; however, the majority of the problems, especially the top three problems at all time points, were emotionally-focused and appropriate for psychotherapy. The top three problems identified by the patients—worry, fears, and sadness—match those that Vitek et al. (2007) found when identifying psychological problems that patients experience. More specifically, these results show that the primary problem area patients were facing at their time of arrival at the clinic related to how they were feeling about their cancer or the cancer a family member was experiencing. This indicates that these patients were appropriate for the COPE clinic.

With regard to depression levels, the longer a patient was in psychotherapy, the lower the depression level was for that patient. Again, while the results are not statistically significant, the survey results show the positive effect psychotherapy can have on depression levels in people facing cancer in their lives. In contrast, anxiety started to decrease over time; however, after three months, anxiety levels began to increase. It is predicted that anxiety increased due to the topics being faced in psychotherapy. In both cases, the study did not assess for the outside factors that could be contributing to the patients' overall level of depression or anxiety. One specific area that was not collected and could have contributed was the number of sessions a patient attended. The number of sessions a patient would attend varied, as some attended weekly psychotherapy, while others might have attended monthly. This variability was typically due to physical health complications, being in and out of the hospital, or not living close to the clinic, which made it difficult to come weekly. It should also be noted that, over the time points, there was attrition. The fact that the study stopped collecting data at a time which did not allow for all patients to complete the third time point contributed to the attrition. Post-psychotherapy surveys were also not able to be completed based on when data was collected.

The process of this study can also provide additional information to the literature related to the change of distress throughout treatment. As important as distress screening has become in cancer settings, there have only been eight implementation studies completed, and all eight measured only whether the patient received a psychological referral (Mitchell, 2015). While the study was not completed in a medical setting, implementing surveys directly into psychotherapy is a new process, and can complement the literature.

Aim Two: Outcome of psychotherapy

Through the implementation of surveys, the study was able to begin to address the question of whether the overall distress of patients decreased throughout psychotherapy. Through the outcome measure, the study was able to better understand the patients' and student therapists' perspectives on how the psychotherapy was being perceived after the relationship began. The study aimed to assess the patient's attitude toward psychotherapy and the therapeutic relationship. Again, due to the sample size, the results were not statistically significant, but could help provide foundational information for future research.

The study found that the patients and student therapists only agreed on three things related to how treatment was going. Patients and therapists agreed on (1) being glad the patient attended sessions; (2) the connection the patient and student therapist felt toward each other; and (3) whether the student therapist explored what the patient was thinking and feeling. In all three areas, both the patient and student therapist strongly agreed on the results. These interactions between the patient and therapist are critical to building rapport and creating a strong therapeutic relationship.

The outcome survey demonstrated that of the majority of the questions, the patients felt as though the therapy was working, was valuable, and was addressing the needs of the patients. Patients felt they liked their student therapist (Figure 15), could trust them (Figure 16), and that the treatment was collaborative (Figure 17). Additionally, they felt that their thoughts and feelings were addressed and that they were learning skills to address their presenting problems.

While the patients were extremely satisfied with the psychological treatment provided, the student therapist did not feel as strongly about the treatment they were providing. The student therapists did not feel as satisfied with the skills they were providing in session, as well as how they were addressing the patient's thoughts and feelings. As shown in Figure 18, while patients felt their therapists asked about their medical condition, the student therapists did not feel as though they had addressed it. One of the reasons for the student therapists' feeling as though the patients' medical condition were not addressed could be that the student could have felt they did not address the medical condition as much as they wanted to or that they didn't know how to address the cancer. The results are also impacted by individual perspectives that will impact a therapy room no matter what, regardless of the variables researchers control for.

One hypothesis for the reason student therapists did not feel as strongly about the therapy is that they are early in their career and training and might not have the confidence more seasoned psychotherapist would have. There is research to support that as student therapists begin their training and gain competencies, they will begin to lose confidence (Bennett-Levy & Beedie, 2006). In fact, fluctuations in self-confidence during graduate training is quite normal.

Furthermore, the majority of the student therapists were in their second year of training, and many of them had very little experience working directly with health conditions. Even though student therapists did not feel like they learned the patient's medical condition, they in fact had, based upon the patients responses that students had asked about the medical condition; however, because student therapists may have been less familiar with the specific cancer, they may not have felt that the information they obtained was as in-depth as it should have been. Finally, knowing that psychotherapy focuses on patient emotions and not the physical treatment of the cancer itself, student therapists may not have addressed it or thought it was the focus of the therapy. Again, the perspective of the individual plays into what is being done in the psychotherapy room.

Limitations

While the study achieved its primary aim of implementing the surveys into the clinic, there were still limitations regarding the number of participants. Additionally, due to the timeframe, not all participants completed all time points of the survey. A final survey was never completed due to the study's timeframe and attrition of clients.

On a larger scale, another limitation of this study is the format of the clinic itself. With COPE embedded into the PPC, there are staff members in the clinic who are less familiar with COPE and its patient population. While there is no way to measure whether this affects the data, it could affect patients' perception of the clinic. It could also create some concern for the patients if the staff are less familiar with their medical situation. Patients may feel more comfortable because the PPC is not a medical clinic, but that could also increase anxiety if the patients needed medical attention.

Future Direction and Recommendations

Overall, having this study repeated in a larger scale is recommended. In doing so, it would be important to not only collect more participants, but also to extend the length of the study throughout the year to ensure multiple time points. Extending the study will also provide data to add to the limited literature that addresses change of distress throughout treatment.

Aim one: Implementation. When it comes to the implementation process, there are a number of recommendations for future studies. While having the surveys sent to the patient online provided for easier data collection, there were some drawbacks. First, some patients still do not utilize email regularly; therefore, they were not able to complete the survey or needed to be reminded multiple times to complete it. The second drawback is the student therapist/provider does not see the survey results from their specific patient. Having a paper form that is filled out not only allows for the patient to complete the survey without reminders, but also provides an added benefit of having the student therapist see the survey information. Much like in other settings, having the provider see the survey information could be beneficial to the treatment of the patient.

As for the specific surveys that were implemented, in the future the use of the PHQ-2 that has the same Likert scale as the GAD-7 (0-4) would provide more information about the patient. Updating the PHQ-2 to add in additional screens such as the PHQ-9 is recommended. According to Maurer & Darnall (2012), if the patient screens positive for depression using the PHQ-2, following up with the PHQ-9 would add additional information about the depression of the patient. Moving forward, if the patient completes the PHQ-2 through the online survey and is screened positive, a PHQ-9 could be given to the patient in the clinic prior to being seen by the student therapist. Again, considering that many of the items could be linked to the cancer is important to keep in mind, but by giving the full PHQ-9, a broader picture of the depression is assessed.

The information obtained from the IES was informative; however, not imperative. If PTSD is still an area of interest to assess, it is recommended to provide a scale that is more diagnostic in nature. Another option for future studies is only providing the distress screen, PHQ-2, and GAD-7.

It would be recommended to keep the same time periods of surveys (prior to initial visit, after the fourth visit, every three months, and after the final session). These time points coincide with important milestones of the therapy and also provide important feedback as to how the patient is doing psychologically through many time points. However, adding an additional time point after the patient's first contact with the clinic in order to formally assess wait-list times and determine if wait-list time has an impact on patient distress. Patient wait-list time a patient was not formally measured during this study and it is unclear how that may have impacted the distress patients experienced.

While this specific study utilized the National Cancer Institute distress scale, future studies could use a distress scale that identifies how psychological, social, and physical areas affect distress. In the current study, a number of problem areas were mentioned, but each one may have varying relative impacts on the distress of the patient. Finally, while the COPE clinic focuses on the psychological aspects of the patient, it is recommended that the student therapist address the different problem areas endorsed by the patient. There could be a possibility that a patient is unfamiliar with a community resource that the COPE clinic could refer them to addressing that area.

Aim Two: Outcome of psychotherapy. When it comes to the outcome measure, the time at which it was given (during the fifth session) is a recommended time point for future studies. Since the outcome measure captures those who have started psychotherapy in the clinic and the initial feeling about how the psychotherapy is going, more information would be helpful. Adding more open-ended questions would also allow for qualitative data. Some additional questions could be: What is working well? What is not working? If this was not what I expected my sessions would be like, what was I expecting? Those questions would be appropriate for both the patient and student therapist. Additional questions specifically for the student therapist are recommended. Specifically, asking: What, if anything, would you have wanted to know about the medical disease prior to starting with the patient? Is there anything else that would have made you feel more prepared? Describe your confidence when providing psychotherapy at the COPE clinic.

In the current study, surveys were provided to the student therapist to give at the end of the fifth session. Future studies could benefit from providing additional training on discussing the surveys with patients, which could change the direction of the psychotherapy. If the additional training is implemented, additional open-ended questions about the process of discussing the outcome measures in session should be provided. Additionally, it would be interesting to examine whether the strong therapeutic relationship found between patient and student therapist affects the overall distress level of the patient.

Conclusion

Despite the limitations of having a smaller data set, the first aim of the study of implementing the surveys was successfully completed. Implementation of the psychological surveys provided the clinic with additional information about the psychological, social, and physical needs of the patients being seen at the COPE clinic. While this study was not able to illustrate effectiveness of treatment, there were trends that the distress and likelihood of depression for the patients decreased from the initial visit to the second time point. Additionally, patients were satisfied with the overall level of psychotherapy being provided. An unexpected finding from this study was the level of confidence the student therapists had in how they felt psychotherapy was going with their patients. This is something that should be addressed in future studies through more qualitative data. In conclusion, providing psychological services at a community clinic showed reduced levels of depression and anxiety, and patients reported being extremely satisfied with numerous aspects of their psychological treatment.

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Figure 1

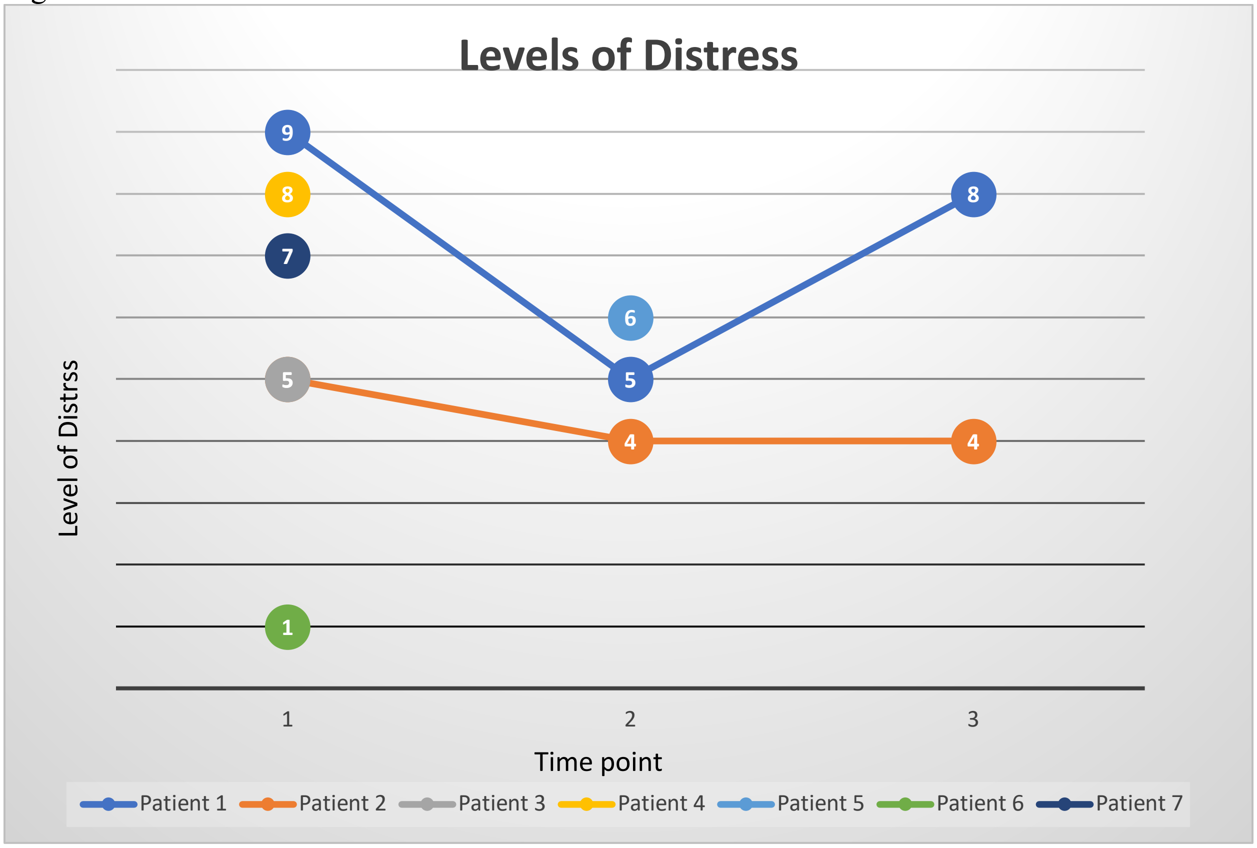

Levels of Distress
Level of Distrss
9
8
7
6
5
5
4
4
8
1
1
2
3
Time point
Patient 1
Patient 2
Patient 3
Patient 4
Patient 5
Patient 6
Patient 7

Figure 2

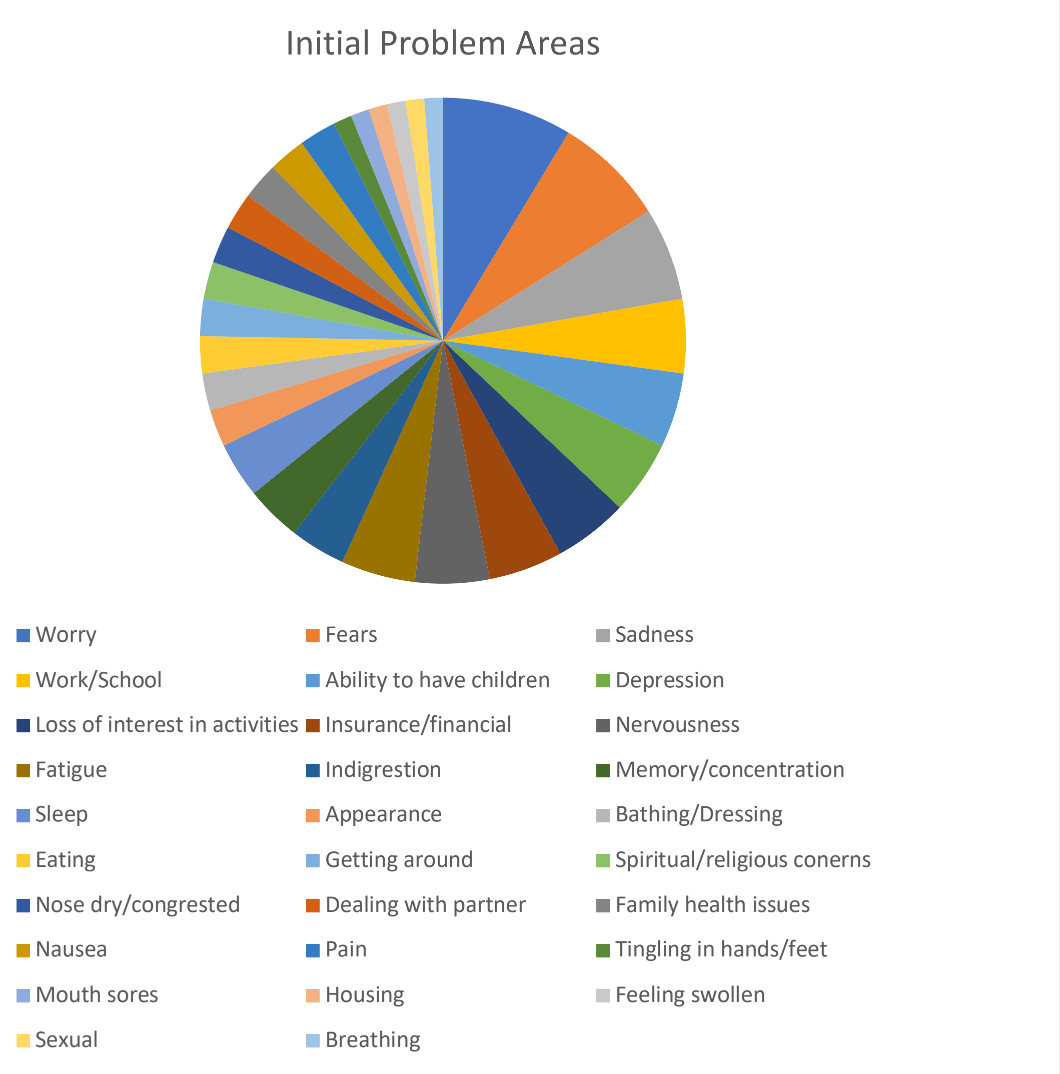

Initial Problem Areas
Worry
Fears
Sadness
Work/School
Ability to have children
Depression
Loss of interest in activities
Insurance/financial
Nervousness
Fatigue
Indigrestion
Memory/concentration
Sleep
Appearance
Bathing/Dressing
Eating
Getting around
Spiritual/religious conerns
Nose dry/congrested
Dealing with partner
Family health issues
Nausea
Pain
Tingling in hands/feet
Mouth sores
Housing
Feeling swollen
Sexual
Breathing

Figure 3

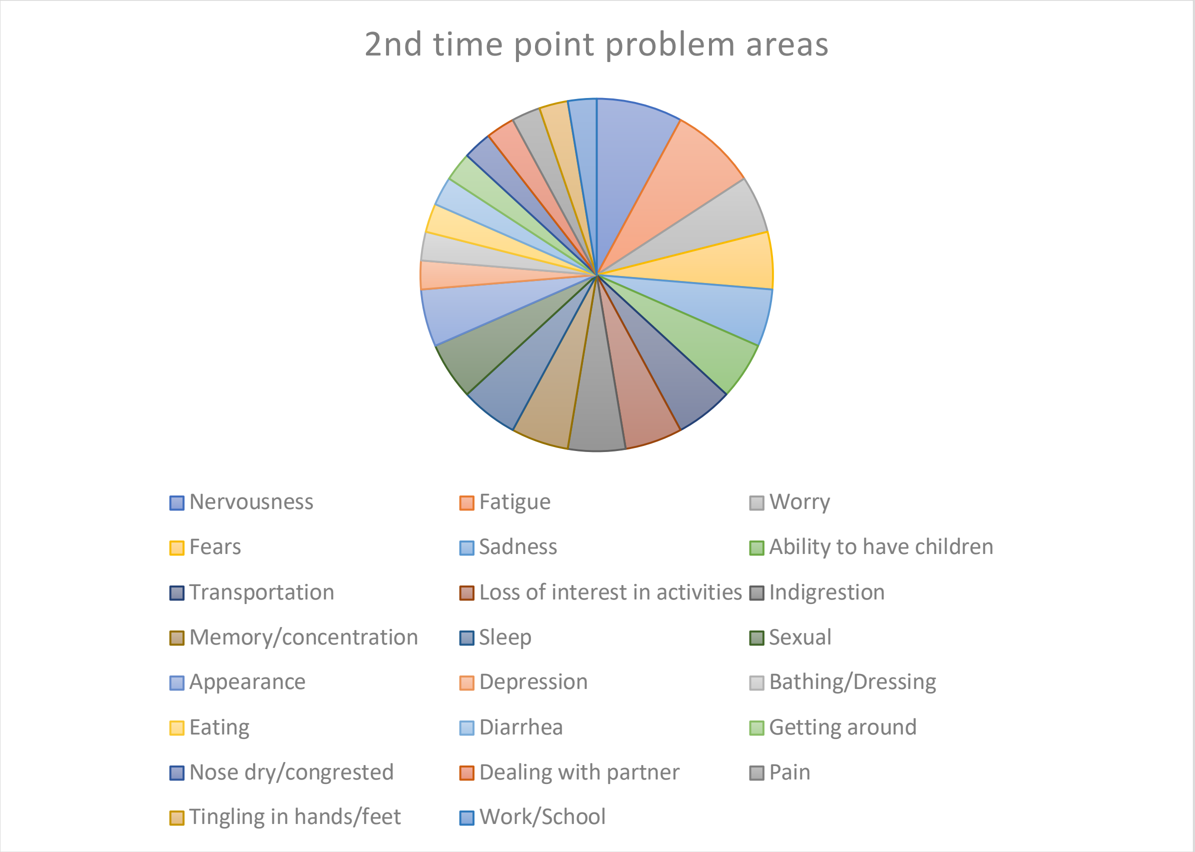

2nd time point problem areas
Nervousness
Fatigue
Worry
Fears
Sadness
Ability to have children
Transportation
Loss of interest in activities
Indigrestion
Memory/concentration
Sleep
Sexual
Appearance
Depression
Bathing/Dressing
Eating
Diarrhea
Getting around
Nose dry/congrested
Dealing with partner
Pain
Tingling in hands/feet
Work/School

Figure 4

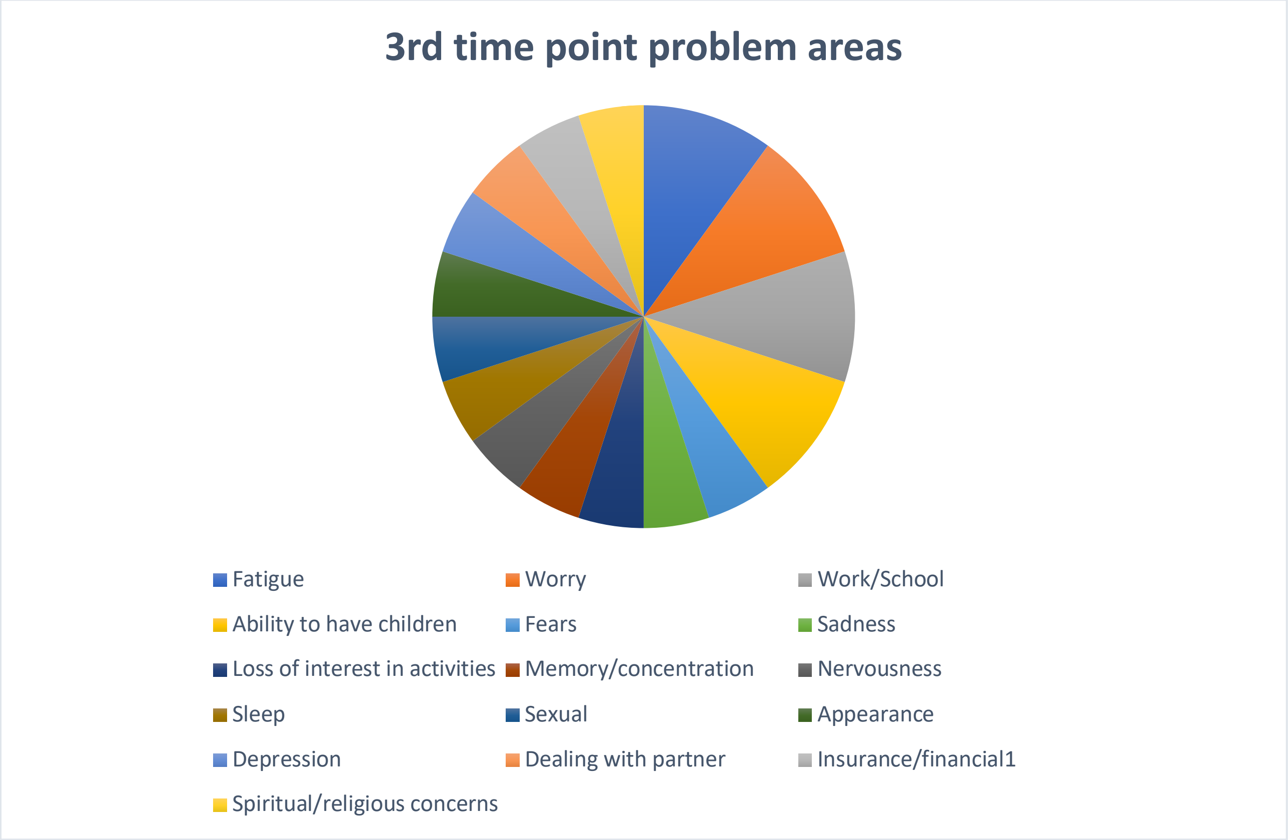

3rd time point problem areas
Fatigue
Worry
Work/School
Ability to have children
Fears
Sadness
Loss of interest in activities
Memory/concentration
Nervousness
Sleep
Sexual
Appearance
Depression
Dealing with partner
Insurance/financial1
Spiritual/religious concerns

Figure 5

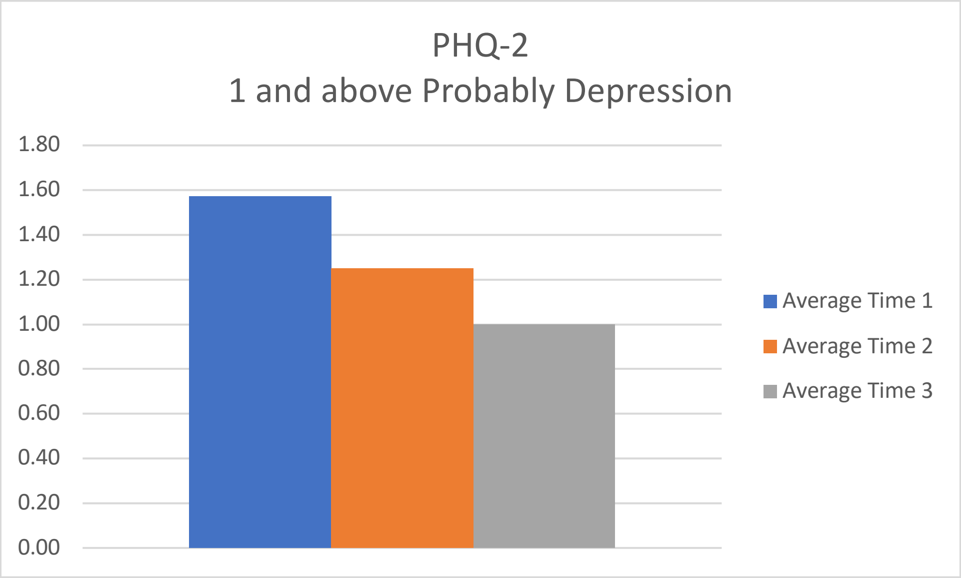

PHQ-2
1 and above Probably Depression
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
Average Time 1
Average Time 2
Average Time 3

Figure 6

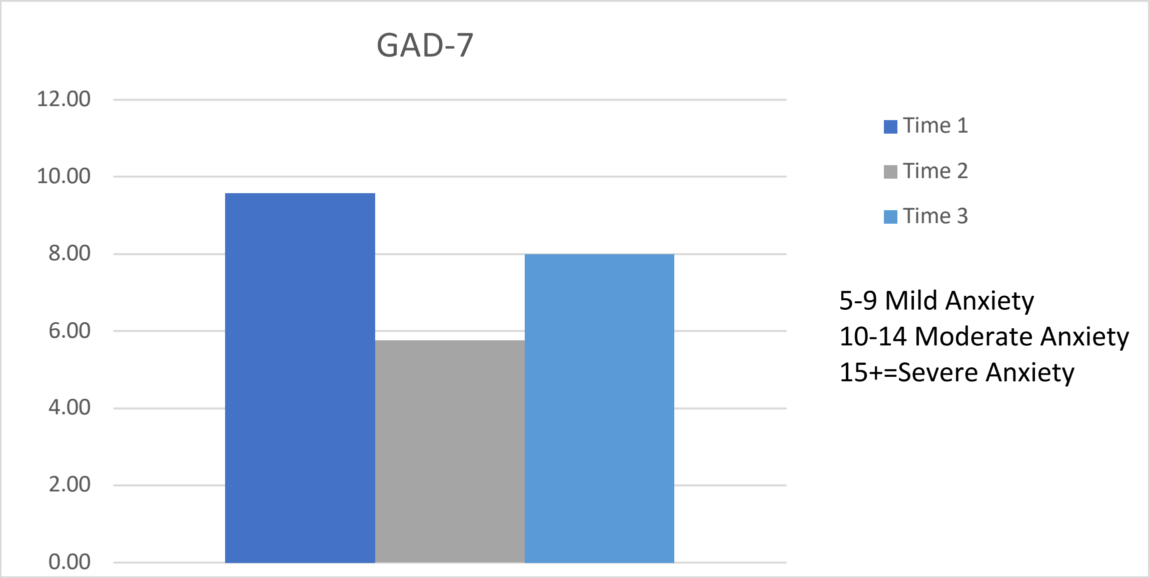

GAD-7
12.00
10.00
8.00
6.00
4.00
2.00
0.00
■ Time 1
■ Time 2
■ Time 3
5-9 Mild Anxiety
10-14 Moderate Anxiety
15+=Severe Anxiety

Figure 7

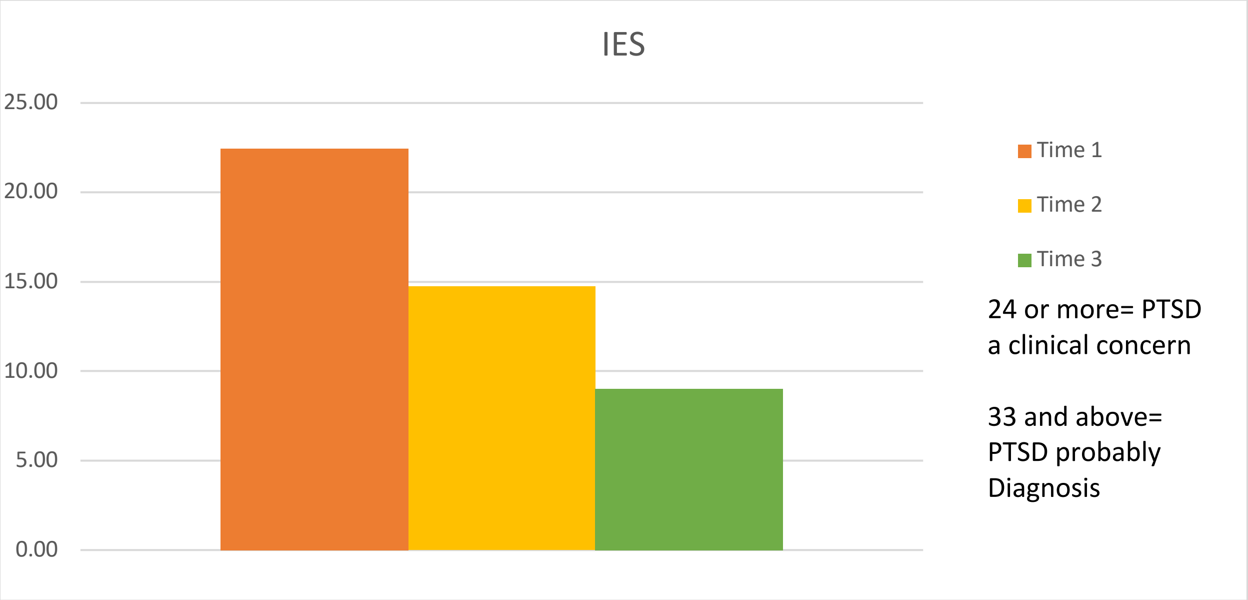

IES
25.00
20.00
15.00
10.00
5.00
0.00
Time 1
Time 2
Time 3
24 or more= PTSD a clinical concern
33 and above= PTSD probably Diagnosis

Figure 8

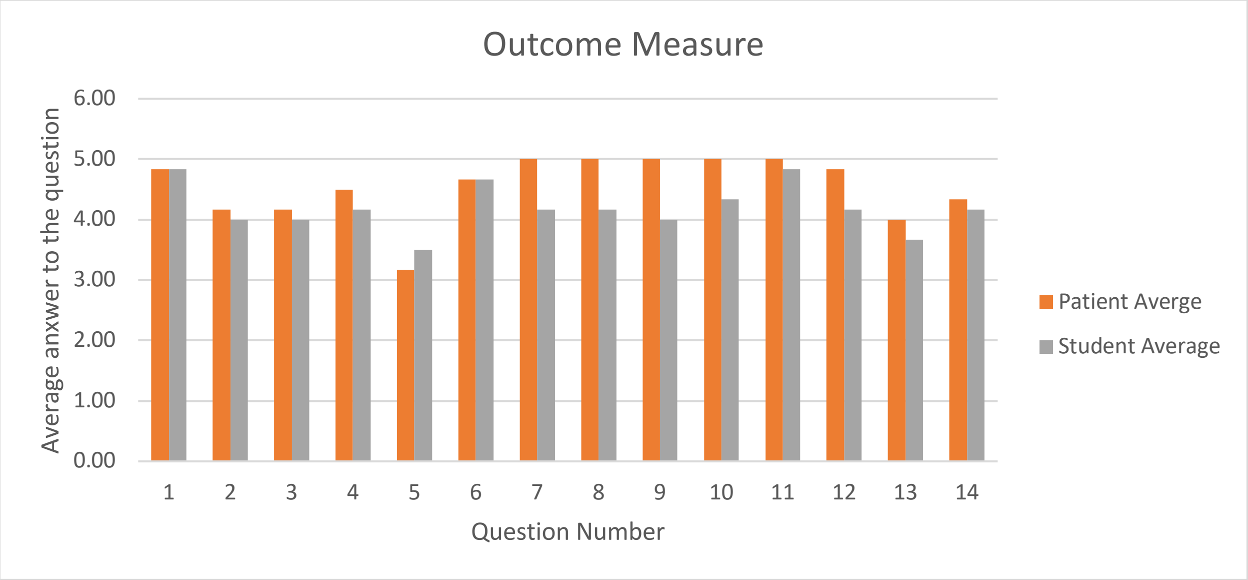

Outcome Measure
Average anxwer to the question
6.00
5.00
4.00
3.00
2.00
1.00
0.00
1
2
3
4
5
6
7
8
9
10
11
12
13
14
Question Number
Patient Averge
Student Average

Figure 9

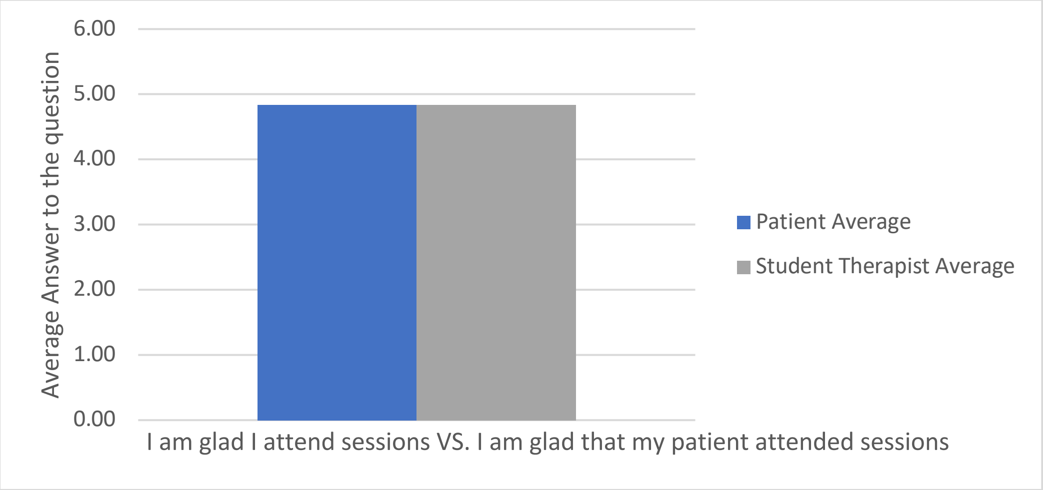

6.00
5.00
4.00
3.00
2.00
1.00
0.00
Average Answer to the question
Patient Average
Student Therapist Average
I am glad I attend sessions VS. I am glad that my patient attended sessions

Figure 10

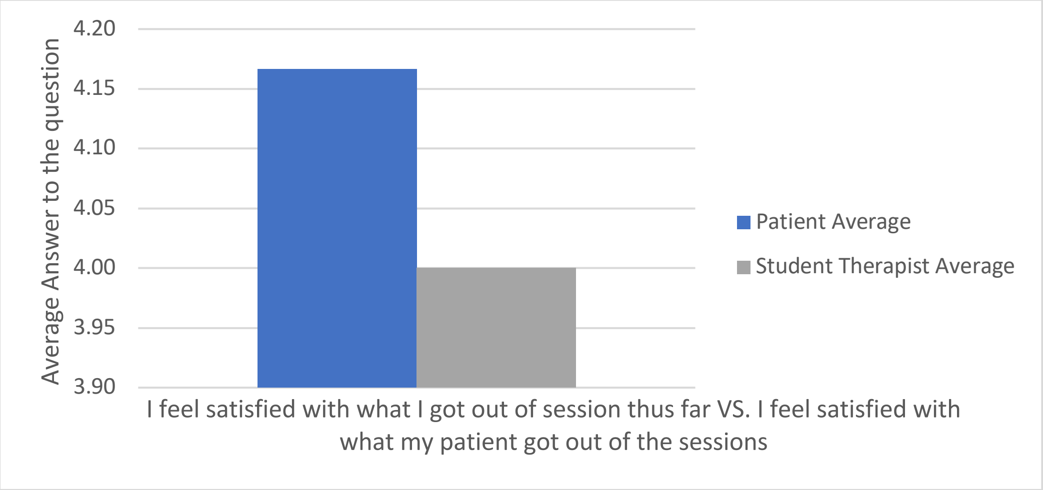

4.20
4.15
4.10
4.05
4.00
3.95
3.90
Average Answer to the question
I feel satisfied with what I got out of session thus far VS. I feel satisfied with what my patient got out of the sessions
Patient Average
Student Therapist Average

Figure 11

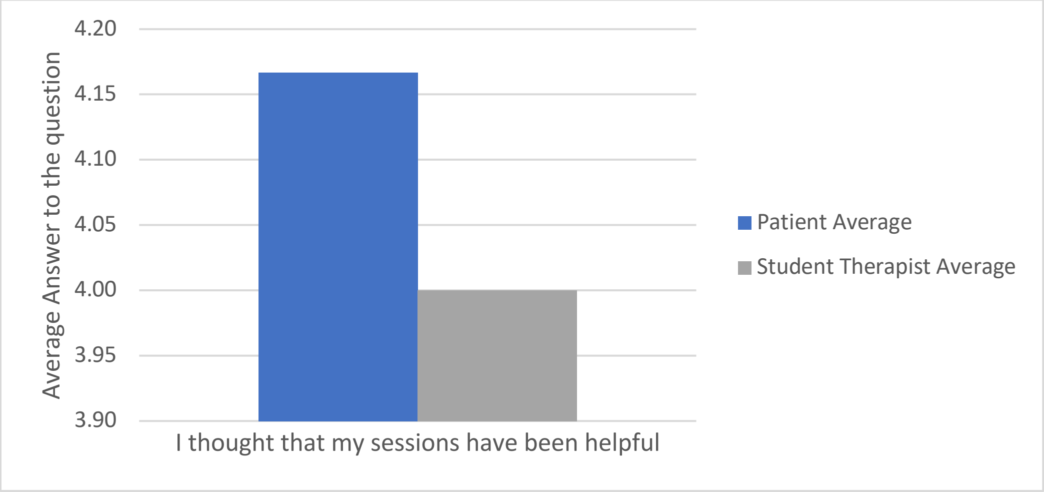

Average Answer to the question
4.20
4.15
4.10
4.05
4.00
3.95
3.90
I thought that my sessions have been helpful
Patient Average
Student Therapist Average

Figure 12

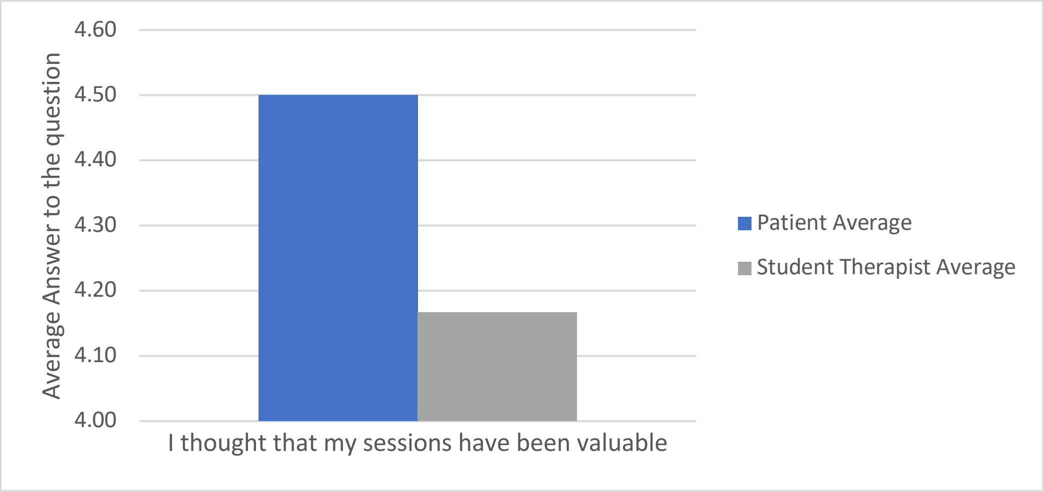

4.60
4.50
4.40
4.30
4.20
4.10
4.00
Average Answer to the question
I thought that my sessions have been valuable
Patient Average
Student Therapist Average

Figure 13

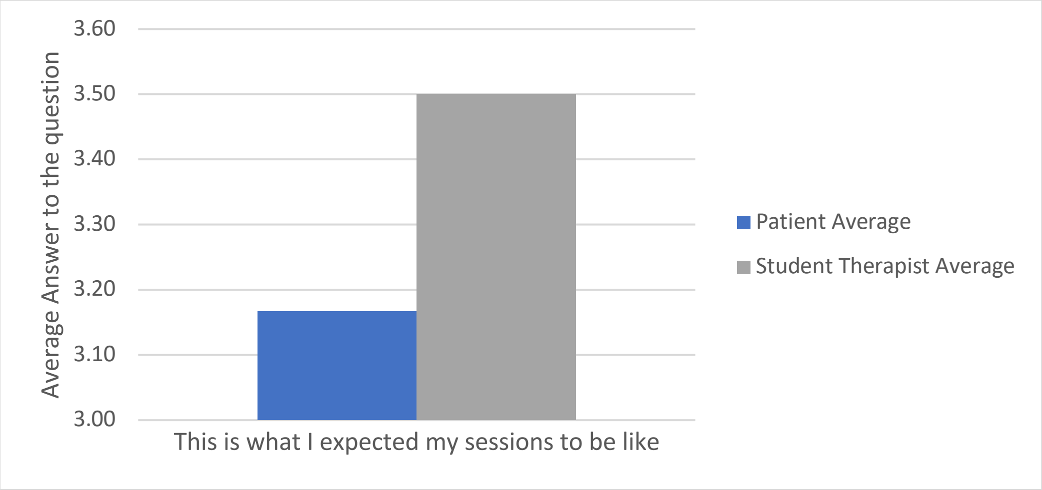

3.60
3.50
3.40
3.30
3.20
3.10
3.00
Average Answer to the question
This is what I expected my sessions to be like
Patient Average
Student Therapist Average

Figure 14

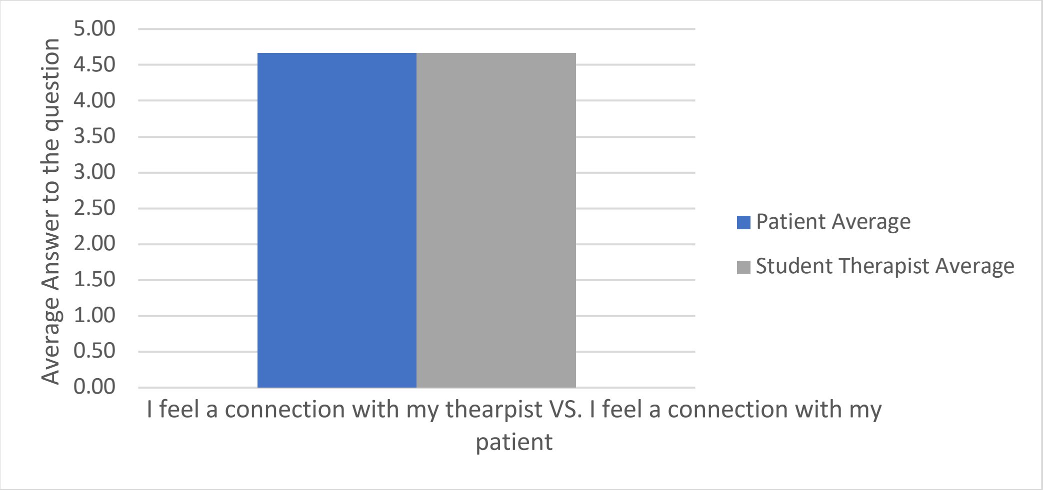

Average Answer to the question
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
I feel a connection with my thearpist VS. I feel a connection with my patient
Patient Average
Student Therapist Average

Figure 15

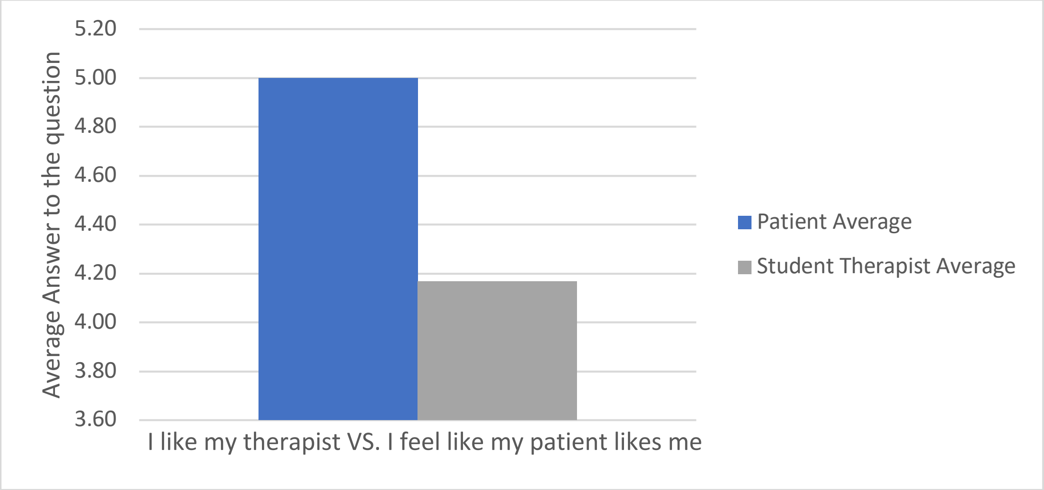

5.20
5.00
4.80
4.60
4.40
4.20
4.00
3.80
3.60
Average Answer to the question
I like my therapist VS. I feel like my patient likes me
Patient Average
Student Therapist Average

Figure 16

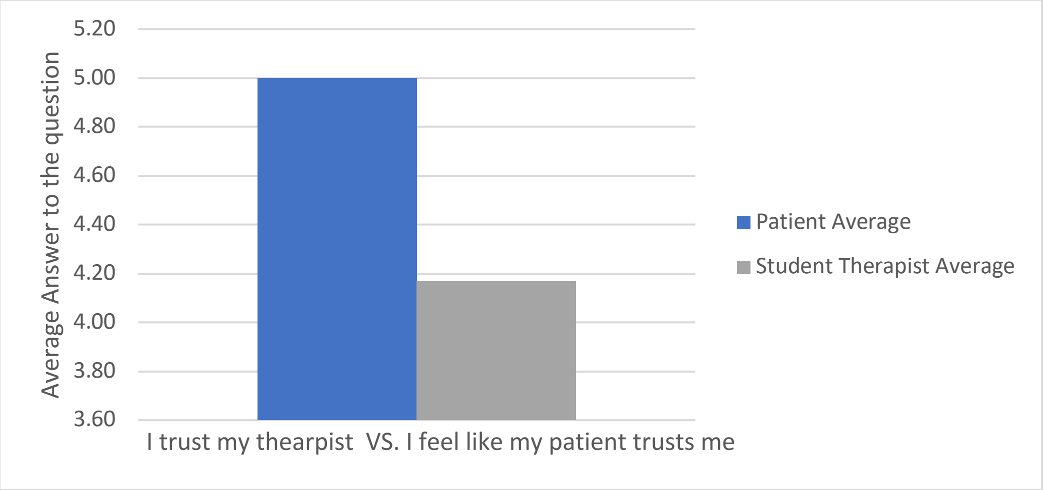

5.20
5.00
4.80
4.60
4.40
4.20
4.00
3.80
3.60
Average Answer to the question
I trust my thearpist VS. I feel like my patient trusts me
Patient Average
Student Therapist Average

Figure 17

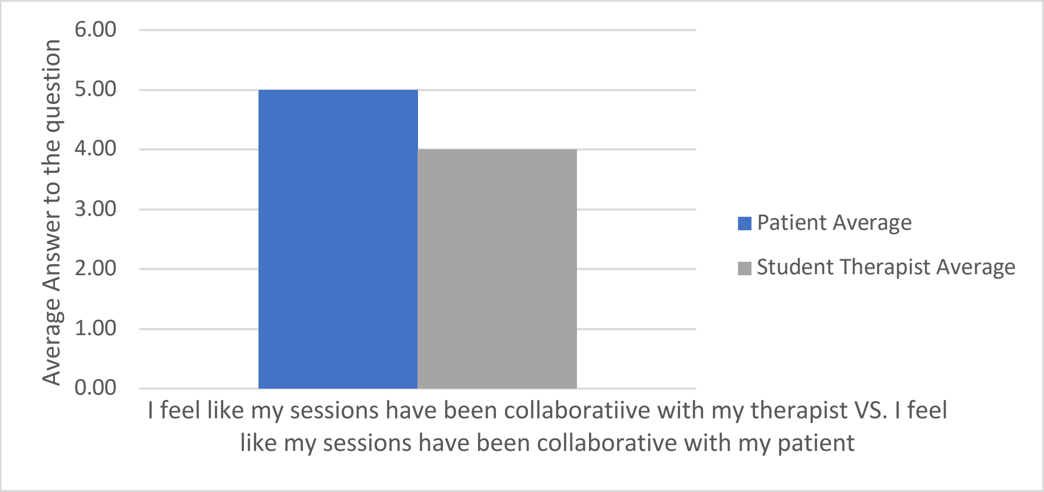

Average Answer to the question
6.00
5.00
4.00
3.00
2.00
1.00
0.00
I feel like my sessions have been collaboratiive with my therapist VS. I feel like my sessions have been collaborative with my patient
Patient Average
Student Therapist Average

Figure 18

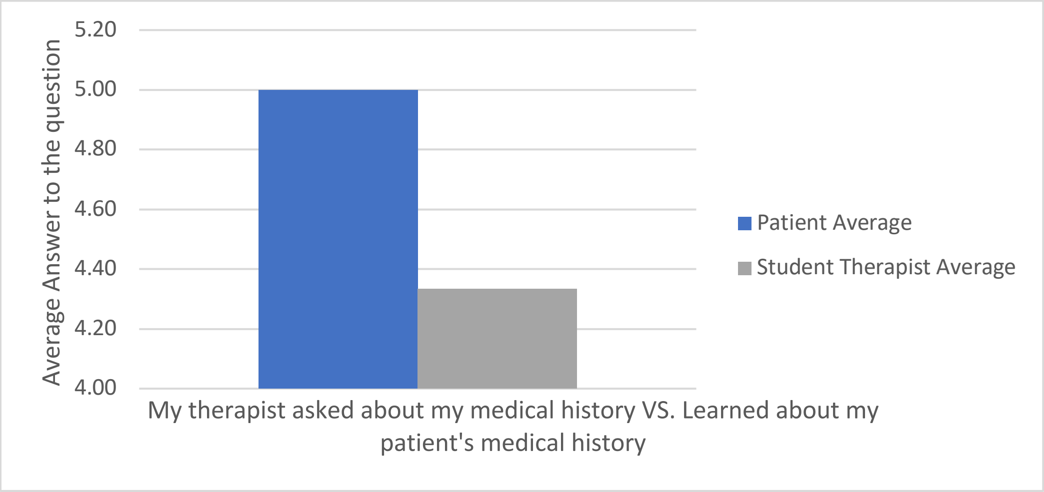

Average Answer to the question
5.20
5.00
4.80
4.60
4.40
4.20
4.00
My therapist asked about my medical history VS. Learned about my patient's medical history
Patient Average
Student Therapist Average

Figure 19

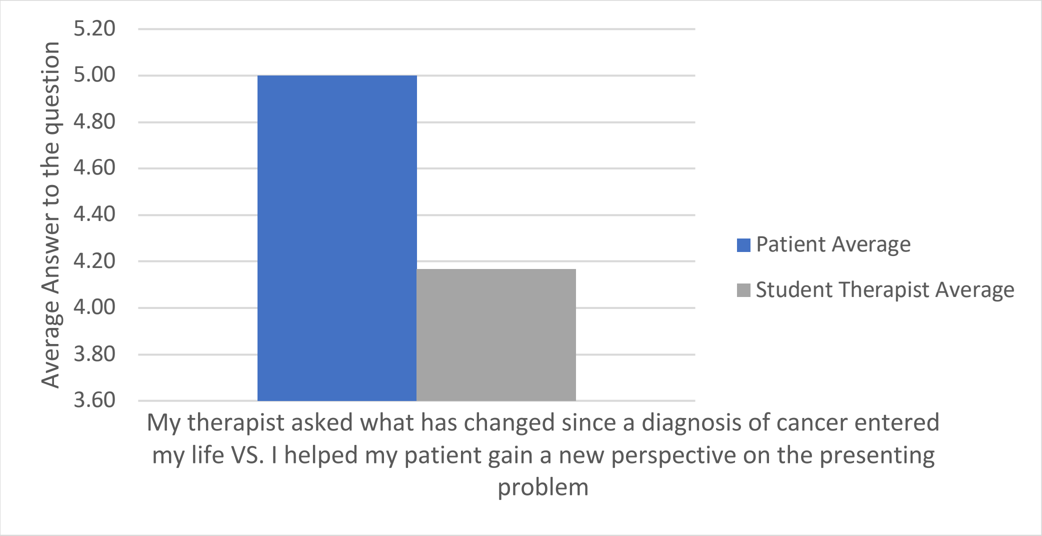

Average Answer to the question
5.20
5.00
4.80
4.60
4.40
4.20
4.00
3.80
3.60
My therapist asked what has changed since a diagnosis of cancer entered my life VS. I helped my patient gain a new perspective on the presenting problem
Patient Average
Student Therapist Average

Figure 20

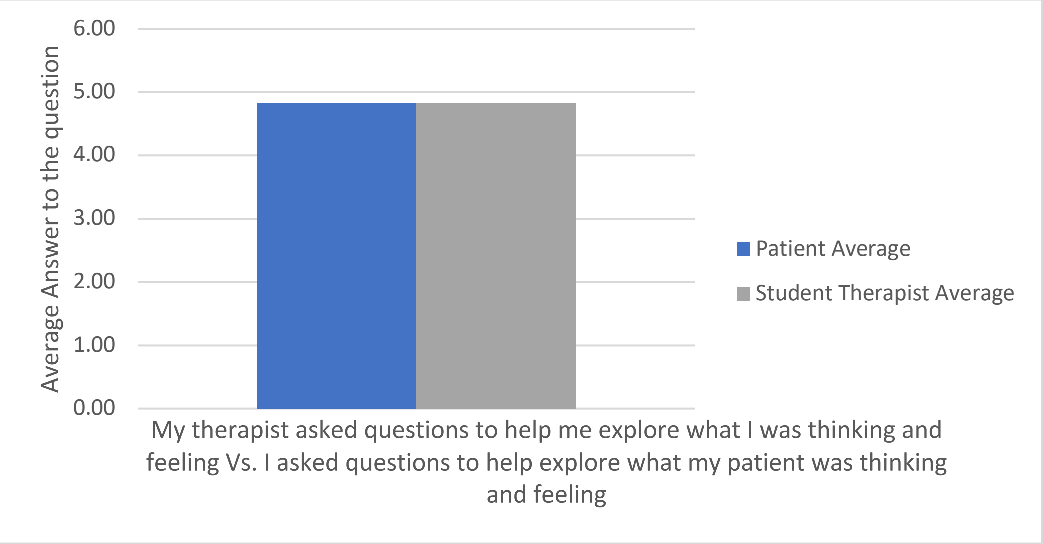

6.00
5.00
4.00
3.00
2.00
1.00
0.00
Average Answer to the question
My therapist asked questions to help me explore what I was thinking and feeling Vs. I asked questions to help explore what my patient was thinking and feeling
Patient Average
Student Therapist Average

Figure 21

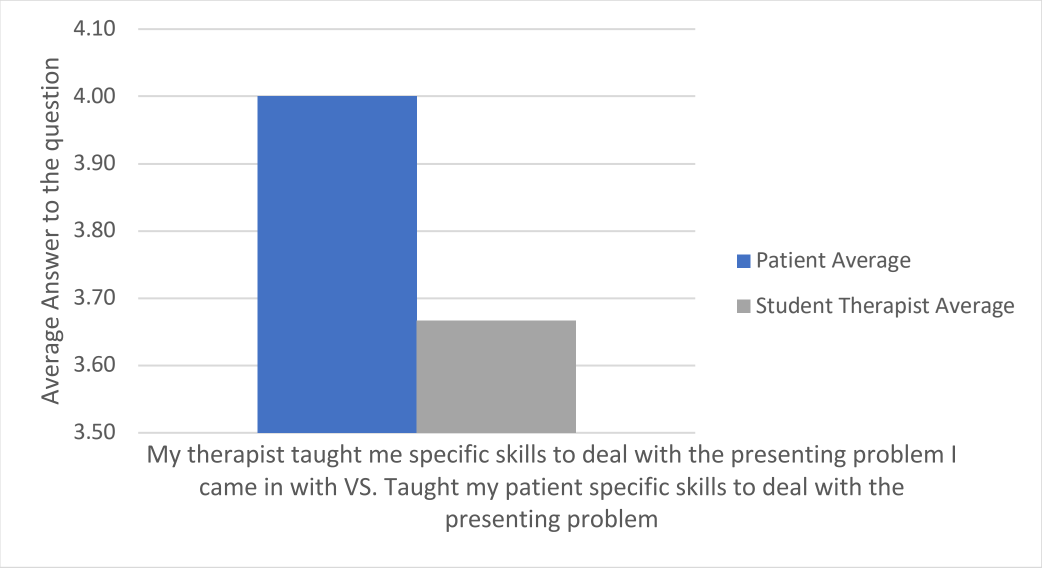
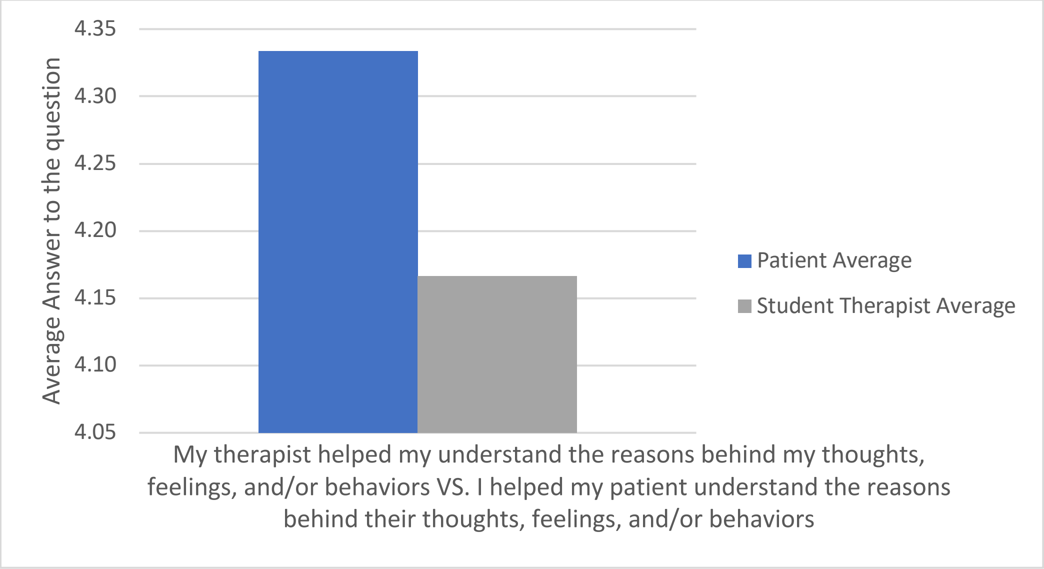

4.10
4.00
3.90
3.80
3.70
3.60
3.50
Average Answer to the question
My therapist taught me specific skills to deal with the presenting problem I came in with VS. Taught my patient specific skills to deal with the presenting problem
Patient Average
Student Therapist Average

Figure 22


4.35
4.30
4.25
4.20
4.15
4.10
4.05
Average Answer to the question
Patient Average
Student Therapist Average
My therapist helped my understand the reasons behind my thoughts, feelings, and/or behaviors VS. I helped my patient understand the reasons behind their thoughts, feelings, and/or behaviors

Appendix A: Survey

Q1.

Welcome to the research study!

You are being asked to participate in a research study. We are hoping to implement a screening and assessment procedure into the Center for Oncology Psychology Excellence (COPE) clinic, as well as learn more about the effectiveness of the clinic through measures that look at the outcome of the therapy. The screeners we are implementing are questionnaires that ask about your mood. They are similar to forms you might see at your oncologist's office.

If you agree to participate in the research study, you will be asked to complete an online survey that will take about ten minutes of your time. These forms will be sent to you after this phone intake via email, and then periodically throughout your time in our clinic. Each time you receive an email it will take no more than ten minutes to complete the survey. In total, completing the surveys will take no more than one hour of your time.

Participating in this research study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to answer any survey questions for any reason without penalty. You can still receive the same services at the clinic regardless of your participation in this research.

This study will have minimal risk. Questions will ask about your emotional health and may cause some minor discomfort. If this does happen, we encourage you to speak with your therapist about it. In addition, you will be provided with the Colorado Crisis line information and you can contact the researchers through the COPE hotline if you have any questions at any point in the study.

This study may help improve our services at the COPE clinic and provide better care to future patients who seek our services.

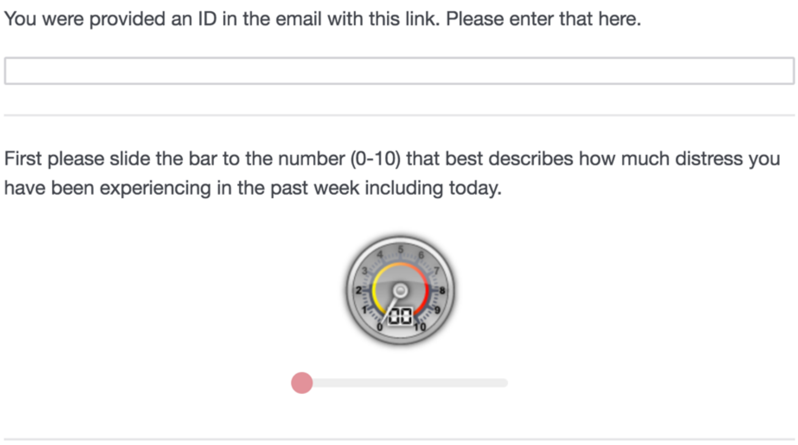
All data will be de-identified. The online screeners will be protected through passwords both on the website and through the computer that will be used to access the data. For the outcome measures that are on paper these also will be de-identified and kept in a locked office in a locked cabinet.

Questions: If you have any questions about this project or your participation, please feel free to ask questions now or contact Hannah Katz at Hannah.katz@du.edu at any time.

If you have any questions or concerns about your research participation or rights as a participant, you may contact the DU Human Research Protections Program by emailing IRBAdmin@du.edu or calling (303) 871-2121 to speak to someone other than the researchers.

○ I consent, begin the study

○ I do not consent, I do not wish to participate

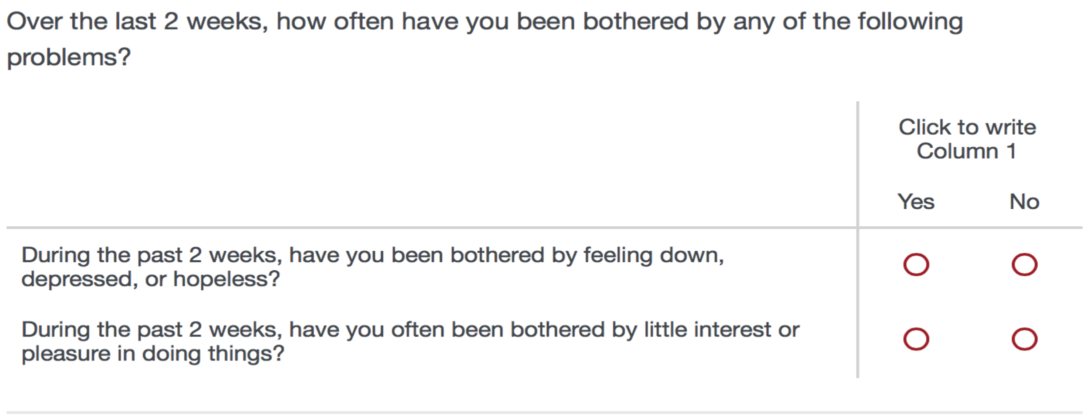


You were provided an ID in the email with this link. Please enter that here.

First please slide the bar to the number (0-10) that best describes how much distress you have been experiencing in the past week including today.

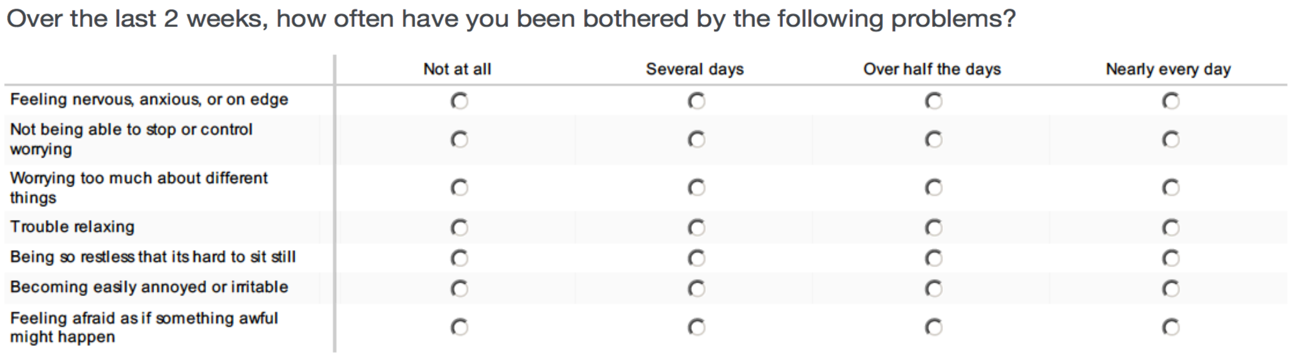
Second, please indicate if any of the following has been a problem for you in the past week including today. Be sure to check YES or NO for each.

	Click to write Column 1	
	Yes	No
Child Care	○	○
Housing	○	○
Insurance/financial	○	○
Transportation	○	○
Work/school	○	○
Treatment decisions	○	○
Dealing with children	○	○
Dealing with partner	○	○
Ability to have children	○	○
Family health issues	○	○
Depression	○	○
Fears	○	○
Nervousness	○	○
Sadness	○	○
Worry	○	○
Loss of interest in usual activities	○	○
Spiritual/religious concerns	○	○
Appearence	○	○
Bathing/dressing	○	○
Breathing	○	○
Changes in urination	○	○
Constipation	○	○
Diarrhea	○	○
Eating	○	○
Fatigue	○	○
Feeling Swollen	○	○
Fevers	○	○
Getting around	○	○
Indigestion	○	○
Memory/concentration	○	○
Mouth sores	○	○
Nausea	○	○
Nose dry/congested	○	○
Pain	○	○
Sexual	○	○
Skin dry/itchy	○	○
Sleep	○	○
Substance abuse	○	○
Tingling in hands/feet	○	○



Over the last 2 weeks, how often have you been bothered by any of the following problems?

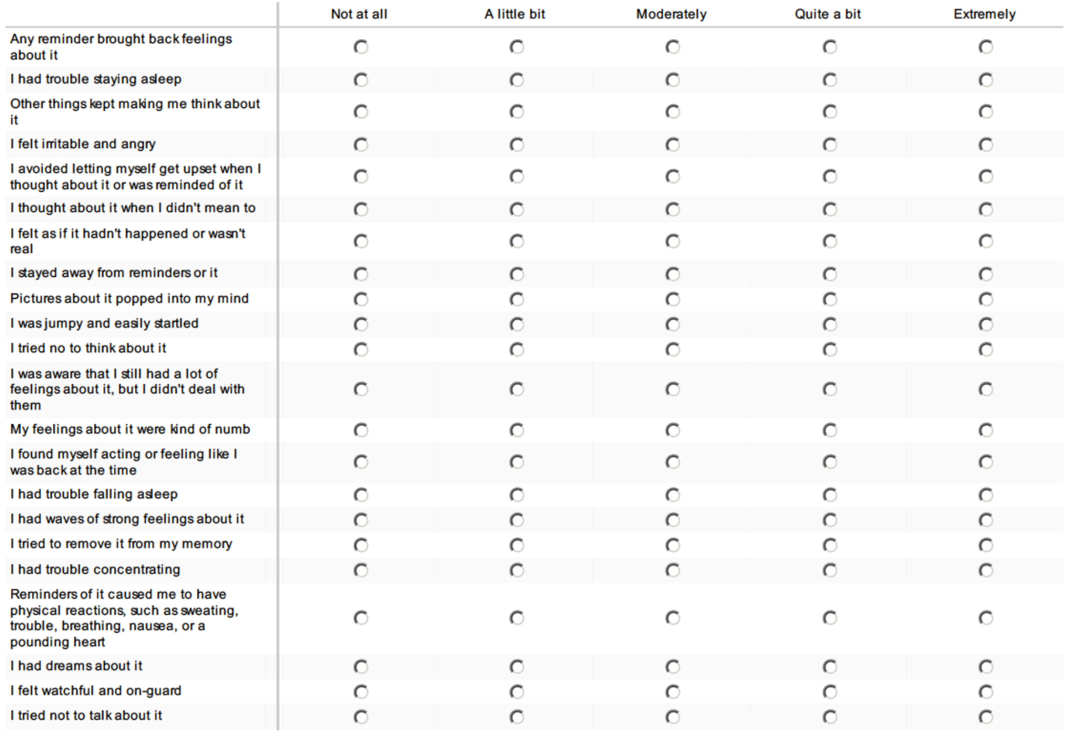
	Click to write Column 1	
	Yes	No
During the past 2 weeks, have you been bothered by feeling down, depressed, or hopeless?	○	○
During the past 2 weeks, have you often been bothered by little interest or pleasure in doing things?	○	○



Over the last 2 weeks, how often have you been bothered by the following problems?

	Not at all	Several days	Over half the days	Nearly every day
Feeling nervous, anxious, or on edge	○	○	○	○
Not being able to stop or control worrying	○	○	○	○
Worrying too much about different things	○	○	○	○
Trouble relaxing	○	○	○	○
Being so restless that its hard to sit still	○	○	○	○
Becoming easily annoyed or irritable	○	○	○	○
Feeling afraid as if something awful might happen	○	○	○	○

Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you **DURING THE PAST SEVEN DAYS** with respect to your cancer journey. How much were you distressed or bothered by these difficulties?



	Not at all	A little bit	Moderately	Quite a bit	Extremely
Any reminder brought back feelings about it	○	○	○	○	○
I had trouble staying asleep	○	○	○	○	○
Other things kept making me think about it	○	○	○	○	○
I felt irritable and angry	○	○	○	○	○
I avoided letting myself get upset when I thought about it or was reminded of it	○	○	○	○	○
I thought about it when I didn't mean to	○	○	○	○	○
I felt as if it hadn't happened or wasn't real	○	○	○	○	○
I stayed away from reminders or it	○	○	○	○	○
Pictures about it popped into my mind	○	○	○	○	○
I was jumpy and easily startled	○	○	○	○	○
I tried no to think about it	○	○	○	○	○
I was aware that I still had a lot of feelings about it, but I didn't deal with them	○	○	○	○	○
My feelings about it were kind of numb	○	○	○	○	○
I found myself acting or feeling like I was back at the time	○	○	○	○	○
I had trouble falling asleep	○	○	○	○	○
I had waves of strong feelings about it	○	○	○	○	○
I tried to remove it from my memory	○	○	○	○	○
I had trouble concentrating	○	○	○	○	○
Reminders of it caused me to have physical reactions, such as sweating, trouble, breathing, nausea, or a pounding heart	○	○	○	○	○
I had dreams about it	○	○	○	○	○
I felt watchful and on-guard	○	○	○	○	○
I tried not to talk about it	○	○	○	○	○

Appendix B: Initial email new patients

Hello _____,

Thank you so much for agreeing to be a participant in the research project. As I mentioned over the phone by doing this research we hope to implement a screening and assessment process into the COPE clinic, as well as learn more about the effectiveness of the clinic through measures that look at the outcome of the therapy. The screeners we are implementing are questionnaires that ask about your mood. They are similar to forms you might see at your oncologist's office. Participation is voluntary and has no effect on you receiving psychotherapy through the clinic. This study is approved by the University of Denver Institutional Review Board.

I will send you the first survey closer to when you are assigned to a student therapist via email.

If you have any questions, please let me know.

Hannah Katz, MA
Center for Oncology Psychology Excellence Fellow
Graduate School of Professional Psychology
University of Denver
www.du.edu/gspp/cope

Appendix C: Survey email

Hello,

Thank you so much for agreeing to be a participant in the research project. You should be receiving a call from your student therapist soon to schedule your first appointment. In the meantime, please complete the following survey.

Your ID is ____

Survey:
https://udenver.qualtrics.com/jfe/form/SV_eF0EeHx78pHjSm1

If you have any questions, please let me know.

Thank you,
Hannah Katz, MA
Center for Oncology Psychology Excellence Fellow
Graduate School of Professional Psychology
University of Denver
www.du.edu/gspp/cope

Appendix D: Recruitment Form

Recruitment form

We are currently conducting a research project. By doing this research we hope to implement a screening and assessment process into the COPE clinic, as well as learn more about the effectiveness of the clinic through measures that look at the outcome of the therapy. The screeners we are implementing are questionnaires that ask about your mood. They are similar to forms you might see at your oncologist's office.

If you are willing to participate in the study, please fill the below out:

___YES I am willing to participate and am okay with the study emailing me the surveys
my email is ______________________

___ NO I am not willing to participate in the study

Appendix E: Initial email for current patients

Hello,

Thank you so much for agreeing to be a participant in the research project. Doing this research, we hope to implement a screening and assessment process into the COPE clinic, as well as learn more about the effectiveness of the clinic through measures that look at the outcome of the therapy. The screeners we are implementing are questionnaires that ask about your mood. They are similar to forms you might see at your oncologist's office. Participation is voluntary and has no effect on you receiving psychotherapy through the clinic.

Your ID is ___

Survey:
https://udenver.qualtrics.com/jfe/form/SV_eF0EeHx78pHjSm1

If you have any questions, please let me know.

Thank you,
Hannah Katz,MA
Center for Oncology Psychology Excellence Fellow
Graduate School of Professional Psychology
University of Denver
www.du.edu/gspp/cope

Appendix F: Follow up screener survey email for all patients

Hello,

Thank you so much again for agreeing to be a participant in the research project. This is a follow up survey from the initial survey you completed earlier. As a reminder, your ID is ____

Survey:
https://udenver.qualtrics.com/jfe/form/SV_eF0EeHx78pHjSm1

If you have any questions, please let me know.

Thank you,
Hannah Katz,MA
Center for Oncology Psychology Excellence Fellow
Graduate School of Professional Psychology
University of Denver
www.du.edu/gspp/cope

Appendix G: Final survey screener email

Hello,

Thank you so much again for participating in the COPE research project. We are aware you have concluded psychotherapy services at COPE and have one more survey for you to complete. As a reminder, Your ID is ____

Survey:
https://udenver.qualtrics.com/jfe/form/SV_eF0EeHx78pHjSm1

If you have any questions, please let me know.

Thank you,
Hannah Katz,MA
Center for Oncology Psychology Excellence Fellow
Graduate School of Professional Psychology
University of Denver
www.du.edu/gspp/cope

Appendix H: Outcome Measure

Patient Measure

Instructions: Please indicate how much each statement reflects your experience with psychotherapy. *Circle one number for each item using the following scale:*

	Strongly Disagree				Strongly Agree
1. I am glad I attend sessions	1	2	3	4	5
2. I feel satisfied with what I got out of sessions thus far	1	2	3	4	5
3. I thought that my sessions have been helpful	1	2	3	4	5
4. I thought that my sessions have been valuable	1	2	3	4	5
5. This is what I expected my sessions would be like	1	2	3	4	5
6. I feel a connection with my therapist	1	2	3	4	5
7. I like my therapist	1	2	3	4	5
8. I trust my therapist	1	2	3	4	5
9. I feel like my sessions have been collaborative with my therapist	1	2	3	4	5

In my sessions, my therapist…

10. Asked about my medical history	1	2	3	4	5
11. Asked what has changed since a diagnosis of cancer entered my life	1	2	3	4	5
12. Asked questions to help me explore what I was thinking and feeling	1	2	3	4	5
13. Taught me specific skills to deal with the presenting problem I came in with	1	2	3	4	5
14. Helped me understand the reasons behind my thoughts, feelings, and/or behaviors	1	2	3	4	5

Student Therapist Measure

Instructions: Indicate how much each statement reflects your experiences with your COPE patient. *Circle one number for each item using the following scale:*

	Strongly Disagree				Strongly Agree
1. I am glad that my patient attended sessions	1	2	3	4	5
2. I feel satisfied with what my patient got out of the sessions	1	2	3	4	5
3. I thought that my sessions have been helpful	1	2	3	4	5
4. I thought that my sessions have been valuable	1	2	3	4	5
5. This is what I expected my sessions would be like	1	2	3	4	5
6. I feel a connection with my patient	1	2	3	4	5
7. I feel like my patient likes me	1	2	3	4	5
8. I feel like my patient trusts me	1	2	3	4	5
9. I feel like my sessions have been collaborative with my patient	1	2	3	4	5

In my sessions, I…

10. Learned about my patient's medical history	1	2	3	4	5
11. Asked questions to help explore what my patient was thinking and feeling	1	2	3	4	5
12. Helped my patient gain a new perspective on the presenting problem	1	2	3	4	5
13. Taught my patient specific skills to deal with the presenting problem	1	2	3	4	5
14. Helped my patient understand the reasons behind their thoughts, feelings, and/or behaviors	1	2	3	4	5

Appendix I: Outcome Measure Instructions

Hello,

In your envelope is your survey along with your patient(s) survey. Please leave 5 minutes at the end of your next session to complete these. Please pass the survey out and complete at the same time. If your patient wants to discuss these with you and you feel comfortable you are more than welcome to discuss these. The completed surveys will be put back in their respective envelopes and then please put in my PPC mailbox.

If you have questions, please contact me at 720-371-4087.

Thank you so much!

Hannah Katz, MA

Your survey has the following number on it: ______

Your patient has the following survey on it: ________