Treatment Preference, Changes in Preference, and Quality of Life

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TREATMENT PREFERENCE, CHANGES IN PREFERENCE, AND QUALITY OF LIFE

by

Chelsea Sage-Germain

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in partial fulfillment of the requirements
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The current study investigates whether treatment preferences prior to beginning treatment are different from treatment preferences at later points in treatment, and whether preferences are related to treatment outcome. While research to date supports the notion that matching clients to treatment in line with their preferences can improve retention and outcomes, results have been equivocal. Further, this research is typically conducted by measuring preferences just one time, prior to starting treatment. It is conceivable that preferences for treatment change over time as patients become more knowledgeable about their presenting problems and about the therapy process. A total of 969 participants were recruited from a Midwestern university-based psychology clinic and online sources. During the first phase of the study, preferences for treatment and the strength of those preferences were assessed in addition to typical intake measures gathered prior to engaging in services at an outpatient psychology clinic. Participants also answered a quality of life questionnaire. Preferences and quality of life were assessed again after the participant’s fourth treatment session, and every four sessions until the participant discontinued services. At all follow up time points, participants were also asked to what degree they believe their treatment aligns with their preferences. Due to recruitment difficulties, the first phase of the study was discontinued, and the survey was adapted for online distribution. Participants currently receiving mental health treatment were recruited from a variety of online
sources, and accessed the survey just one time. Participants were asked about their preferences including strength of preference and perceived match to preference prior to starting treatment and currently. Participants also answered a quality of life questionnaire. It was hypothesized that participants would report changes in preference over time, and that strength of preference and match to preference would be related to quality of life scores.

Results from the study show that a minority of participants did report a change in preference for a variety of treatment related variables, and those who report a change in preference also report a less-close match between the treatment they are receiving and their preference. Results also show that participant perception of match between preference and treatment received is related to measured quality of life. However, results varied depending on the recruitment source. This study lends support to the notion that some of the variability in treatment preference research may be at least partially related to changes in preferences for treatment over time.
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# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ..........................................................................................................ii

LIST OF TABLES ..................................................................................................................v

CHAPTER

I. OVERVIEW .........................................................................................................................1

Introduction .......................................................................................................................... 2

Literature Review .................................................................................................................. 4

   Treatment Preference ......................................................................................................... 4

   Preferences for Therapist Characteristics ..................................................................... 14

   Preferences for Therapeutic Approach ......................................................................... 17

   Patient Retention in Mental Health Treatment ............................................................ 19

Problem Statement .............................................................................................................. 20

II. HYPOTHESES .................................................................................................................. 22

III. METHOD .......................................................................................................................... 23

   Participants ....................................................................................................................... 23

   Materials ........................................................................................................................... 25

   Procedure .......................................................................................................................... 26

   Analysis Plan ..................................................................................................................... 27
Table of Contents—Continued

IV. RESULTS.................................................................................................................29
  Phase I.........................................................................................................................29
  Phase II.......................................................................................................................38

V. DISCUSSION.............................................................................................................77
  Limitations..................................................................................................................82
  Future Directions.......................................................................................................84

REFERENCES.............................................................................................................87

APPENDICES
  A. HSIRB Approval Letter............................................................................................93
  B. Survey: Phase I Copy..............................................................................................95
  C. Survey: Reddit Recruitment.....................................................................................109
  D. Survey: Mturk Screener.........................................................................................131
  E. Survey: Mturk Recruitment.....................................................................................133
LIST OF TABLES

1. Phase I Completer Sample Characteristics .......................................................... 30
2. Phase I Completer Preferences for Common Factors ............................................... 33
3. Phase I Completer Perception of Match to Preferences ............................................. 35
4. Phase I Completer Perception of Match to Preferences for Common Factors ............. 37
5. Participant Recruitment, Exclusion, and Dropout .................................................... 38
6. Reddit Sample Characteristics—Demographics ....................................................... 39
7. Reddit Sample Characteristics—Mental Health Treatment ...................................... 41
8. Reddit Sample—Changes in Preference .................................................................. 43
9. Reddit Sample—Current Preferences for Treatment Goal and Treatment Orientation .... 52
10. Reddit Sample—Current Preferences for Treatment Goal and Specific Treatment Type. 54
11. Reddit Sample—Importance of Common Factors .................................................. 55
12. Reddit Sample—Average Importance, Perception of Match, and Quality of Life ....... 56
13. Reddit Sample—Average Initial Importance, Average Match to Initial Preferences, and WHOQOL-BREF Regression ................................................................. 57
14. Reddit Sample—Average Current Importance, Average Match to Current Preferences, and WHOQOL-BREF Regression ............................................................... 58
15. Reddit Sample—Perception of Match to Initial Preference and WHOQOL-BREF Correlations ........................................................................................................... 58
16. Reddit Sample—Perception of Match to Initial Preference and WHOQOL-BREF Regression ................................................................................................................ 59
17. Reddit Sample—Perception of Match to Initial Preference for Major Goal, Common Factors, and WHOQOL-BREF Regression ............................................................. 60
18. Reddit Sample—Perception of Match to Current Preference and WHOQOL-BREF Correlations ........................................................................................................... 60
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regression</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Reddit Sample – Perception of Match to Initial Preference for Therapist</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Gender, Major Goal, and WHOQOL-BREF Regression</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Mturk Sample Characteristics—Demographics</td>
<td>62</td>
</tr>
<tr>
<td>22.</td>
<td>Mturk Sample Characteristics—Mental Health Treatment</td>
<td>64</td>
</tr>
<tr>
<td>23.</td>
<td>Mturk Sample —Changes in Preference</td>
<td>65</td>
</tr>
<tr>
<td>24.</td>
<td>Mturk Sample – Current Preferences for Treatment Goal and Treatment</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Orientation</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Mturk Sample – Current Preferences for Treatment Goal and Specific Treatment</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Type</td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>Mturk Sample —Importance of Common Factors</td>
<td>72</td>
</tr>
<tr>
<td>27.</td>
<td>Mturk Sample —Average Importance, Perception of Match, and Quality of</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Life</td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>Mturk Sample – Average Initial Importance, Average Match to Initial</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Preferences, and WHOQOL-BREF Regression</td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>Mturk Sample – Average Current Importance, Average Match to Current</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>Preferences, and WHOQOL-BREF Regression</td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>Mturk Sample – Perception of Match to Initial Preference and WHOQOL-BREF</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Correlations</td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Mturk Sample – Perception of Match to Current Preference and WHOQOL-BREF</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Correlations</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER I
OVERVIEW

The current study proposes to investigate whether treatment preferences prior to beginning treatment are different from treatment preferences at later points in treatment, and whether preferences are related to treatment outcome. While research to date supports the notion that matching clients to treatment in line with their preferences can improve retention and outcomes, results have been equivocal. Further, this research is typically conducted by measuring preferences just one time, prior to starting treatment. It is conceivable that preferences for treatment change over time as patients become more knowledgeable about their presenting problems and about the therapy process. A total of 969 participants were recruited from a Midwestern university-based outpatient psychology clinic and online sources. During the first phase of the study, preferences for treatment and the strength of those preferences were assessed in addition to typical intake measures gathered prior to engaging in services at an outpatient psychology clinic. Participants also answered a quality of life questionnaire. Preferences and quality of life were assessed again after the participant’s fourth treatment session, and every four sessions until the participant discontinued services. At all follow up time points, participants were also asked to what degree they believe their treatment aligns with their preferences. Due to recruitment difficulties, the first phase of the study was discontinued, and the survey was adapted for online distribution. Participants currently receiving mental health treatment were recruited from a variety of online sources, and accessed the survey just one time. Participants were asked about their preferences, including strength of preference and perceived match to preference prior to starting treatment and currently. Participants also answered a quality of life questionnaire. It
was hypothesized that participants would report changes in preference over time, and that strength of preference and match to preference would be related to quality of life scores.

**Introduction**

Mental health service providers are tasked with engaging clients in effective treatment that takes into account the client’s unique characteristics, as well as their preferences (APA, 2006; Institute of Medicine, 2001). Not only are these part of the best practice standards set forth by important institutions within the field of psychology, but research supports taking client’s preferences into account when selecting a course of treatment. Many studies have investigated the role of matching clients to their preferred treatments to mixed results (Swift, Callahan, Ivanovic, & Kominiak, 2013), however, for the most part, when clients are matched to their preferred treatment they tend to show better outcomes, and are less likely to drop out of treatment prematurely than clients who do not receive their preferred treatment (Swift, Callahan, & Vollmer, 2011).

Of course, not all clients prefer the same types of treatment. In fact, these same studies suggest that preferences are somewhat correlated with client demographics. However, demographics do not appear to be related to a differential response to treatment matching, meaning that clients, regardless of demographic characteristics, may benefit from being matched to the treatment they prefer (Swift, et al., 2013). Meta analysis suggests that clients matched to their preferred treatment are about half as likely as those in their non-preferred treatment to drop out prematurely, and show a significant, albeit small, positive effect on outcome (Swift & Callahan, 2009). Swift and Callahan’s (2009) meta analysis showed that study design influenced the strength of the relationships between preference and outcome and retention, however. Studies in which participants are partially randomized, meaning only those who agree to randomization
are randomly assigned to treatment, while others are given their preferred treatment, show smaller effect sizes than other research modalities. This is important because, as Swift and Callahan (2009) state, in these types of designs it is likely that those who refuse randomization have stronger preferences than those who agree to randomization. The comparison in such studies then is more likely between those with stronger and weaker preferences, rather than between those who are receiving their preferred or non-preferred treatment. If this is the case, this suggests that strength of preference impacts the level of benefit received by being matched to a preferred treatment.

Several gaps in the literature regarding treatment preference exist to date. While some studies allow participants to indicate that they have no preference, researchers have failed to assess the strength of clients’ preferences, which may moderate the impact of being matched (or mismatched) to a preferred treatment, as Swift and Callahan’s (2009) study appears to indicate. Also, treatment preference studies have traditionally assessed preferences just one time, prior to beginning treatment. It is possible that client’s preferences change as they move through treatment. The current study will address these gaps by assessing different domains of preference (type of treatment, therapist characteristics, etc.) and strength of these preferences, prior to starting treatment and at several points throughout treatment. The client’s perception of match between their preferences and the actual treatment they receive will also be measured. This will allow for assessment of the relationship between preferences, preference alignment, strength of preference, and outcome.
Treatment Preference

Many studies have investigated patient’s preferences for mental health treatment. These studies have varied in terms of populations included, facets of treatment investigated, and diagnoses/diseases targeted. Recently, researchers have investigated preferences for medication, psychotherapy, or a combination treatment for anxiety delivered in various settings among older adult community members (Mohlman, 2012); dialectical behavior therapy, prolonged exposure, or a combination among women diagnosed with Borderline Personality and PTSD (Harned, Tkachuck, & Youngberg, 2013); prolonged exposure, sertraline medication, combination treatment, or no treatment among a college and community sample with sub threshold PTSD (Bergman, Kline, Feeny, & Zoellner, 2015); and for psychotherapy, pharmacotherapy, or a combination among Veterans seeking PTSD treatment in a Veterans Affairs Medical Center setting (Haller, Myers, McKnight, Angkaw, & Norman, 2016) to cite just a few examples.

While it has long been known that patients do have preferences for the type of care they receive, other studies have attempted to go a step further and identify whether relationships exist between matching patients to their preferred treatment and treatment outcome and/or retention. Some of these studies suggest no impact of treatment preference on treatment outcomes. For example, Gelhorn, Sexton, and Classi (2011) reviewed 15 studies of the impact of treatment preference among depressed patients. Studies were included that assessed impact of treatment congruence with preference in a variety of ways, including depression symptom severity, initiation of treatment, treatment adherence, and therapeutic alliance. Overall, the researchers found that most of the articles reviewed showed no impact of receipt of preferred depression treatment on depression severity scores post treatment when the choice for patients is between
psychotherapy and pharmacotherapy. However, the authors note that the two largest studies reviewed did show those matched to their preferred treatment benefitted more than those who did not. These two studies also differed from those finding no effect of treatment matching in that participants were able to express not only a preference for psychotherapy or pharmacotherapy, but also for combination therapy or no preference. Two studies reviewed by the authors, which investigated the role of matching to preference on treatment initiation, found that those randomized to their preferred treatment were more likely to begin treatment than those randomized to their non-preferred treatment. Another study found that patients matched to their preferred treatment when their preferred treatment was psychotherapy reported greater improvements in therapeutic alliance over time than those in psychotherapy when it was non-preferred or those receiving pharmacotherapy treatment, whether pharmacotherapy was preferred or non-preferred. The authors overall concluded that while data are mixed, there does not appear to be a large or robust impact of treatment preference in the treatment of depression. However, the authors also noted that there were methodological differences between reviewed studies that likely impacted results. Many of the studies they reviewed were secondary analyses of studies with other primary aims. They suggested future studies investigate treatment preferences with the primary objective of investigating how preferences impact various aspects of treatment. Importantly, Gelhorn and colleagues’ review did not include any statistical combination of data; rather the researchers summarized the method and results of each study briefly.

Since Gelhorn et al., (2011), studies designed to directly address the impact of treatment preferences have been conducted. In one such investigation of preferences for treatment aimed at reducing depression relapse (Huijbers, Spinoven, van Schaik, Nolen, & Speckens, 2016), participants in full or partial remission for major depressive disorder (MDD) being treated with
antidepressant medication were recruited. Participants’ preferences for mindfulness based cognitive therapy (MBCT) and medication were assessed at the beginning of the study. Those who expressed a preference for MBCT were randomly assigned to MBCT alone or MBCT plus medication management. Individuals who expressed a preference for medication were randomly assigned to medication alone or MBCT plus medication management. In this way, all participants received their preferred treatment, and some received their preferred treatment in addition to their non-preferred treatment. There were no statistically significant differences between preference groups prior to randomization, with the exception of number of previous episodes of depression; those who expressed a preference for medication reported a higher number of previous episodes. Results of the study showed that preferences were unrelated to treatment adherence, quality of life post treatment, or time to relapse (meeting criteria for a major depressive episode as assessed by the SCID-I [First, Gibbon, Spitzer, & Williams, 1996]). Given the pre-treatment difference between groups, however, results are difficult to interpret. The authors note that participants who expressed a preference for medications may have been reluctant to discontinue medications, perhaps due to their more severe history with the disorder, and thus stated a preference for medications. Those who expressed a preference for medications may have been open to concurrent MBCT. Individuals in this study were not able to express a preference for combination treatment (Huijbers, et al., 2016). Due to these factors, the accuracy of the presumed “match” between preferences and treatment are questionable. Considering that depression symptom remission was a criterion for participation in the study further complicates the interpretation of results; it is possible that improvements in quality of life did not change between groups because participants were already only experiencing low-level symptoms at the beginning of the study.
While the research reviewed above suggests no or limited benefit to being matched to preferred treatment, other studies do suggest that match to preferences impacts outcomes. In another study assessing the impact of preference on outcome for patients with depression, Kwan, Dimidjian, and Rivzi (2010) allowed participants to express their preference for “talk therapy,” “pharmacotherapy,” or “no preference,” before being randomly assigned to behavioral activation, cognitive therapy, medication management, or placebo. The authors were interested in how preference was related to likelihood of starting treatment, overall attendance, treatment completion, and therapeutic alliance. Out of 106 participants, 12 did not attend any treatment sessions after randomization. Two of these 12 participants were randomized to psychotherapy while the remaining 10 were randomized to medications (placebo or active medication management). None of the 12 who did not attend any sessions were randomized to their preferred treatment; five expressed no preference, while the remaining seven were assigned away from their preferred treatment. The effect of preference mismatch on refusing randomization was not significantly different among those who preferred therapy versus those who preferred medication. However, participants assigned to their non-preferred treatment were significantly more likely to drop out of treatment early that those assigned to their preferred treatment, and this effect was larger among those who preferred psychotherapy but received medication (50% completed) than those who preferred medication but received psychotherapy (67% completed). Those matched to their preferred treatment attended a greater number of visits regardless of treatment group. Patient-rated (but not therapist-rated) working alliance measured at the second session was higher among those who were matched to their preferred treatment, regardless of treatment group. All preference groups (matched, mismatched, or no preference) showed significant reductions in depression symptoms over the course of treatment. However, path
analyses revealed that 16% of the variance in depression severity improvement was mediated by the direct effect of treatment initiation and overall attendance. The authors caution that they “may have underestimated the indirect effect of preference match on depression outcomes if symptom severity persisted or worsened for those who failed to start treatment... or dropped out,” (Kwan, et al., 2010, p. 803).

In a comparison of prolonged exposure therapy (PE) or sertraline medication (SER) for posttraumatic stress disorder, 200 adults meeting criteria for PTSD were randomly assigned to receive their preferred treatment, or to be randomly assigned to a treatment in what was called a “doubly randomized control trial” (Le, Doctor, Zoellner, & Feeny, 2014). The authors did not detail how preferences for treatment were assessed. All patients underwent 10 weeks of therapy. Quality of life was measured at pretreatment, post treatment, and at 3-, 6-, and 12-month follow up using the EuroQoL Questionnaire-5 dimensions (EQ-5D; Kind, 2003). The EQ-5D was used to calculate quality-adjusted life years (QALY), a combined measure of quantity and quality of life. The authors also measured the cost of care for patients, in terms of direct costs of treatment and the indirect costs of loss of productivity. QALY was then used as an indicator of cost effectiveness of treatment. Overall, results suggested that the cost of care for patients receiving PE and SE were similar. However, QALY gains were higher among those treated with PE. There were significant differences by preference group. Those who preferred and received PE incurred fewer treatment related costs compared to those who preferred medication but received PE. There was no significant difference in treatment related costs by preference among those who received SER. Receipt of PE resulted in greater increase in QALY than receipt of SER. Receipt of one’s preferred treatment also resulted in greater gains in QALY. This suggests that allowing
patients to choose their treatment modality, particularly when their preference is for prolonged exposure, is a cost effective treatment (Le, et al., 2014).

Additional analyses from the same study were conducted to further understand the impact of the two treatment modalities as well as the impact of having a choice over treatment and being matched to preferred treatment (either through random assignment to choice condition, or random assignment to a treatment modality that happens to be preferred). Results from these secondary analyses showed no difference in age, gender, prior experience with psychotherapy, or prior experience with pharmacotherapy between preference groups. There were differences in education level, such that those with higher levels of education were more likely to prefer PE than those with lower education levels. Also, individuals who preferred SER self reported more severe symptoms of depression than those who preferred PE (Le, Doctor, Zoellner, & Feeny, 2018). In these analyses, the EQ-5D was used to create an indicator of health-related quality of life where a score of 0 would be equivalent to death, and a score of 1 would indicate perfect health. Overall, results suggested that PE improved quality of life scores more than SER treatment, and this effect was larger among those who preferred PE. There was also a treatment choice effect; those who were able to choose their preferred treatment showed greater improvements in quality of life than those who were randomly assigned. This effect was larger among those who received SER (either by choice or through random assignment) than those who received PE. There was also a preference effect found; those who received their preferred treatment (either by choice or through random assignment) showed greater gains in quality of life than those who were randomly assigned to their non-preferred treatment. The effect of matching to preferred treatment was greater among those who received SER when it was preferred than among those who received PE when it was preferred, perhaps due to ceiling effects (Le, et al.,
Taken together, results from this investigation of treatments for PTSD suggest that allowing patients the choice between prolonged exposure and sertraline can boost treatment outcomes and save patients money.

Another recent study investigating treatment preferences among depressed patients suggested an impact on treatment outcomes, although not in the predicted direction. Steidtmann and colleagues (2012) attempted to identify relationships between participant beliefs about depression etiology with preferences for treatment. In their study, participants with chronic depression expressed their preference for continued medication treatment alone (n = 50, 6%), combination of medication and psychotherapy (n = 538, 67% of the sample), or no preference (n = 203, 26% of the sample). Regardless of preference, everyone first received 12 weeks of medication management alone, and then non-remitters were randomly assigned to continue medication management alone, medication management with a cognitive behavioral therapy, or medication management with a brief supportive therapy. Although there were no demographic differences between groups, there were several other differences between preference groups prior to randomization. Those with no preference reported fewer years with MDD than those reporting a preference, and were less likely to have used medications for MDD in the past. Those who preferred medication alone were more likely to have experienced remission while using medication in the past, and were more likely to endorse the belief that their symptoms were due to a chemical imbalance. Those who preferred a combination treatment approach were more likely to endorse the belief that their symptoms were due to stressful life events. Surprisingly, results from the study showed that those with no preference for treatment at baseline actually showed a faster decrease in depressive symptoms during the first 12 weeks of the study than those who expressed a preference for either medications alone or combination treatment.
Additionally, those who expressed a preference for medications alone were more likely to drop out of the first phase of treatment than those with no preference, or those who preferred a combination treatment. There was no significant difference in rate of depressive symptom decrease among phase I non-remitters in the second phase of the study between those with and without a preference. However, due to the small number of participants who reported a preference for medications included in the second phase of the study, differences between those who preferred medications and those who preferred combination treatment could not be explored (Steidtmann, et al., 2012).

The authors provide several possible explanations for the pattern of results found. They suggest that those with no preference for treatment showed a more rapid decline in depressive symptoms because those with a preference largely preferred combined treatment, and therefore did not receive their preferred treatment (Steidtmann, et al., 2012). It should be noted that participants did not have the option to indicate that they preferred psychotherapy alone. The authors failed to consider what impact this may have had on the results. It seems possible that those who preferred psychotherapy alone would endorse a preference for a combination of medication and psychotherapy. Thus, there were likely some participants in the first phase of the study who did not prefer medications at all. It is likely that at least some who expressed a preference were in a non-preferred treatment during phase I of the study, which may explain the increased risk of drop out compared to the no preference group. To explain the greater attrition during phase I among those who preferred medication, the authors suggest that a lack of treatment response may have been particularly discouraging for those receiving their preferred treatment (Steidtmann, et al., 2012). However, differences in symptom reduction between
preference groups prior to the bulk of participant drop out were non-significant, making evidence for this explanation weak.

Another possible explanation for the confusing pattern of results found by Steidtmann and colleagues may be that participants’ preferences for treatment changed over the course of the study. Participants only continued into phase II of the treatment if they did not remit on the medication-only first phase of the study. Perhaps non-responders may have developed a greater preference for psychotherapy after a non-successful medication trial. Unfortunately, preferences were only assessed at one time, strength of those preferences was unmeasured, and participants did not have the opportunity to express a preference for psychotherapy alone.

In an attempt to make sense of the disparate findings among preference research, several meta-analyses have been conducted. Swift and Callahan (2009) included 26 treatment preference studies conducted between 1967 and 2007 in their analysis. These studies covered a wide range of treatment modalities and psychological diagnoses/symptoms. Results suggested that participants matched to their preferred treatment were 58% more likely to show greater improvement than those who were not matched to their preferred treatment. This resulted in a small but significant effect on treatment outcome. The authors did not detail how rate of drop out may have been controlled for in this calculation of effect size. Ten of the included studies contained information regarding drop out rates by group. The results from this meta-analysis suggested that when participants were matched to treatments for which they expressed a preference, they were about half as likely to drop out prematurely from treatment compared to those who did not receive their preferred treatment. Results were moderated by study design. The authors classified treatment preference studies as either randomized control trials (RCTs), in which participants were randomly assigned to treatment regardless of preference; match/no
match designs, in which participants were randomly assigned to their preferred or non-preferred treatment; or partially randomized preference trials (PRPTs), which utilized random assignment to treatment type regardless of preference for those who agreed to the procedure, and matched to preferred treatment those who did not agree to random assignment. As would be expected, PRPT studies showed smaller effect sizes between the two groups (treatment congruent with preferences versus mismatched) than other study types. The comparison in PRPT studies could perhaps be more accurately described as a comparison between individuals who were matched to their preferred treatment and those with little or no preference (Swift & Callahan, 2009), suggesting the need to take strength of treatment preference into account when designing preference studies.

More recently, Swift, Callahan, Ivanovic, and Kominiak (2013) conducted a meta-regression analysis of 33 studies investigating the effects of matching participants to their preferred treatment on outcome and retention. Results of this analysis suggested that participants matched to their preferred treatment showed a small yet significant improvement in terms of outcome and retention. Further, the authors noted that the impact of matching participants to their preferred treatment was not moderated by any measured qualities of the participants, although preferences were moderated by participant demographics. Thus, while characteristics of participants were related to their treatment preferences, these characteristics did not impact the benefit received from being matched to their preferred treatment. Length of treatment was related to treatment dropout, however. Participants who were not matched to their preferred treatment were more likely to drop out prematurely when their choice was between brief treatments, compared to participants who were not matched to their preferred treatment when their choice was between longer treatments. Length of treatment was not significantly related to outcome.
Taken together, these studies suggest that the APA’s recommendation that client preferences be taken into account when selecting an appropriate course of treatment (APA, 2006) is an important one. When clinicians are able to match participants to their preferred treatments, their client’s chances of benefitting from treatment increase, while chances of premature drop out decrease. It seems that this benefit is not dependent on the client’s age, race/ethnicity, education, and so on. However, several gaps in the literature remain. To date, researchers have not assessed how patients’ preferences may change over time. It is conceivable that preferences evolve as patients learn more about their presenting problem and gain more exposure to their therapist and the therapeutic process. Also, while some treatment preference research has allowed for participants to endorse that they have no preference, the strength of a patient’s preferences are rarely assessed. Other researchers have noted this gap and have called for future studies to take into account the strength of patients’ preferences (Gelhorn, et al., 2011). It seems likely that those whose preferences are stronger may benefit more from being matched to their preferred treatment, or in a similar vein, struggle more if their preferences are not met.

**Preferences for Therapist Characteristics**

While the studies discussed above focus on patients’ preferences for treatment type, fewer studies have focused on preferences for individual characteristics of therapists. Of these, preferences for therapist race/ethnicity have perhaps received the most attention. A recent meta-analysis of studies investigating preferences for therapist race/ethnicity and its impact on treatment outcome reviewed 154 studies (Cabral & Smith, 2011). While the researchers found that individuals tended to have a preference for a therapist of the same race/ethnicity, matching clients to their preferred therapist race/ethnicity did not influence treatment outcomes. The authors hypothesized that this could be due to patients dropping out prematurely when they are
not matched to their preferred therapist, or that race/ethnicity is a flawed variable. The authors hypothesized that patients may have a preference for a therapist of a similar race or ethnicity because they believe that other important similarities will also be present, or that a therapist with the same race/ethnicity will understand their culture better than a dissimilar therapist. The authors state, “categorical conceptualizations of race/ethnicity do not account for related variables such as level of client interracial mistrust or therapist multicultural competence. Race/ethnicity is too imprecise and too complex to consistently impact averaged therapy outcomes” (Cabral & Smith, 2011, p. 544). Of course, investigations into the potential mediators and/or moderators proposed here (interracial mistrust, multicultural competence) have not yet been conducted within the preference literature. Thus, these hypotheses remain just that—hypotheses.

Other therapist characteristics have been the focus of preference research as well. One study showed, for example, using a sample of women in treatment, that those diagnosed with eating disorders did not have preferences for therapist’s figures that differed from patients diagnosed with anxiety disorders; both groups preferred therapists with average body types that were similar to their own. However, those with eating disorders rated their preference as “more important” to them than those with anxiety disorders (Vocks, Legenbauer, & Peters, 2007). While this represents a rare preference study that assessed the strength of participants’ preferences, it did not assess how preferences or the strength of those preferences affected the participants’ treatment. Other studies have investigated the role of therapist gender. While one study found that women college students from a non-treatment seeking sample would prefer and anticipate feeling more comfortable disclosing to a woman therapist (Landes, Burton, King, & Sullivan, 2013), another study investigating matching client and therapist gender found no effect
on retention in PTSD treatment when female Veterans were matched with female therapists (Shiner, Westgate, Harrik, Watts, & Schnurr, 2016). Interestingly, the same large-scale study found a negative correlation between retention in treatment and matching male Veterans to male therapists (Shiner et al., 2016).

Waltz and colleagues (2014) studied the preferences for treatment of depression and other comorbid diagnoses among veterans in a Veterans Affairs primary care setting. Their study looked specifically at preferences for provider type (primary care physician [PCP], psychiatrist, or “other mental health specialist”) rather than treatment modality. Although numerous studies have found higher rates of preference for psychotherapy over medications among individuals with depression (Dwight-Johnson, Sherbourne, Liao, & Wells, 2000; Gelhorn, et al., 2011), Waltz et al. (2014) found preference rates to be similar across different treatment providers, including prescribers vs. non-prescribers. Participants in this study were veterans who had been seen in primary care in the past year and were scheduled for an additional appointment who endorsed symptoms of major depressive disorder (MDD) alone, or MDD comorbid with PTSD symptoms and/or alcohol use disorder symptoms. Participants were asked about their preferences, as well as their mental health treatment history in the past six months, and their satisfaction with their mental health care. Results from this study showed preferences varied depending on diagnosis. Veterans who met criteria for PTSD were more likely to endorse preference for more than one provider type than those who did not. The authors interpreted this to mean the participant preferred concurrent treatment from more than one provider type, however this was not assessed directly. In line with previous research, this study found that overall, patient satisfaction was increased when individuals were matched to their preferred provider. However, there was one notable exception in that those who stated an exclusive
preference for treatment by their PCP were less satisfied when they had received treatment from their PCP in the past six months than those that reported they had received no treatment for their mental health concern. The authors identified several limitations to this study, including the use of self report of received care, rather than verification by treatment records; no ability to express a preference for “watchful waiting,” forcing individuals to express preference for care or no care; no direct assessment of preference for treatment modality; and no exploration of factors contributing to preference other than current diagnostic status (Waltz, et al., 2014). Additionally, the study utilized a cross sectional design, and while satisfaction with treatment was measured, the impact of treatment (or non treatment) on symptom severity was left unmeasured. Further, participants were included in the study only if they met criteria for MDD based on self-report of symptoms on the Patient Health Questionnaire-9 (Kroenke, Spitzer, & Williams, 2001). Due to the cross-sectional nature of the study, it is possible that individuals who had previously met criteria for MDD based on this measure but had received successful treatment were excluded. Limitations aside, this study is unique in its contribution to the literature by exploring preferences for treatment provider type.

Much more research is needed in the area of therapist characteristics to determine how influential the matching of clients to their preferred therapist is on treatment outcome and retention.

Preferences for Therapeutic Approach

Investigations into treatment preference have often focused on preferences between two empirically supported treatments (e.g. dialectical behavior therapy vs. prolonged exposure). However, Swan and Heesacker (2013) suggest that clients may place more value on the “common factors” of therapy rather than on the specific factors of an intervention. Their study
included a diverse sample of adults with varying experience with psychotherapy. Participants were shown two explanations for the beneficial effect of psychotherapy, presumably provided by two different psychotherapists. One of those descriptions appealed to a “common factors” explanation; that all therapies work because they provide a space to talk about problems with a supportive, trustworthy person. The other appealed to a “specific ingredients” approach; that different therapies will work when matched appropriately to the presenting problem of the individual. Participants were then asked to rate how likely they would be to make an appointment with either of the therapists who provided the information they had received, and how valuable they thought both of the two types of treatment would be to them. Results suggested that participants prefer an approach to therapy that emphasizes common factors, regardless of a number of individual factors of the participants proposed as mediators. There were of course, several limitations to the study. The authors note that the common factors and specific ingredient descriptions used were purposefully non-overlapping, while in reality therapists likely attend to both aspects of treatment, although to varying degrees (Swan & Heesacker, 2013). It should also be noted that the common factors description suggested research evidence supports the notion that all treatments work for similar reasons, while no mention of research support was made in the specific factors description. The possibility that this influenced participants’ decision-making was not explored in this manuscript. Limitations of Swan and Heesacker (2013) aside, this study suggests that future investigations of treatment preference should focus not only on the specific treatment clients may have preferences for, but also to the non-specific qualities they may prefer in any treatment that is sought.
Patient Retention in Mental Health Treatment

The National Comorbidity Survey Replication (NCS-R) was conducted using a nationally representative sample to gather information about the types of mental health services being used and to what degree by adults within the United States (Wang et al., 2005). Of the 9,282 respondents, 17.9% used mental health services of some kind within the 12-months prior to being interviewed, which included 41.1% of individuals who met criteria for a DSM-IV diagnosis, and 10.1% of those who did not. While the minimum number of visits required to constitute an “adequate dose” of treatment was defined as eight sessions of psychotherapy and four or more visits for pharmacotherapy, the median number of sessions attended by participants in the NCS-R was just 2.9 over the 12-month period assessed. Only 32.7% of those who sought treatment received an adequate dose of treatment (Wang et al., 2005). Clearly, significant problems with treatment access and retention exist.

Wang and colleagues (2005) noted several sociodemographic variables associated with treatment retention; these variables, of course, are frequently unable to be manipulated experimentally. However, areas of intervention exist to improve patient retention. Green, Bina, and Gum (2016) conducted a systematic review of studies that aimed to improve retention rates in various mental health services. Methods used to increase retention included increasing mental health knowledge among participants, changing mental health attitudes, and removing barriers to treatment, to name a few. Those interventions that addressed multiple targets were typically the most successful in improving patient retention, and as the number of targets increased, so did the average effect size of the improvement in retention. One intervention that Green and colleagues did not evaluate was matching clients to their preferred treatment. As noted above, meta analyses investigating treatment preference have shown that matching clients to their preferred treatment
can improve retention rates (Swift & Callahan, 2009; Swift et al., 2013). Given Green and colleagues (2016) finding that more intervention targets tend to be better, perhaps interventions that include taking clients’ preferences into account could improve retention rates further still.

**Problem Statement**

While current research supports the notion that matching clients to treatment in line with their preferences can improve retention and outcomes, results have been equivocal. Further, this research is typically conducted by measuring preferences just one time, prior to starting treatment. It is conceivable that preferences for treatment change over time as patients become more knowledgeable about their presenting problems, their therapist, and the therapy process. Also, while some treatment preference research has allowed participants to endorse that they do not have preferences for treatment, studies have typically not allowed participants to rate the strength of their preference. It is currently unknown whether those whose preferences are stronger benefit more from being matched to their preferred treatment, or in a similar vein, struggle more if their preferences are not met. Another factor that may influence patients’ willingness to engage in treatment and the benefit they receive from treatment could be related to perceived competence of their therapist. This question has not typically been assessed in treatment preference studies. Currently, retention rates in mental health treatment are unacceptably low, and even treatments with the strongest evidence base do not work maximally for all patients. One possible way to increase treatment retention and outcome is to match clients to their preferred treatment.

The current study addressed these gaps in the research literature by assessing client’s treatment preferences at several time points. Preferences regarding treatment type and therapist characteristics were investigated. Quality of life will was also assessed, as a trans-diagnostic
measure of treatment outcome. During the first phase of the study, preferences, strength of preferences, and quality of life were being measured prior to beginning treatment, and again every four sessions until the client discharged from treatment. After the first assessment, participants were also asked to rate how closely they believed their treatment aligned with their preferences. Due to recruitment difficulties, the first phase of the study was discontinued, and the survey was adapted for online distribution. Participants currently receiving mental health treatment were recruited from a variety of online sources, and accessed the survey just one time. Participants were asked about their current preferences and their preferences prior to starting treatment. They also answered questions about the strength of their preferences and perceived match between their treatment and preferences at both points in time. Participants recruited from online sources also answered the same quality of life questionnaire.
CHAPTER II

HYPOTHESES

There is little research investigating how treatment preferences may change over the course of treatment, or how the strength of one’s preferences is related to retention and outcome. However, research suggests that those who are matched to their preferred treatment tend to show better outcomes, on average, and are less likely to drop out prematurely. Because this study is investigational in nature, the study’s hypotheses are non-directional. This study tested the following hypotheses:

1. Treatment preferences will change over the course of treatment.

2. Strength of treatment preference and patient’s perception of match between preference and treatment received will be related to treatment outcome, operationally defined as quality of life score.
CHAPTER III

METHOD

Participants

Phase I. Fourteen participants were recruited from new, treatment seeking adults at a Midwestern university-based outpatient psychology clinic. Clients at this community-based, outpatient mental health clinic represent a range of ages, ethnicities, and socioeconomic backgrounds. While clients also come with a range of presenting problems, severely mentally ill and chronically suicidal clients are typically not appropriate for the level of care provided by the clinic, and are referred to more appropriate services elsewhere in the community. At the time of intake, participants were provided with information about the current study. Participants who expressed interest in participation were directed to an online survey via a laptop computer during the intake session. Subjects were excluded if they were unable to read and understand the study’s English-written informed consent and survey questions, or if they were unable to complete materials in web-based form. Individuals with a primary concern of substance use were excluded from participation to protect participant data from possible legal seizure.

Phase II. Due to difficulties with recruitment, the survey was moved to primarily online recruitment format. Participants were recruited from a variety of online sources including mental health related discussion threads on the social media site reddit.com, and the Amazon-hosted platform Mechanical Turk (Mturk). Mturk is a site designed to connect “requesters” with “workers” who perform various tasks that would be difficult or impossible to automate. While Mturk is a relatively newer source for participants among the social sciences, its use is becoming more frequent in published literature (Chandler & Shapiro, 2016). Evidence suggests that the use of Mturk can provide quick access to high quality participants. While the Mturk population is
different from the total U.S. population on several demographic characteristics, it is more representative of the U.S. population than college student samples or community samples recruited from college areas (Buhrmester, Kwang, & Gosling, 2011; Chandler & Shapiro, 2016; Shapiro, Chandler, & Mueller, 2013). Research investigating the prevalence rate of mental health conditions among the Mturk population varies depending on diagnoses investigated, with some research suggesting similar rates of mental health disorders between Mturk users and the general population, and other studies showing higher or lower rates among Mturk workers (Chandler & Shapiro, 2016). Previous research has found approximately 6% of the Mturk population is currently engaged in talk therapy, and about 12% are taking medication for a psychological or psychiatric reason (Shapiro et al., 2013). Research investigating the validity of Mturk user data suggests that scale reliability, passing of “attention checks,” and data consistency is equal to or better than other samples commonly used in social science research (Chandler & Shapiro, 2016). Because requesters can discretely reject work produced, which will negatively affect workers’ ability to be eligible for future tasks, there exists a strong ethic of honesty and accuracy among Mturk users. Research also suggests Mturk users feel more comfortable disclosing mental health related information online than in a face-to-face format (Shapiro et al., 2013). A total of 955 participants accessed the survey via online sources. Interested participants followed the link to the survey provided in the internet posting, which directed them to the consent document. The same inclusion/exclusion criteria applied to the internet sample as was used in the outpatient psychology clinic sample sample, with the addition of specific exclusion criteria related to length of treatment to increase similarity between participants recruited from the two phases. Participants were excluded if they reported having been engaged in treatment less than one
month or longer than one year, and were excluded if they reported attended fewer than four sessions of individual treatment.

**Materials**

The survey assessed *demographic characteristics* (gender, age, race/ethnicity, education level, employment status, and financial status), *preferences for therapist characteristics* (therapist gender, age, race/ethnicity), *preferences for treatment* (common factors, therapist competence, treatment orientation, specific treatments, major goal for therapy), *strength of preferences* for each domain surveyed, *perceived match* between preferences and treatment received, *presenting problem/diagnosis*, and *quality of life* (WHOQOL-BREF). During the second phase of data collection, participants were also asked how long they have been in treatment, and how many sessions of treatment they had attended. Participants recruited from Mturk also responded to several validity questions to verify respondents attended to item content. Validity questions were constructed such that all respondents should answer, “strongly disagree” to each item (“I do not understand a word of English”). Validity questions can be found within the survey utilized for the Mturk sample located in Appendix E.

*WHOQOL-BREF*: The WHOQOL-BREF is a 26-item measure of quality of life that assesses four domains: physical health, psychological health, relationships, and environment, as well as an overarching general facet. Participants answered questions about their functioning over the past two weeks. The measure is based on the 100-item WHOQOL-100. The two measures are highly correlated. Like the WHOQOL-100, the WHOQOL-BREF has good discriminant validity, and good test-retest reliability. Values for Cronbach’s alpha vary depending on population domain assessed, but ranged between .69 and .82 in an international field trial, suggesting good internal consistency. Overall scores range from 26 to 130, with higher
scores indicating higher quality of life (Skevington, Lofty, & O’Connell, 2004). Research suggests that the measure can distinguish between self-reported “sick” and “well” groups, and those with depression may have lower scores than individuals with other mental and physical conditions (Skevington & McCrate, 2012).

Procedure

Phase I. Participants engaged in therapy in the usual manner conducted by the outpatient psychology clinic where the study took place. At intake, clients accessed an online survey measuring the domains listed above. The procedures of the psychology clinic include the completion of a “treatment plan” prior to the fifth treatment session. Thus, after the fourth session the client and therapist will have, in most cases, discussed and determined a course for treatment. Participants who completed the survey at intake were re-directed to the online survey after their fourth treatment session via the clinic laptop. Participants were asked to complete the survey every four sessions until treatment ended. No incentive was provided for treatment participation other than the possibility of extra credit for university psychology students, which was up to the discretion of the participant’s psychology instructor. Researchers had no knowledge of participant’s enrollment in psychology courses or of extra credit awarded.

Phase II. The survey was modified such that participants recruited from online sources (the social media website “reddit” and Mturk) responded to items about their current preferences, as well as their preferences just prior to engaging in treatment. Domains assessed and questions asked were otherwise unchanged. Monetary incentives were provided for participants recruited from Mturk. Participants recruited from this location first accessed a screener questionnaire ensuring the respondent met minimum criteria for participation (actively involved in mental health treatment, had attended at least four treatment sessions). Eligibility questions were
disguised by other mental health related questions, to reduce the likelihood that potential participants would modify their responding to earn the provided compensation. Those who were eligible next accessed the full survey, which was identical to the survey provided to other online participants, except for the inclusion of six validity questions. Participants recruited from Mturk who completed the initial screener were compensated $.02. Eligible participants who completed the full survey were compensated an additional $2.98.

**Analysis Plan**

Because phase I elicited only a very small number of participants, descriptive statistics only were used to describe the sample. Data collected during phase II of the study were analyzed similarly to prior studies that have also examined treatment preference and factors potentially contributing to those preferences (Dwight-Johnson et al., 2000; Lin et al., 2005; Jaycox et al., 2006; Frye, 2016; Givens et al., 2007). Univariate and parametric analyses were used to provide descriptive characteristics of the overall sample. Samples collected from various sources were compared before combining to test for any statistically significant differences. Multivariate analyses (multiple regression) were conducted to test the hypothesis that perceived match between preferences and current treatment, and the strength of these preferences, was related to quality of life.

During phase II analyses, rankings of preference match and strength of preference were averaged to create an omnibus “perceived match” variable for each participant at time 1 and time 2, and an omnibus “strength of preference” variable for each participant at time 1 and time 2. While this collapsing of data reduced some of the complexity and variation within the data set, this choice was made to reduce the number of statistical comparisons made and therefore reduce risk of type I error. When relationships between these aggregate variables were significant,
individual variable level analyses were conducted. However, “common factor” variables were
combined to accommodate the limited sample size of the data set within multiple regression.
Zero order correlations were conducted to investigate relationships between variables and guide
decision-making regarding inclusion of variables in the regression model.

Prior to conducting analyses, data were inspected to ensure normality through the
analysis of kurtosis and skewness, and the visual inspection of scatterplots to ensure linear
relationships between data. Results of these analyses suggest the data was normally distributed,
supporting the use of parametric analyses.
CHAPTER IV

RESULTS

Phase I

Participants. In all, 14 unique participants accessed the online survey during phase I of the study. Two of those declined to participate after being presented with the online consent document, and two more failed to complete a useable portion of the survey. Two participants who otherwise responded to the entire survey did not answer any demographic questions. Demographic characteristics ($n = 8$) and mean WHOQOL-BREF scores ($n = 10$) reported at time one for the entire sample of phase I survey completers is presented in Table 1. Of the three participants for whom multiple time points were collected, one participant did not report demographic information. The other two participants identified as female. One identified as Asian, one identified as White/Caucasian. One identified as married or in a committed partnership, and one identified as never been married. One identified as a non-student while the other was a student. One reported being employed full time, while the other reported she was not currently employed. One reported an annual income of $50,000 or higher, while the other reported an annual income of less than $10,000. All three participants with multiple collection dates reported “depression” as the problem/concern that brought them to treatment.

Preferences. In terms of preferences for therapist characteristics, six out of 10 participants (60%) at reported no time 1 preference in terms of therapist gender. Of those six, all but one stated their preference was “not at all important” (one stated it was “slightly important”), and none of the six reported they would be unwilling to work with a therapist of another gender. The remaining four participants (40%) reported preferring a female therapist: one rated the importance of receiving a female therapist as “slightly important,” two rated their preference as
Table 1.

**Phase I Completer Sample Characteristics**

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>25%</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>25%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>25%</td>
</tr>
<tr>
<td>30</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>35</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td>37</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>44</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td><strong>Race/ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>4</td>
<td>50%</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>2</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never been married</td>
<td>5</td>
<td>62.5%</td>
</tr>
<tr>
<td>Married/committed partner</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td><strong>Student status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non student</td>
<td>6</td>
<td>75%</td>
</tr>
<tr>
<td>Freshman undergraduate</td>
<td>2</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Employment status</strong></td>
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<td></td>
</tr>
<tr>
<td>Employed full time</td>
<td>5</td>
<td>62.5%</td>
</tr>
<tr>
<td>Not currently employed</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0-$9,999</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td>$10,000-$19,999</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td>$20,000-$29,999</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>$50,000 or above</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td><strong>Reason for treatment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>Assessment</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>Relationship difficulties</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>Stress management</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1</td>
<td>10%</td>
</tr>
</tbody>
</table>

**WHOQOL-BREF score (n = 10)**  
\[M = 80.0, SD = 14.81\]

*Note. Response options that were not chosen by any respondent are not included in the table. Please see Appendix B for a complete list of response options.*
“moderately important,” and one rated their preference as “very important.” Only the respondent who rated their preference as “very important” reported they would be unwilling to work with a male therapist. The remaining three respondents did not report being unwilling to work with a therapist of another gender.

In terms of therapist age, eight out of ten participants (80%) reported no preference. One participant reported preferring a therapist older than herself, and one participant reported preferring a therapist near the same age as herself. Both participants who expressed a preference rated their preference as “moderately important,” and both reported they would be unwilling to work with a therapist younger than herself. All participants \( n = 10, 100\% \) reported “no preference” for therapist race/ethnicity. No participant reported being unwilling to work with a therapist of a particular race/ethnicity.

Two out of 10 participants (20%) reported a preference for cognitive/behavior therapy. Of these two, one stated her preference was slightly important, and another reported their preference was moderately important. One participant (10%) reported “no preference,” and all others (70%) reported they were not sure how the different treatment approaches listed were different from one another. None of the participants reported being unwilling to work with any of the treatment orientations listed; four (40%) endorsed the response option, “I am fine with any of these,” while the other six (60%) endorsed the option, “I am not sure how these are different.” When asked about the specific treatment type preferred, two participants (20%) responded “medication,” one of whom stated her preference was moderately important, and one of whom reported her preference was extremely important. One participant (10%) expressed a preference for “Interpersonal psychotherapy,” and stated this preference was moderately important; five (50%) responded, “I'm not sure how these are different,” and two (20%) reported they had no
One participant (10%) who otherwise did not have a preference for treatment type stated they would be unwilling to use medication. One participant (10%) who expressed a preference for medication stated she would be unwilling to use motivational interviewing. In terms of goals for treatment, four participants (40%) stated “no preference/I don’t know.” Two participants (20%) endorsed “changing the way I think” as their preference for their primary goal in treatment. One of these respondents stated her preference was extremely important, while the other stated it was slightly important. Two participants (20%) stated their primary goal was “changing my emotions.” Of these two, one stated his preference was “very important,” and one stated her preference was “extremely important.” One participant (10%) stated their preference for “changing my behavior” was moderately important, and one participant (10%) stated their preference for “improving my relationships” was very important. Only one participant stated they would be unwilling to work on any of the goals listed. This participant otherwise listed no preferences in terms of goals but stated they would be unwilling to work on “facing fears.”

Table 2 shows patient responses to questions asked about the importance of common factors and therapist competence at time 1. Responses were provided on a five-point Likert type scale ranging from “extremely important” to “not at all important.” All participants rated therapist supportiveness, trustworthiness, listening skills, therapist warmth, and therapist competence at least “moderately important” qualities.

Changes in preference. Among the three participants who answered the survey at multiple time points, changes in preference were observed over time. Participant one changed their preference for major goal for therapy from “no preference” at time 1 to “managing emotions” at time 2, and back to “no preference” at time 3. In terms of preference for specific treatment, participant 1 stated, “I’m not sure how these are different” at time 1 and time 2, and
Table 2.

**Phase I Completer Preferences for Common Factors**

<table>
<thead>
<tr>
<th>Common Factor</th>
<th>Extremely important</th>
<th>Very important</th>
<th>Moderately important</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supportiveness</strong></td>
<td>3</td>
<td>5</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely important</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td>Very important</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Moderately important</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td><strong>Trustworthiness</strong></td>
<td>7</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely important</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td></td>
<td>70%</td>
</tr>
<tr>
<td>Very important</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td><strong>Good listener</strong></td>
<td>2</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely important</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Very important</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td></td>
<td>60%</td>
</tr>
<tr>
<td>Moderately important</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td><strong>Warmth</strong></td>
<td>3</td>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very important</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td>Moderately important</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td></td>
<td>70%</td>
</tr>
<tr>
<td><strong>Competence</strong></td>
<td>4</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely important</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>Very important</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td>Moderately important</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td>30%</td>
</tr>
</tbody>
</table>

reported “no preference” at time 3. No other changes in preference were reported for participant one, however several changes in importance of preference were noted. Importance of preference for major goal for therapy was “moderately important” at time 1, and “slightly important” at times 2 and 3. Therapist supportiveness and therapist listening skills were considered “very important” at time 1, and extremely important at times 2 and 3. Therapist warmth was considered “moderately important” at time 1, and “extremely important” at times 2 and 3.

Participant two changed their preference for therapist gender from “no preference” at time 1 to female at times 2 and 3. In terms of orientation or approach to treatment, they reported “I’m not sure how these are different” at times 1 and 2, and reported having no preference at
time 3. They reported no preference for specific treatment at time 1, a preference for medication at time 2, and no preference again at time 3. They reported their preference (or lack of preference) for therapist gender at time 1 was “not at all important,” and rated the importance of their preference for a female therapist at times 2 and 3 as “moderately important.” Their preference for specific treatment was “moderately important,” at time 1, “slightly important,” at time 2, and “not at all important” at time 3. They reported therapist supportiveness and warmth were “very important” at times 1 and 3, but only “moderately important” at time 2. They reported therapist listening skills were “extremely important” at times 1 and 3, but only “very important” and time 2. Finally, they reported therapist competence was “moderately important” at times 2 and 3, but only “slightly important” at time 2.

Participant three accessed the survey twice. She changed her preference for treatment orientation from cognitive behavioral at time 1 to cognitive at time 2. The same participant reported a preference for a major goal of “changing my emotions” at time 1 to “changing the way I think” at time 2. This participant also reported changes in importance level; she stated that her preference for a female therapist at time 1 was “moderately important,” and at time 2 was “very important.” Her preference for treatment orientation was rated as “slightly important” at time 1 and “moderately important” at time 2. Her preference for medication was rated as “extremely important” at time 1 and “very important” at time 2, as was her preference for major goal for therapy. Her preference for therapist listening skills changed from “very important” at time 1 to “extremely important” at time 2.

Perception of match. Three participants rated their perception of match between their expressed preference and the treatment they received at time 2. Two participants rated their perception of match at time 3. Table 3 displays the ratings of perception of match for therapist
Table 3.

Phase I Completer Perception of Match to Preferences

<table>
<thead>
<tr>
<th></th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td><strong>Therapist gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely close to ideal</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Very close to ideal</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Therapist age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely close to ideal</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Very close to ideal</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Moderately close to ideal</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Therapist race/ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely close to ideal</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Very close to ideal</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Treatment orientation/approach</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very close to ideal</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Moderately close to ideal</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Not close to ideal</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Specific treatment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely important</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Moderately close to ideal</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Not close to ideal</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Major therapy goal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely important</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Very close to ideal</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Moderately close to ideal</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Slightly close to ideal</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

and treatment variables. Participant one changed her perception of match between her preference for treatment approach/orientation and treatment received from “moderately close to the ideal” at time 2 to “very close to the ideal” at time 3. Participant one changed her perception of match to her preference for specific treatment from “moderately close to the ideal,” at time 2 to “extremely close to the ideal” at time 3. She reported that match between her preference for major goal for treatment and treatment received at time 2 was “slightly close to the ideal,” while
perception of match at time 3 was rated as “extremely close to the ideal.” However, the participant did not express a clear preference for treatment approach/orientation, specific treatment type, or major goal for therapy, making interpretation of match data difficult for these variables.

Participant two changed their perception of match between preference for female therapist and treatment received from “extremely close to the ideal” at time 2, to “very close to the ideal” at time 3. They reported the match between preference for therapist age and treatment received was “extremely close to the ideal” at time 2 and “moderately close to the ideal” at time 3. They reported a match between therapist race/ethnicity and treatment received as “extremely close to the ideal” at time 2, and “very close to the ideal” at time 3. They reported a match between treatment orientation or approach that was “not close to the ideal” at time 2, and “moderately close to the ideal” at time 3. They reported an extremely close match between preferred major goal for treatment and treatment received at time 2, and a very close match at time three. However, they reported no clear preference for therapist age, therapist race/ethnicity, treatment approach/orientation, or major goal for therapy, making interpretation of perceived match difficult for these variables.

In terms of common factors, all participants rated the match between their preference and current treatment as at least “very close to the ideal” across all five variables and all time points. Table 4 displays the perception of match scores across common factor variables. Changes in scores from time 2 to time 3 occurred three times; participant two reported the match between therapist supportiveness, therapist trustworthiness, and therapist listening skills and treatment received at time 2 as “extremely close to the ideal,” and as “very close to the ideal” at time 3.
Table 4.

*Phase I Completer Perception of Match to Preferences for Common Factors*

<table>
<thead>
<tr>
<th></th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td><strong>Supportiveness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely close to the ideal</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Very close to the ideal</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Trustworthiness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely close to the ideal</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Very close to the ideal</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Good listener</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely close to the ideal</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Very close to the ideal</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Warmth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely close to the ideal</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Very close to the ideal</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Competence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely close to the ideal</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Very close to the ideal</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Changes in quality of life.** Quality of life scores for the three participants who responded to the survey at multiple time points are displayed in Figure 1.

![WHOQOL-BREF Scores for Phase I Repeat Participants](image)
Phase II

Participants. A total of 955 participants accessed the survey via online recruitment methods. Of those, 208 participants completed the entire survey, for a response rate of 21.8%.

Table 5 displays information related to recruitment source, exclusion, and drop out.

Table 5.

<table>
<thead>
<tr>
<th>Participant Recruitment, Exclusion, and Dropout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral source:</td>
</tr>
<tr>
<td>reddit n</td>
</tr>
<tr>
<td>Mturk n</td>
</tr>
<tr>
<td>Accessed survey</td>
</tr>
<tr>
<td>Did not meet eligibility after screening</td>
</tr>
<tr>
<td>Voluntarily discontinued</td>
</tr>
<tr>
<td>Potentially invalid</td>
</tr>
<tr>
<td>Final sample</td>
</tr>
</tbody>
</table>

Of the 496 participants who accessed the survey via the link provided on the social media site reddit, 211 participants (42.5%) were ineligible to participate after screening. Of these, 58 (11.7%) reported that they had been in treatment less than one month, 133 (26.8%) reported they had been in treatment over one year, and an additional 20 (4%) reported attending fewer than four sessions of treatment. Finally, 171 (34.5%) discontinued the survey prematurely. Of the 459 Mturk participants who accessed the survey, 357 (77.8%) were ineligible to participate. Most (n = 254, 55.3%) were excluded because they were not currently in mental health treatment. Five additional participants (1.1%) were excluded because they were reportedly in treatment less than one month, 70 (15.3%) were excluded because they were reportedly in treatment for over one year, and an additional 28 (6.1%) were excluded because they reported participating in fewer than four sessions of treatment. An additional eight (1.7%) discontinued the survey prematurely. A conservative decision rule was applied regarding potential invalidity of responses among the Mturk sample. If the participant chose any response other than “strongly disagree” for one or
more of the six validity questions, data associated with the respondent was not included in the overall sample. This led to the removal of an additional 40 (8.7%) respondents’ data.

Final analyses included the 114 participants from reddit and 54 from Mturk who completed a usable amount of survey data and responded appropriately to validity questions. Some statistically significant differences between samples from the two recruitment sources were identified. There were significant differences by sample in gender ($\chi^2(4, N = 168) = 11.34, p = .02$), age (reddit sample $M = 28.48$, $SD = 8.29$; Mturk sample $M = 31.54$, $SD = 7.84$; $t(166) = -2.27, p = .025$) and income level ($\chi^2(5, N = 168) = 15.57, p = .01$). Differences in quality of life approached significance (reddit sample $M = 79.18$, $SD = 17.02$; Mturk sample $M = 84.26$, $SD = 14.04$; $t(166) = -1.90, p = .06$). Due to these differences, the two samples were analyzed separately.

**Reddit sample.** Descriptive characteristics for the reddit sample are included in Table 6.

Table 6.

<table>
<thead>
<tr>
<th>Reddit Sample Characteristics – Demographics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>17.5</td>
</tr>
<tr>
<td>Female</td>
<td>87</td>
<td>76.3</td>
</tr>
<tr>
<td>Transgender</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>1</td>
<td>.9</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 - 20</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>21 - 30</td>
<td>59</td>
<td>51.8</td>
</tr>
<tr>
<td>31 - 40</td>
<td>31</td>
<td>27.2</td>
</tr>
<tr>
<td>41 - 50</td>
<td>5</td>
<td>4.4</td>
</tr>
<tr>
<td>51 - 60</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>61+</td>
<td>1</td>
<td>.9</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White / Caucasian</td>
<td>94</td>
<td>82.5</td>
</tr>
<tr>
<td>Black / African American</td>
<td>1</td>
<td>.9</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>3.5</td>
</tr>
</tbody>
</table>
Participants recruited from Reddit were majority female (76.3%), Caucasian (82.5%), never married (57.9%), non-student (63.2%), employed at least part time (69.3%) with an income below $20,000 per year (50.4%), and with an average age of 28.48 years ($SD = 8.29$). Table 7 displays the sample’s mental health characteristics. Participants who had been in
Table 7.

Reddit Sample Characteristics – Mental Health Treatment

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length of current treatment episode</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – 3 months</td>
<td>31</td>
<td>27.2</td>
</tr>
<tr>
<td>4 – 6 months</td>
<td>42</td>
<td>36.8</td>
</tr>
<tr>
<td>7 – 9 months</td>
<td>22</td>
<td>19.3</td>
</tr>
<tr>
<td>9 – 12 months</td>
<td>19</td>
<td>16.7</td>
</tr>
<tr>
<td><strong>Number of sessions attended</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 - 6</td>
<td>25</td>
<td>21.9</td>
</tr>
<tr>
<td>6 - 8</td>
<td>14</td>
<td>12.3</td>
</tr>
<tr>
<td>8 - 10</td>
<td>14</td>
<td>12.3</td>
</tr>
<tr>
<td>11+</td>
<td>61</td>
<td>53.5</td>
</tr>
<tr>
<td><strong>Reason for seeking treatment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic difficulty</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Attention/concentration difficulty</td>
<td>1</td>
<td>.9</td>
</tr>
<tr>
<td>Anger management</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Anxiety</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Assessment</td>
<td>1</td>
<td>.9</td>
</tr>
<tr>
<td>Cognitive/memory concerns</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Depression</td>
<td>30</td>
<td>26.3</td>
</tr>
<tr>
<td>Grief/bereavement</td>
<td>1</td>
<td>.9</td>
</tr>
<tr>
<td>Obsessions/compulsive behavior</td>
<td>5</td>
<td>4.4</td>
</tr>
<tr>
<td>Parenting concerns</td>
<td>1</td>
<td>.9</td>
</tr>
<tr>
<td>Relationship difficulties</td>
<td>7</td>
<td>6.1</td>
</tr>
<tr>
<td>Stress management</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Trauma</td>
<td>25</td>
<td>21.9</td>
</tr>
<tr>
<td>Other</td>
<td>18</td>
<td>15.8</td>
</tr>
</tbody>
</table>

Treatment for less than one month or longer than one year were excluded from participation.

Included participants reported being in treatment an average of 5.7 months ($SD = 3.14$). The majority of the sample (53.5%) had attended 11 or more treatment sessions. The most frequent reason respondents gave for seeking treatment was depression (26.3%), followed by trauma (21.9%), anxiety (14%), and a range of other presenting concerns.

Changes in preference. For each variable in which preference was assessed, participants were asked whether their preference or the strength of their preference had changed since
beginning treatment. The majority of patients recruited from reddit reported that their preferences on all variables assessed had not changed over the course of treatment. However, the number of participants reporting that their preference had changed depended on the variable assessed. Table 8 displays the proportion of respondents who reported that their preferences had changed over the course of treatment.

While only a minority of participants reported that their preference or the strength of their preference had changed from pretreatment to the time they completed the survey, comparisons revealed some statistically significant differences between those who reported a change in preference and those who did not. Among the variables with the highest numbers of participants reporting that their preferences had changed (therapist gender, treatment orientation, treatment type, major goal for treatment, and therapist supportiveness), t-tests were conducted to assess whether differences existed between those who reported a preference change and those who did not in perception of match with initial and current preference and treatment, importance of initial and current preferences, and quality of life. For all variables, initial preferences and how they changed or were maintained were explored.

**Therapist gender.** A notable number of participants reported a change in preference for therapist gender. There was a significant difference in terms of perceived match with pretreatment preference for therapist gender between those who reported their preference for therapist gender changed over time ($M = 2.65, SD = 1.79$) and those who reported their preference was the same ($M = 1.53, SD = .87; t(28.58) = 3.09, p < .01$). Those who later changed their preference for therapist gender reported a less close match between initial preference in this regard and treatment received than those who maintained their preference. There was also a significant difference between preference changers and preference maintainers in terms of rated
Table 8.

*Reddit Sample – Changes in Preference*

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapist gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>26</td>
<td>22.8</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>88</td>
<td>77.2</td>
</tr>
<tr>
<td>Therapist age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>21</td>
<td>18.4</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>93</td>
<td>81.6</td>
</tr>
<tr>
<td>Therapist race/ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>111</td>
<td>97.4</td>
</tr>
<tr>
<td>Treatment orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>27</td>
<td>23.7</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>87</td>
<td>76.3</td>
</tr>
<tr>
<td>Treatment type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>36</td>
<td>31.6</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>78</td>
<td>68.4</td>
</tr>
<tr>
<td>Major goal for treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>37</td>
<td>32.5</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>77</td>
<td>67.5</td>
</tr>
<tr>
<td>Therapist supportiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance changed</td>
<td>26</td>
<td>27.2</td>
</tr>
<tr>
<td>Importance the same</td>
<td>87</td>
<td>36.8</td>
</tr>
<tr>
<td>Therapist trustworthiness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance changed</td>
<td>6</td>
<td>5.3</td>
</tr>
<tr>
<td>Importance the same</td>
<td>108</td>
<td>94.7</td>
</tr>
<tr>
<td>Therapist a good listener</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance changed</td>
<td>13</td>
<td>11.4</td>
</tr>
<tr>
<td>Importance the same</td>
<td>101</td>
<td>88.6</td>
</tr>
<tr>
<td>Therapist warmth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance changed</td>
<td>19</td>
<td>16.7</td>
</tr>
<tr>
<td>Importance the same</td>
<td>95</td>
<td>83.3</td>
</tr>
<tr>
<td>Therapist competence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance changed</td>
<td>18</td>
<td>15.8</td>
</tr>
<tr>
<td>Importance the same</td>
<td>96</td>
<td>84.2</td>
</tr>
</tbody>
</table>

importance of initial preferences. Those who changed their preference for therapist gender reported their initial preference was less important \(M = 3.54, SD = 1.36\) than those who
maintained their preference ($M = 2.80$, $SD = 1.49$; $t(112) = 2.28$, $p = .03$). There was no significant difference in perceived match to current preference for therapist gender between those who reported their preferences had changed ($M = 1.27$, $SD = .874$) and those who did not ($M = 1.53$, $SD = .87$; $t(112) = -1.36$, $p = .18$), and no significant difference in importance of current preference for those who reported their preferences had changed ($M = 3.31$, $SD = 1.46$) and those who did not ($M = 2.80$, $SD = 1.49$; $t(112) = 1.55$, $p = .12$). There was also no significant difference in quality of life scores between the two groups (change in preference: $M = 81.23$, $SD = 13.40$; preference maintained: $M = 78.58$, $SD = 17.98$; $t(112) = .70$, $p = .49$).

The nature of reported changes in preference for therapist gender was explored. In terms of preferences for therapist gender, 15 participants (13.2%) responded that just prior to beginning treatment, they preferred a male therapist. Of those, 13 reported a current preference for a male therapist, while two reported no preference currently for therapist gender. Seventy-one participants (62.3%) reported a preference for a female therapist just prior to beginning treatment. Of those, 62 maintained their preference for a female therapist, seven reported a current preference for a male therapist, and two reported no current preference. One participant reported their preference for therapist gender was “other;” this preference remained currently. Twenty-seven participants (23.7%) reported they had no preference for therapist gender before beginning treatment. Twenty-one maintained no preference, while two reported a current preference for a male therapist, and four reported a current preference for a female therapist. The rated importance of preferences for therapist gender was not significantly different between pretreatment ($M = 2.96$, $SD = 1.49$) and current time ($M = 2.91$, $SD = 1.49$, $t(113) = .60$, $p = .55$).
Therapist age. Preferences for therapist age prior to beginning treatment were most frequently for a therapist older than oneself ($n = 58, 50.9\%$). Of participants with a pretreatment preference for an older therapist, 54 maintained this preference, while three stated they currently preferred a therapist near the same age as themselves, and one changed to no preference. Of the eight participants (7.0\%) who reported they preferred a younger therapist prior to beginning treatment, six reported they maintained their preference, while one reported a current preference for an older therapist, and one reported no preference. Of the 25 participants (21.9\%) who reported an initial preference for a therapist around their same age, 24 maintained the preference, while one reported a current preference for an older therapist. Twenty-three (20.2\%) participants reported no preference pretreatment for therapist age. Twenty-one participants maintained no preference, while one reported they currently preferred an older therapist, and one reported preferring a therapist around their same age. Differences between pretreatment ($M = 3.52, SD = 1.08$) and current importance of preferences ($M = 3.52, SD = 1.09$) were not statistically significant ($t(113) = .00, p = 1.0$).

Therapist race/ethnicity. The overwhelming majority of participants reported that they had no preference for therapist race/ethnicity prior to starting treatment ($n = 92, 80.7\%$). Sixteen participants (14\%) reported an initial preference for a White/Caucasian therapist, and one participant (.8\%) each reported an initial preference for a Black/African-American therapist, an Asian therapist, a Native American therapist, a Hispanic/Latino(a) therapist, and a therapist of more than one race. Only one participant reported their current preference was different from their pretreatment preference; they reported initially preferring a Native American therapist and currently preferring an Asian therapist. There was no significant difference between pretreatment


(M = 4.54, SD = 1.04) and current importance of preferences in terms of therapist race/ethnicity (M = 4.54, SD = 1.04; t(113) = -1.00, p = .32).

Treatment orientation. A notable number of participants reported a change in preference for treatment orientation. Those who reported their preference for treatment orientation was different currently than it had been before starting treatment reported a less-close match between their treatment and their initial preference in terms of treatment orientation (M = 2.74, SD = 1.38) when compared to those who reported their preference was the same in this regard (M = 2.16, SD = 1.14; t(112) = 2.20, p = .03). Those who maintained their preference also rated their initial preference as less important (M = 3.64, SD = 1.43) than those who changed their preference (M = 2.96, SD = 1.37; t(112) = -2.13, p = .04). There were no differences in match with current preference (change in preference: M = 1.93, SD = 1.17; preference maintained: M = 2.20, SD = 1.14; t(112) = -1.07, p = .29), importance of current preference (change in preference: M = 3.35, SD = 1.44; preference maintained: M = 3.42, SD = 1.48; t(112) = -.23, p = .82), or in quality of life (change in preference: M = 82.04, SD = 13.37; preference maintained: M = 78.30, SD = 17.98; t(57.87) = 1.16, p = .32) between preference changers and non-changers.

The most common initial preference for treatment orientation or approach was for a cognitive behavioral orientation (n = 39, 34.2%). Of those with this initial preference, 31 maintained their preference currently, while three reported they currently preferred a psychodynamic approach, three reported a humanistic approach, one endorsed the response “I'm not sure how these are different,” and one reported no current preference. Three participants (2.6%) reported that prior to starting treatment, they preferred a behavioral approach to treatment. Two maintained that preference, while one changed to a current preference for a cognitive behavioral approach. Three participants (2.6%) reported an initial preference for a
cognitive approach; one reported maintaining their preference, while one changed to a preference for humanistic treatment, and one changed to no preference. Ten participants (8.8%) reported an initial preference for a psychodynamic approach to treatment; seven of these maintained their preference, while one changed to a preference for a cognitive behavioral approach, one changed to a preference for a humanistic approach, and one reported no current preference for treatment approach. All seven of those who reported an initial preference for a humanistic approach (6.1%) maintained their preference. The rated importance of preferences for treatment approach was not significantly different between pretreatment ($M = 3.49, SD = 1.45$) and current time ($M = 3.41, SD = 1.47$; $t(113) = .923, p = .36$).

**Treatment type.** A notable number of participants reported changing their preference for treatment type since beginning treatment. Those who reported no change in preference for specific treatment between pretreatment and the time they answered the survey reported a closer match ($M = 1.95, SD = 1.01$) between pretreatment preferences for a specific treatment and the treatment they received compared to those who reported a change in preference ($M = 2.89, SD = 1.95$; $t(112) = 4.31, p < .001$). No significant differences were found in perceived match between current preference and treatment (change in preference: $M = 2.25, SD = 1.18$; preference maintained: $M = 1.95, SD = 1.01$; $t(112) = 1.41, p = .16$), importance of pretreatment preference for treatment type (change in preference: $M = 3.15, SD = 1.46$; preference maintained: $M = 3.24, SD = 1.58$; $t(112) = -.25, p = .81$), importance of current preference for treatment type (change in preference: $M = 2.92, SD = 1.57$; preference maintained: $M = 3.11, SD = 1.57$; $t(112) = .19, p = .85$), or in quality of life (change in preference: $M = 80.19, SD = 13.02$; preference maintained: $M = 78.72, SD = 18.64$; $t(94.23) = .49, p = .63$) between those who changed their preference for specific treatment and those who did not.
The most frequent responses when asked about initial preferences for specific treatment type were “no preference” and cognitive behavioral therapy (CBT; \(n = 24, 21.1\%\)). Of those who stated they had no preference prior to beginning treatment, most maintained no preference currently \( (n = 23), \) while one reported a current preference for CBT. Of those who initially preferred CBT, 15 maintained their preference, one each reported a current preference for acceptance and commitment therapy (ACT), dialectical behavior therapy (DBT), interpersonal psychotherapy, and mindfulness, while two reported a current preference for “other” therapy, and three reported a current preference for medication. Of the 13 participants \((11.4\%)\) who reported a pretreatment preference for DBT, 10 maintained their preference, two reported a current preference for CBT, and one endorsed “I’m not sure how these are different.” Three participants \((2.6\%)\) reported an initial preference for ACT; all three maintained their preference. Twelve participants \((10.5\%)\) reported a preference for medication before beginning treatment. Of those, 9 maintained their preference, while two changed their preference to CBT, and one endorsed “I’m not sure how these are different.” Five participants \((4.4\%)\) reported an initial preference for interpersonal psychotherapy; four maintained their preference, and one expressed a current preference for DBT. Five participants \((4.4\%)\) reported a preference for psychoanalysis/psychoanalytic psychotherapy; four maintained this preference, and one expressed a current preference for interpersonal psychotherapy. Four participants \((3.5\%)\) reported an initial preference for mindfulness. Of those, two maintained their preference, one expressed a current preference for CBT, and one expressed a current preference for DBT. A notable subset of participants \((n = 17, 14.9\%)\) reported, “I’m not sure how these are different” when asked about initial preferences; 13 maintained this response when asked about current preferences, while two participants expressed a current preference for CBT, one expressed a
current preference for ACT, and one expressed a preference for “other” therapy. Differences between pretreatment ($M = 3.22, SD = 1.54$) and current importance of preferences ($M = 3.07, SD = 1.7$) for specific treatment trended toward but did not reach statistical significance ($t(113) = 1.89, p = .06$). This suggests that participant preferences for treatment type were slightly, though not significantly, more important currently than they were initially. However, it should be noted that the difference in ratings between these time points is quite small; .15 points on a five point Likert-type scale, where 1 is “extremely important” and 5 is “not at all important.”

Treatment goal. A notable proportion of participants reported a change in preference over time in terms of goal for treatment. Those who reported no change in preference for major goal for treatment between pretreatment and the time they answered the survey reported a closer match ($M = 2.01, SD = .12$) between pretreatment preference for goal and the treatment they received when compared to those who changed their preference regarding goal for treatment ($M = 2.54, SD = 1.17; t(112) = 2.42, p = .02$). There was no significant difference in terms of match to current preference for therapy goal between those who changed preferences for treatment goal ($M = 1.95, SD = .88$) and those who did not ($M = 2.01, SD = 1.06; t(112) = -.33, p = .74$), nor were there significant differences in rated importance of pretreatment preference for treatment goal (change in preference: $M = 1.85, SD = .88$; preference maintained: $M = 1.81, SD = .97$; $t(112) = .19, p = .85$), or importance of current preference for treatment goal (change in preference: $M = 1.96, SD = .82$; preference maintained: $M = 1.70, SD = .90; t(112) = 1.30, p = .20$). However, there was a significant difference between these two groups in terms of quality of life scores ($t(112) = 3.17, p = .002$). Those who reported a change in preference had a higher quality of life score ($M = 86.19, SD = 2.37$) when compared to those who did not change their preference for treatment goal ($M = 75.82, SD = 17.24$).
The most common response endorsed for initial preference for major goal for therapy was “managing emotions” \( (n = 29, 25.4\%) \). Of those, 23 maintained their preference currently, two changed their preference to “facing fears,” and one participant changed to each of the following response options: “doing things that are important to me,” “changing the way I think,” “changing habits,” and “feeling supported.” Seventeen participants (14.9%) endorsed an initial preference for their major goal for treatment to be “changing the way I think.” Fourteen participants maintained this preference, two changed their current preference to “managing emotions,” and one changed to “being in the present moment.” Thirteen participants (11.4%) reported having a pretreatment preference that their major goal for therapy be “changing my emotions.” Six participants maintained that preference, three reported their current preference was to have the goal of “acceptance of thoughts and emotions,” one changed to each of the following goals: “doing things that are important to me,” “managing emotions,” “facing fears,” and “being in the present moment.” Twelve participants (10.5%) reported their preference for major goal for therapy was “feeling supported.” Of those, nine maintained their preference, and one participant changed to each of the following response options: “acceptance of thoughts and emotions,” “managing emotions,” and “being in the present moment.” Nine participants (7.9%) reported their preference for major goal for therapy prior to starting treatment was “changing my behavior.” Six participants maintained this preference, while one changed to “acceptance of thoughts and emotions,” one changed to “changing the way I think,” and another changed to “no preference/I don't know.” Seven participants (6.1%) reported their initial preference for major goal for treatment was, “improving my relationships.” Five maintained this preference, one changed to “acceptance of thoughts and emotions,” and the other changed to “changing my emotions.” Six participants (5.3%) endorsed “acceptance of thoughts and emotions” as their
preferred major goal for treatment initially. Four participants maintained this preference, one participant changed to a current preference for “facing fears,” and another changed to, “no preference/I don't know.” Five participants (4.4%) reported their initial preference for their major goal for therapy was “changing habits;” all five maintained that preference currently. Five participants (4.4%) reported their preference for their major goal for therapy prior to starting treatment was “increasing motivation to make changes.” Three maintained this preference, one changed to “managing emotions,” and one changed to “changing my emotions.” Four participants (3.5%) reported initially they preferred their major goal for therapy to be “doing things that are important to me.” Three participants maintained this preference, and one participant changed their current preference to “increasing motivation to make changes.” Two participants (1.8%) endorsed an initial preference for “facing fears” to be the major goal for their treatment. One person changed their preference to “managing emotions,” while the other stayed the same. One participant (.8%) stated their pretreatment preference for major goal for therapy was “being in the present moment,” and this preference was maintained. Four participants (3.5%) when asked about their initial preference for treatment goal endorsed, “no preference/I don't know.” Three maintained this response, while one reported their current preference for treatment goal was “changing the way I think.” Differences between initial ($M = 1.82, SD = .95$) and current importance of preferences ($M = 1.76, SD = .87$) for therapy goal were not statistically significant ($t(113) = .93, p = .36$).

Table 9 displays the frequency of current preference for various treatment orientations within the context of current preference for treatment goal. The most frequent overlap in
<table>
<thead>
<tr>
<th>Table 9.</th>
<th>Reddit Sample – Current Preferences for Treatment Goal and Treatment Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Behavioral</td>
</tr>
<tr>
<td>Accept thoughts, emotions</td>
<td>0</td>
</tr>
<tr>
<td>Doing important things</td>
<td>0</td>
</tr>
<tr>
<td>Changing thinking</td>
<td>0</td>
</tr>
<tr>
<td>Managing emotions</td>
<td>1</td>
</tr>
<tr>
<td>Facing fears</td>
<td>0</td>
</tr>
<tr>
<td>Changing habits</td>
<td>0</td>
</tr>
<tr>
<td>Feeling supported</td>
<td>0</td>
</tr>
<tr>
<td>Being in the moment</td>
<td>0</td>
</tr>
<tr>
<td>Increasing motivation</td>
<td>0</td>
</tr>
<tr>
<td>Changing behavior</td>
<td>1</td>
</tr>
<tr>
<td>Changing emotions</td>
<td>0</td>
</tr>
<tr>
<td>Improve relationships</td>
<td>1</td>
</tr>
<tr>
<td>No pref/ don't know</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note.* Response options that were not chosen by any respondent are not included in the table. Please see Appendix C for a complete list of response options.
responses was between a preference for the goal “managing emotions” and a preference for a cognitive behavioral approach.

Table 10 displays the frequency of current preferences for specific treatment type in the context of major goal for treatment. The most frequent overlap in responses was between a preference for the goal “managing emotions” and a preference for a cognitive behavioral therapy, followed closely by a preference for dialectical behavior therapy (DBT).

Therapist Supportiveness. When investigating changes in level of importance of therapist supportiveness, a significant difference in terms of match between treatment and initial importance of therapist supportiveness was found between those who changed the level of importance assigned to supportiveness \( (M = 2.47, SD = 1.36) \) and those who reported the level of importance they assigned to therapist supportiveness had not changed \( (M = 1.64, SD = .86; t(15.76) = 2.30, p = .04) \) such that those who maintained their preference reported a closer perception of match between treatment and importance of therapist supportiveness than those who changed the level of importance assigned to therapist supportiveness. There was also a significant difference in rated initial importance levels of therapist supportiveness between the two groups (change in importance: \( M = 1.85, SD = 1.22 \); importance maintained: \( M = 1.34, SD = .71; t(30.13) = 2.67, p = .05 \)), suggesting that those who later changed the importance level they ascribed to therapist supportiveness rated the quality less important prior to starting treatment compared to those whose level of importance stayed the same. There were no differences in perception of match with therapist supportiveness (change in importance: \( M = 1.53, SD = .99 \); importance maintained: \( M = 1.64, SD = .86; t(112) = -.42, p = .67 \)), current importance levels (change in importance: \( M = 1.58, SD = .99 \); importance maintained: \( M = 1.33, SD = .99 \)).
<table>
<thead>
<tr>
<th></th>
<th>ACT</th>
<th>CBT</th>
<th>DBT</th>
<th>Interp</th>
<th>Medic</th>
<th>Mindf</th>
<th>Psych</th>
<th>Other</th>
<th>Not sure how these are different</th>
<th>No Pref</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept thoughts, emotions</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Doing important things</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Changing thinking</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Managing emotions</td>
<td>1</td>
<td>8</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Facing fears</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Changing habits</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Feeling supported</td>
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<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Being in the moment</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Increasing motivation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Changing behavior</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Changing emotions</td>
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<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Improve relationships</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No pref/ don't know</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note.* Response options that were not chosen by any respondent are not included in the table. Please see Appendix C for a complete list of response options.
SD = .69; \( t(32.55) = 1.20, p = .24 \) or in quality of life (change in importance: \( M = 78.87, SD = 11.91 \); importance maintained: \( M = 79.23, SD = 17.72; t(112) = -.08, p = .94 \)) between the two groups.

**Common factors.** Participants did not state a preference for common factors outright but rather rated how important it was to them that their therapist possess a variety of common factors. Paired t-tests revealed no significant differences between participants’ report of pretreatment importance to their reported level of importance currently on therapist supportiveness (\( t(113) = 1.47, p = .15 \)), trustworthiness (\( t(113) = .83, p = .41 \)), listening skills (\( t(113) = 1.75, p = .08 \)), warmth (\( t(113) = .93, p = .36 \)), or competence (\( t(113) = 1.72, p = .09 \)).

Average ratings for common factors are detailed in Table 11.

Table 11.

**Reddit Sample – Importance of Common Factors**

<table>
<thead>
<tr>
<th>Average importance scores</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Therapist supportiveness</td>
<td></td>
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<tr>
<td>Prior to beginning treatment</td>
<td>1.46</td>
<td>.87</td>
</tr>
<tr>
<td>Current</td>
<td>1.39</td>
<td>.77</td>
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<tr>
<td>Therapist trustworthiness</td>
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<td></td>
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<tr>
<td>Prior to beginning treatment</td>
<td>1.24</td>
<td>.61</td>
</tr>
<tr>
<td>Current</td>
<td>1.21</td>
<td>.59</td>
</tr>
<tr>
<td>Therapist good listener</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>1.38</td>
<td>.71</td>
</tr>
<tr>
<td>Current</td>
<td>1.30</td>
<td>.61</td>
</tr>
<tr>
<td>Therapist warmth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>2.08</td>
<td>1.01</td>
</tr>
<tr>
<td>Current</td>
<td>2.04</td>
<td>.96</td>
</tr>
<tr>
<td>Therapist competence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>1.68</td>
<td>.91</td>
</tr>
<tr>
<td>Current</td>
<td>1.61</td>
<td>.88</td>
</tr>
</tbody>
</table>

**Perceived match to preference, importance of preference, and quality of life.**

Participants rated how important their preferences prior to beginning treatment were to them at
that time, as well as how important their current preferences are now for each of the 11 preference variables assessed: therapist gender, therapist age, therapist race/ethnicity, treatment orientation, treatment type, goal for treatment, therapist supportiveness, therapist trustworthiness, therapist listening skills, therapist warmth, and therapist competence. Response options ranged from 1 (extremely important) to 5 (not at all important). An overall average “importance” score was created for each participant for both pretreatment and current preferences. Similarly, participants rated their perception of the match between the treatment they were receiving and their pretreatment preferences, as well as their perception of the match between treatment and their current preferences for each of the 11 preference variables assessed. Response options ranged from 1 (extremely close to the ideal) to 5 (not close to the ideal). An overall average “perception of match” score was created for each participant for both pretreatment and current preferences. One outlier on the perceived match to preference variable was identified and removed from analysis. No cases had missing data given the data screening for entry into the sample used for analysis. Overall quality of life scores were calculated based on the WHOQOL-BREF. Table 12 displays importance, match, and quality of life scores. This data suggests

Table 12.

<table>
<thead>
<tr>
<th>Reddit Sample – Average Importance, Perception of Match, and Quality of Life</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average “importance” scores</td>
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<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>2.50</td>
<td>.46</td>
</tr>
<tr>
<td>Current</td>
<td>2.44</td>
<td>.45</td>
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<tr>
<td>Average “perception of match” scores</td>
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<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>1.90</td>
<td>.61</td>
</tr>
<tr>
<td>Current</td>
<td>1.74</td>
<td>.58</td>
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<tr>
<td>WHOQOL-BREF score</td>
<td>79.46</td>
<td>16.84</td>
</tr>
</tbody>
</table>
moderate quality of life, on average, within the sample. This data also indicates participants perceived their treatment to be a good match with their preferences overall.

A multiple linear regression was conducted to predict quality of life scores based on overall average “perceived match to preferences” and overall average “importance of match” score based on reported preferences prior to beginning treatment. Table 13 displays regression data. A significant regression equation was found ($F(2,110) = 4.45, p = .01$), with an $R^2$ of .08.

Table 13.

<table>
<thead>
<tr>
<th>Source</th>
<th>$B$</th>
<th>$SE$ $B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Current)</td>
<td>88.92</td>
<td>9.24</td>
<td>9.63</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Average initial importance</td>
<td>2.01</td>
<td>3.43</td>
<td>.05</td>
<td>.59</td>
<td>.56</td>
</tr>
<tr>
<td>Average initial perception of match</td>
<td>-7.62</td>
<td>2.57</td>
<td>-.28</td>
<td>-2.98</td>
<td>.004</td>
</tr>
</tbody>
</table>

The adjusted $R^2$ value of .06 suggests that 6% of the variability in participants’ quality of life scores is predicted by their overall average importance of preference prior to beginning treatment scores and overall average perception of match to pretreatment preference scores. However, only perception of match was a significant predictor of quality of life score.

An additional regression was calculated to predict quality of life scores based on perceived match to current preferences and importance of current preferences. Results were similar to the analysis of pretreatment preferences and are displayed in Table 14. A significant regression equation was found ($F(2,110) = 6.83, p = .00$), with an $R^2$ of .11. The adjusted $R^2$ value of .09 suggests 9% of the variability in quality of life scores is predicted by average importance of current preferences and average perception of match to current preferences scores. However, only perception of match was a significant predictor of quality of life score.
Table 14.

*Reddit Sample – Average Current Importance, Average Match to Current Preferences, and WHOQOL-BREF Regression*

<table>
<thead>
<tr>
<th>Source</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Current)</td>
<td>90.41</td>
<td>8.96</td>
<td>10.54</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Average current importance</td>
<td>.86</td>
<td>3.43</td>
<td>.02</td>
<td>.25</td>
<td>.80</td>
</tr>
<tr>
<td>Average current perception of match</td>
<td>-9.78</td>
<td>2.66</td>
<td>-.37</td>
<td>-3.68</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

To better understand which variables may be driving the relationship between perception of match to initial preferences and quality of life, zero-order correlations between perception of match with initial preference variables and WHOQOL-BREF scores were calculated. “Common factor” variables were averaged to create an overall match variable. Table 15 displays correlations found.

Table 15.

*Reddit Sample – Perception of Match to Initial Preference and WHOQOL-BREF Correlations*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Therapist gender</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Therapist age</td>
<td>.41***</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Therapist race/ethnicity</td>
<td>.19*</td>
<td>.27**</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Treatment orientation</td>
<td>.30**</td>
<td>.32**</td>
<td>.32**</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Treatment type</td>
<td>.08</td>
<td>.30**</td>
<td>.34***</td>
<td>.70***</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Major goal</td>
<td>.06</td>
<td>.19*</td>
<td>.13</td>
<td>.40***</td>
<td>.58***</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Common factors</td>
<td>.25**</td>
<td>.20*</td>
<td>.17</td>
<td>.33***</td>
<td>.26**</td>
<td>.45***</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>8. WHOQOL-BREF</td>
<td>-.16</td>
<td>-.10</td>
<td>-.06</td>
<td>-.17</td>
<td>-.15</td>
<td>-.20*</td>
<td>-.24*</td>
<td>—</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01  ***p < .001*
Individual perception of match with pretreatment preference variables were entered into a regression model. The inclusion of these seven variables did not result in a significant regression equation \( F(7,110) = 1.34, p = .24 \). Data from this regression model is displayed in Table 16.

Table 16.

<table>
<thead>
<tr>
<th>Source</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>93.23</td>
<td>5.17</td>
<td>18.04</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Therapist gender</td>
<td>-1.60</td>
<td>1.54</td>
<td>-.11</td>
<td>-1.04</td>
<td>.30</td>
</tr>
<tr>
<td>Therapist age</td>
<td>.19</td>
<td>1.54</td>
<td>.01</td>
<td>.12</td>
<td>.90</td>
</tr>
<tr>
<td>Therapist race/ethnicity</td>
<td>.26</td>
<td>1.72</td>
<td>.02</td>
<td>.15</td>
<td>.88</td>
</tr>
<tr>
<td>Treatment orientation</td>
<td>-.43</td>
<td>1.98</td>
<td>-.03</td>
<td>-.22</td>
<td>.83</td>
</tr>
<tr>
<td>Treatment type</td>
<td>-.59</td>
<td>2.29</td>
<td>-.04</td>
<td>-.26</td>
<td>.80</td>
</tr>
<tr>
<td>Major goal</td>
<td>-1.41</td>
<td>1.93</td>
<td>-.09</td>
<td>-.73</td>
<td>.47</td>
</tr>
<tr>
<td>Common factors</td>
<td>-3.65</td>
<td>2.62</td>
<td>-.15</td>
<td>-1.39</td>
<td>.17</td>
</tr>
</tbody>
</table>

Because the common factor match aggregate variable and match to pretreatment preference for goal variable were both significantly correlated with quality of life, these two variables were entered into a regression model alone. This resulted in a significant regression model \( F(2,110) = 3.94, p = .02 \), with an \( R^2 \) of .07. The adjusted \( R^2 \) value of .05 suggests 5% of the variability in quality of life scores is predicted by the combination of these two variables. However, neither of the predictors was significant. The common factors aggregate variable trended toward significance. Table 17 displays data from this regression model.

A similar process was carried out for perception of match to current preference variables. Zero-order correlations between perception of match with current preference variables and WHOQOL-BREF scores were calculated. “Common factor” variables were averaged to create an overall match variable. Table 18 displays correlations found.
The inclusion of all seven perception of match variables resulted in a significant regression model ($F(7,105) = 3.86, p = .001$), with an $R^2$ of .21. The adjusted $R^2$ value of .15 suggests 15% of the variability in quality of life scores is predicted by the combination of these seven variables. However, only match between current preference for therapist gender and treatment was a significant predictor. Results are displayed in Table 19.
Table 19.

Reddit Sample – Perception of Match to Current Preference and WHOQOL-BREF Regression

<table>
<thead>
<tr>
<th>Source</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>93.33</td>
<td>4.75</td>
<td>19.65</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Therapist gender</td>
<td>-6.61</td>
<td>2.29</td>
<td>-.32</td>
<td>-2.89</td>
<td>.01</td>
</tr>
<tr>
<td>Therapist age</td>
<td>3.23</td>
<td>1.75</td>
<td>.18</td>
<td>1.85</td>
<td>.07</td>
</tr>
<tr>
<td>Therapist race/ethnicity</td>
<td>1.82</td>
<td>1.72</td>
<td>.11</td>
<td>1.06</td>
<td>.29</td>
</tr>
<tr>
<td>Treatment orientation</td>
<td>-.80</td>
<td>1.77</td>
<td>-.05</td>
<td>-.45</td>
<td>.65</td>
</tr>
<tr>
<td>Treatment type</td>
<td>-2.67</td>
<td>2.27</td>
<td>-.16</td>
<td>-1.18</td>
<td>.24</td>
</tr>
<tr>
<td>Major goal</td>
<td>-2.13</td>
<td>2.22</td>
<td>-.12</td>
<td>-.96</td>
<td>.34</td>
</tr>
<tr>
<td>Common factors</td>
<td>-1.12</td>
<td>2.90</td>
<td>-.04</td>
<td>-.39</td>
<td>.70</td>
</tr>
</tbody>
</table>

Given that match between current preference for therapist gender and treatment was a significant predictor, and a significant correlation was found between match to initial and current preference for major goal and WHOQOL-BREF score (see Table 16), match to current preference for therapist gender and match to current preference for major goal variables were entered into a regression model. Results are displayed in Table 20. A significant model was found \( (F(2,110) = 3.94, p<.001) \), with an \( R^2 \) of .11. The adjusted \( R^2 \) value of .10 suggests 10% of the variability in quality of life scores is predicted by the combination of these two variables. Both the goal and gender variables were significant predictors of the model.
Mturk sample. Descriptive characteristics for the Mturk sample are included in Table 21. Participants recruited from Mturk were majority female (61.1%), Caucasian (81.5%), never married (51.9%), non-student (75.9%), employed full time (55.6%) with an income below $30,000 per year (51.9%), and with an average age of 31.54 years ($SD = 7.84$).

Table 21.

<table>
<thead>
<tr>
<th>Demographic Sample Characteristics – Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Variables</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>18 - 20</td>
</tr>
<tr>
<td>21 - 30</td>
</tr>
<tr>
<td>31 - 40</td>
</tr>
<tr>
<td>41 - 50</td>
</tr>
<tr>
<td>51 - 60</td>
</tr>
<tr>
<td>61+</td>
</tr>
<tr>
<td>Ethnicity</td>
</tr>
<tr>
<td>White / Caucasian</td>
</tr>
<tr>
<td>Black / African American</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Pacific Islander</td>
</tr>
<tr>
<td>Native American/American Indian</td>
</tr>
<tr>
<td>Hispanic/Latino(a)</td>
</tr>
<tr>
<td>More than one race</td>
</tr>
<tr>
<td>Prefer not to answer</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Marital Status</td>
</tr>
<tr>
<td>Never Been Married</td>
</tr>
<tr>
<td>Married / Committed Partnership</td>
</tr>
<tr>
<td>Separated</td>
</tr>
<tr>
<td>Divorced</td>
</tr>
<tr>
<td>Widowed</td>
</tr>
<tr>
<td>Student Status</td>
</tr>
<tr>
<td>Non-student</td>
</tr>
<tr>
<td>Freshman Undergraduate</td>
</tr>
<tr>
<td>Sophomore Undergraduate</td>
</tr>
<tr>
<td>Junior Undergraduate</td>
</tr>
<tr>
<td>Senior Undergraduate</td>
</tr>
</tbody>
</table>
Table 21 - continued

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters Level Student</td>
<td>3</td>
<td>5.6</td>
</tr>
<tr>
<td>Doctoral Level Student</td>
<td>2</td>
<td>3.7</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Employment Status**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time</td>
<td>30</td>
<td>55.6</td>
</tr>
<tr>
<td>Part-Time</td>
<td>9</td>
<td>16.7</td>
</tr>
<tr>
<td>Not Employed</td>
<td>15</td>
<td>27.8</td>
</tr>
</tbody>
</table>

**Income**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - $9,999</td>
<td>11</td>
<td>20.4</td>
</tr>
<tr>
<td>$10,000 - $19,999</td>
<td>8</td>
<td>14.8</td>
</tr>
<tr>
<td>$20,000 - $29,999</td>
<td>9</td>
<td>16.7</td>
</tr>
<tr>
<td>$30,000 - $39,999</td>
<td>6</td>
<td>11.1</td>
</tr>
<tr>
<td>$40,000 - $49,999</td>
<td>6</td>
<td>11.1</td>
</tr>
<tr>
<td>$50,000 or More</td>
<td>14</td>
<td>25.9</td>
</tr>
</tbody>
</table>

Table 22 displays the sample’s mental health characteristics. Participants who had been in treatment for less than one month or longer than one year were excluded from participation in the initial screener questionnaire. However, participants were asked again to answer how long they had been in treatment in the main survey; two participants reported they had been in treatment longer than one year. Included participants reported being in treatment an average of 6.1 months \((SD = 3.27)\). The majority of the sample (68.5\%) had attended 10 or fewer treatment sessions. The most frequent reason respondents gave for seeking treatment was anxiety (38.9\%), followed by depression (35.2\%), and a range of other presenting concerns.

**Changes in preference.** For each variable in which preference was assessed, participants were asked whether their preference or the strength of their preference had changed since beginning treatment. The majority of patients recruited from Mturk reported that their preferences on all variables assessed had not changed over the course of treatment. Table 23 displays the proportion of respondents who reported that their preferences had changed over the course of treatment.
<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length of current treatment episode</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – 3 months</td>
<td>14</td>
<td>25.9</td>
</tr>
<tr>
<td>4 – 6 months</td>
<td>21</td>
<td>38.9</td>
</tr>
<tr>
<td>7 – 9 months</td>
<td>9</td>
<td>16.7</td>
</tr>
<tr>
<td>9 – 12 months</td>
<td>10</td>
<td>18.5</td>
</tr>
<tr>
<td>13 months</td>
<td>2</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Number of sessions attended</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 - 6</td>
<td>14</td>
<td>25.9</td>
</tr>
<tr>
<td>6 - 8</td>
<td>13</td>
<td>24.1</td>
</tr>
<tr>
<td>8 - 10</td>
<td>10</td>
<td>18.5</td>
</tr>
<tr>
<td>11+</td>
<td>17</td>
<td>31.5</td>
</tr>
<tr>
<td><strong>Reason for seeking treatment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic difficulty</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Attention/concentration difficulty</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Anger management</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Anxiety</td>
<td>21</td>
<td>38.9</td>
</tr>
<tr>
<td>Assessment</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cognitive/memory concerns</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Depression</td>
<td>19</td>
<td>35.2</td>
</tr>
<tr>
<td>Grief/bereavement</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Obsessions/compulsive behavior</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Parenting concerns</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Relationship difficulties</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Stress management</td>
<td>2</td>
<td>3.7</td>
</tr>
<tr>
<td>Trauma</td>
<td>3</td>
<td>5.6</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>5.6</td>
</tr>
</tbody>
</table>

preferences on all variables assessed had not changed over the course of treatment. Table 23 displays the proportion of respondents who reported that their preferences had changed over the course of treatment.

**Therapist gender.** In terms of preferences for therapist gender, 11 participants (20.4%) responded that just prior to beginning treatment, they preferred a male therapist. Of those, 10 reported a current preference for a male therapist, while one reported no preference currently for
### Table 23.

**Mturk Sample – Changes in Preference**

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapist gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>4</td>
<td>7.4</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>50</td>
<td>92.6</td>
</tr>
<tr>
<td>Therapist age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>3</td>
<td>5.6</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>51</td>
<td>94.4</td>
</tr>
<tr>
<td>Therapist race/ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>2</td>
<td>3.7</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>52</td>
<td>96.3</td>
</tr>
<tr>
<td>Treatment orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>5</td>
<td>9.3</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>49</td>
<td>90.7</td>
</tr>
<tr>
<td>Treatment type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>6</td>
<td>11.1</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>48</td>
<td>88.9</td>
</tr>
<tr>
<td>Major goal for treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference/importance changed</td>
<td>9</td>
<td>16.7</td>
</tr>
<tr>
<td>Preference/importance the same</td>
<td>45</td>
<td>83.3</td>
</tr>
<tr>
<td>Therapist supportiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance changed</td>
<td>8</td>
<td>14.8</td>
</tr>
<tr>
<td>Importance the same</td>
<td>46</td>
<td>85.2</td>
</tr>
<tr>
<td>Therapist trustworthiness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance changed</td>
<td>3</td>
<td>5.6</td>
</tr>
<tr>
<td>Importance the same</td>
<td>51</td>
<td>94.4</td>
</tr>
<tr>
<td>Therapist a good listener</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance changed</td>
<td>2</td>
<td>3.7</td>
</tr>
<tr>
<td>Importance the same</td>
<td>52</td>
<td>96.3</td>
</tr>
<tr>
<td>Therapist warmth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance changed</td>
<td>6</td>
<td>11.1</td>
</tr>
<tr>
<td>Importance the same</td>
<td>48</td>
<td>88.9</td>
</tr>
<tr>
<td>Therapist competence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance changed</td>
<td>2</td>
<td>3.7</td>
</tr>
<tr>
<td>Importance the same</td>
<td>52</td>
<td>96.3</td>
</tr>
</tbody>
</table>

therapist gender. Twenty-seven participants (50%) reported a preference for a female therapist just prior to beginning treatment. Of those, 26 maintained their preference for a female therapist
and one reported no current preference. One participant reported their preference for therapist gender was “other;” this preference remained currently. Fifteen participants (27.8%) reported they had no preference for therapist gender before beginning treatment. All 15 reported they maintained no preference. The rated importance of preferences for therapist gender were not significantly different between pretreatment ($M = 3.19$, $SD = 1.59$) and current time ($M = 3.19$, $SD = 1.64$, $t(53) = .00$, $p = 1.0$).

**Therapist age.** The majority of Mturk participants reported they preferred a therapist older than themselves just prior to beginning treatment ($n = 34$, 63%). All of these participants maintained their preference for an older therapist currently. No participant reported a pretreatment preference for a younger therapist, while 10 participants (18.5%) reported an initial preference for a therapist around their same age. Nine participants maintained the preference, while one reported a current preference for an older therapist. Ten participants (18.5%) reported no preference pretreatment for therapist age, and all participants reported maintaining this preference. Differences between pretreatment ($M = 3.44$, $SD = 1.53$) and current importance of preferences ($M = 3.41$, $SD = 1.13$) were not statistically significant ($t(53) = 1.43$, $p = .16$).

**Therapist race/ethnicity.** The overwhelming majority of participants reported that they had no preference for therapist race/ethnicity prior to starting treatment ($n = 41$, 75.9%). Eleven participants (20.4%) reported an initial preference for a White/Caucasian therapist, and one participant (1.9%) each reported an initial preference for a Black/African-American therapist and an Asian therapist. All participants reported maintaining their preference currently. Significance testing could not be conducted on pretreatment versus current importance of preference for therapist race/ethnicity as the standard error of the difference was zero, suggesting no differences between initial ($M = 4.46$, $SD = 1.22$) and current ($M = 4.46$, $SD = 1.22$) strength of preference.
**Treatment orientation.** In terms of preferences for treatment orientation or approach, the most common initial preference was for a cognitive behavioral orientation \((n = 22, 40.7\%)\). One participant (1.9%) reported that prior to starting treatment, they preferred a behavioral approach to treatment. Four participants (7.4%) reported an initial preference for a cognitive approach; three reported maintaining their preference, while one changed to a preference for a cognitive behavioral approach. This was the only change in preference reported for this variable. Three participants (5.6%) each reported an initial preference for psychodynamic and humanistic treatment. Ten participants (18.5%) responded, “I'm not sure how these are different,” while seven (13%) reported they had no preference. The rated importance of preferences for treatment approach were not significantly different between pretreatment \((M = 3.31, SD = 1.37)\) and current time \((M = 3.22, SD = 1.42; t(53) = 1.53, p = .13)\).

**Treatment type.** The most frequent response when asked about preferences for specific treatment type was CBT \((n = 18, 33.3\%)\). Of those, one participant changed their preference to exposure therapy, and one responded, “I'm not sure how these are different.” Four participants (7.4%) reported a pretreatment preference for mindfulness. Of those, one changed their preference to CBT. Twelve participants (22.2%) responded, “I'm not sure how these are different” when asked about preferences just prior to starting treatment, eight participants (14.8%) reported they had no preference for specific treatment, three participants (5.6%) reported a pretreatment preference for medication, three (5.6%) reported a preference for supportive therapy, and one each (1.9%) reported a preference for DBT, exposure therapy, interpersonal psychotherapy, and psychoanalysis/psychoanalytic psychotherapy. None changed their preference. Differences between pretreatment \((M = 3.20, SD = 1.37)\) and current importance of preferences \((M = 3.11, SD = 1.42)\) for specific treatment trended toward but did
not reach statistical significance ($I$). This suggests that participants believed their preference for specific treatment was slightly, though not significantly, more important currently than it had been just prior to starting treatment. However, it should be noted that the difference in ratings between these time points is quite small; .09 points on a five point Likert-type scale, where 1 is “extremely important” and 5 is “not at all important.”

**Treatment goal.** Regarding participants’ preference for major goal for therapy, the most common response endorsed for initial preference was “managing emotions” ($n = 13, 24.1\%$). Seven participants (13\%) expressed a pretreatment preference for “changing my emotions” to be their major goal for treatment. Five each (9.3\%) reported and initial preference for “facing fears,” and “increasing motivation to make changes.” Four each (7.4\%) reported a pretreatment preference for “acceptance of thoughts and emotions,” “doing things that are important to me,” and “changing the way I think.” Two (3.7\%) expressed an initial preference for “changing habits.” One (1.9\%) expressed a preference for “feeling supported,” and one endorsed, “no preference/I don’t know.” None of the participants with these initial preferences reported having a different preference currently. Some participants who reported initially preferring “being in the present moment,” ($n = 3, 5.6\%$) and “changing my behavior” ($n = 5, 9.3\%$) did report having a different preference currently. One participant who initially preferred “being in the present moment” for a treatment goal currently preferred “acceptance of thoughts and emotions,” while another preferred “changing the way I think.” One participant maintained their initial preference. One participant who initially preferred “changing my behavior” reported currently preferring “being in the present moment” for a treatment goal. The other four maintained their initial treatment preference. Differences between initial ($M = 1.69, SD = .84$) and current importance of
preferences \((M = 1.74, SD = .13)\) for therapy goal were not statistically significant \((t(53) = -.83, p = .41)\).

Table 24 displays the frequency of current preference for various treatment orientations within the context of current preference for treatment goal. The most frequent overlap in responses was between a preference for the goal “managing emotions” and a preference for a cognitive behavioral approach.

Table 25 displays the frequency of current preferences for specific treatment type in the context of major goal for treatment. The most frequent overlap in responses was between a preference for the goal “managing emotions” and a preference for a cognitive behavioral therapy.

Common factors. Participants did not state a preference for common factors outright but rather rated how important it was to them that their therapist possess a variety of common factors. Paired t-tests revealed no significant differences between participants’ report of pretreatment importance to their reported level of importance currently on supportiveness \((t(53) = -.44, p = .67)\), trustworthiness \((t(53) = -1.35, p = .18)\), good listener \((t(53) = .00, p = 1.00)\), warmth \((t(53) = -.57, p = .57)\), or competence \((t(53) = -1.43, p = .16)\). Average ratings for common factors are detailed in Table 26.

Perceived match to preference, importance of preference, and quality of life. Just as with the reddit sample, participants recruited via Mturk rated how important their preferences prior to beginning treatment were to them at that time, as well as how important their current preferences are now for each of the 11 preference variables assessed: therapist gender, therapist age, therapist race/ethnicity, treatment orientation, treatment type, goal for treatment, therapist
Table 24.

*Mturk Sample – Current Preferences for Treatment Goal and Treatment Orientation*

<table>
<thead>
<tr>
<th></th>
<th>Behavioral</th>
<th>Cognitive</th>
<th>Cognitive - Behavioral</th>
<th>Psychodynamic</th>
<th>Humanistic</th>
<th>Not sure how these are different</th>
<th>No prefer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept thoughts, emotions</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Doing important things</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Changing thinking</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Managing emotions</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Facing fears</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Changing habits</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Feeling supported</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Being in the present moment</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increasing motivation</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Changing behavior</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Changing emotions</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>No pref/don't know</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note.* Response options that were not chosen by any respondent are not included in the table. Please see Appendix E for a complete list of response options.
Table 25.

*Mturk Sample – Current Preferences for Treatment Goal and Specific Treatment Type*

<table>
<thead>
<tr>
<th></th>
<th>ACT</th>
<th>CBT</th>
<th>DBT</th>
<th>Exposure</th>
<th>Interpersonal</th>
<th>Medication</th>
<th>Mindfulness</th>
<th>Psychoanalysis</th>
<th>Supportive</th>
<th>Not sure how these are different</th>
<th>No Pref</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept thoughts, emotions</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Doing important things</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Changing thinking</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Managing emotions</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Facing fears</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Changing habits</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Feeling supported</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Being in the present moment</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increasing motivation</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Changing behavior</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Changing emotions</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No pref/don’t know</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Response options that were not chosen by any respondent are not included in the table. Please see Appendix E for a complete list of response options.
Table 26.

Mturk Sample – Importance of Common Factors

<table>
<thead>
<tr>
<th>Average importance scores</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapist supportiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>1.26</td>
<td>.56</td>
</tr>
<tr>
<td>Current</td>
<td>1.30</td>
<td>.63</td>
</tr>
<tr>
<td>Therapist trustworthiness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>1.17</td>
<td>.47</td>
</tr>
<tr>
<td>Current</td>
<td>1.22</td>
<td>.66</td>
</tr>
<tr>
<td>Therapist good listener</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>1.39</td>
<td>.71</td>
</tr>
<tr>
<td>Current</td>
<td>1.39</td>
<td>.74</td>
</tr>
<tr>
<td>Therapist warmth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>2.06</td>
<td>1.05</td>
</tr>
<tr>
<td>Current</td>
<td>2.07</td>
<td>1.01</td>
</tr>
<tr>
<td>Therapist competence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>1.61</td>
<td>.81</td>
</tr>
<tr>
<td>Current</td>
<td>1.65</td>
<td>.81</td>
</tr>
</tbody>
</table>

supportiveness, therapist trustworthiness, therapist listening skills, therapist warmth, and therapist competence. Response options ranged from 1 (extremely important) to 5 (not at all important). An overall average “importance” score was created for each participant for both pretreatment and current preferences. Similarly, participants rated their perception of the match between the treatment they were receiving and their pretreatment preferences, as well as their perception of the match between treatment and their current preferences for each of the 11 preference variables assessed. Response options ranged from 1 (extremely close to the ideal) to 5 (not close to the ideal). An overall average “perception of match” score was created for each participant for both pretreatment and current preferences. No outliers were identified. No cases were missing data, given the screening for entry into the sample used for analyses. Overall quality of life scores were calculated based on the WHOQOL-BREF. Table 27 displays importance, match, and quality of life scores for the Mturk sample. Consistent with the reddit
Table 27.

*Mturk Sample – Average Importance, Perception of Match, and Quality of Life*

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average “importance” scores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>2.43</td>
<td>.42</td>
</tr>
<tr>
<td>Current</td>
<td>2.43</td>
<td>.53</td>
</tr>
<tr>
<td>Average “perception of match” scores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning treatment</td>
<td>2.01</td>
<td>.73</td>
</tr>
<tr>
<td>Current</td>
<td>1.97</td>
<td>.71</td>
</tr>
<tr>
<td>WHOQOL-BREF score</td>
<td>84.26</td>
<td>14.04</td>
</tr>
</tbody>
</table>

sample, participants reported a relatively good match between preferences and treatment received, and reported moderate quality of life scores on average.

A multiple linear regression was conducted to predict quality of life scores based on overall average “perceived match to preferences” and overall average “importance of match” score based on reported preferences prior to beginning treatment. Data from this regression are presented in Table 28. This did not result in a significant regression equation ($F(2,51) = 1.72, p = .19$).

Table 28.

*Mturk Sample – Average Initial Importance, Average Match to Initial Preferences, and WHOQOL-BREF Regression*

<table>
<thead>
<tr>
<th>Source</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>79.34</td>
<td>9.62</td>
<td>8.25</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Average initial importance</td>
<td>5.44</td>
<td>3.816</td>
<td>.20</td>
<td>1.43</td>
<td>.16</td>
</tr>
<tr>
<td>Average initial perception of match</td>
<td>-4.14</td>
<td>2.72</td>
<td>-.21</td>
<td>-1.52</td>
<td>.13</td>
</tr>
</tbody>
</table>

An additional regression was calculated to predict quality of life scores based on perceived match to current preferences and importance of current preferences. Results were
similar to the analysis of pretreatment preferences; the regression equation was not significant \( F(2,51) = 2.05, p = .14 \). Results are displayed in Table 29.

Table 29.

<table>
<thead>
<tr>
<th>Source</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>80.16</td>
<td>9.53</td>
<td>8.41</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Average current importance</td>
<td>5.50</td>
<td>3.71</td>
<td>.21</td>
<td>1.48</td>
<td>.14</td>
</tr>
<tr>
<td>Average current perception of match</td>
<td>-4.71</td>
<td>2.78</td>
<td>-.24</td>
<td>-1.70</td>
<td>.10</td>
</tr>
</tbody>
</table>

To better understand which variables may be driving the relationship between perception of match to initial preferences and quality of life, zero-order correlations between perception of match with initial preference variables and WHOQOL-BREF scores were calculated. “Common factor” variables were averaged to create an overall match variable. Table 30 displays correlations found. A significant correlation was found between match to pretreatment preference for treatment goal and quality of life. No significant correlations between individual match to current preference variables and quality of life were identified.

Table 31 displays correlations between perception of match to current preferences and WHOQOL-BREF scores. Given the lack of multiple relationships identified, no additional regression analyses were conducted.
Table 30.

*Mturk Sample – Perception of Match to Initial Preference and WHOQOL-BREF Correlations*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Therapist gender</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Therapist age</td>
<td>.68***</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Therapist race/ethnicity</td>
<td>.41**</td>
<td>.41**</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Treatment orientation</td>
<td>.38**</td>
<td>.36**</td>
<td>.39*</td>
<td>—</td>
<td></td>
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<td>5. Treatment type</td>
<td>.30*</td>
<td>.37**</td>
<td>.33*</td>
<td>.78***</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Major goal</td>
<td>.51***</td>
<td>.57***</td>
<td>.38**</td>
<td>.40**</td>
<td>.39**</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Common factors</td>
<td>.64***</td>
<td>.65***</td>
<td>.34*</td>
<td>.51***</td>
<td>.43**</td>
<td>.716***</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>8. WHOQOL-BREF</td>
<td>-.04</td>
<td>.02</td>
<td>.04</td>
<td>-.10</td>
<td>-.11</td>
<td>-.32*</td>
<td>-.19</td>
<td>—</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01  ***p < .001
Table 31.

*Mturk Sample – Perception of Match to Current Preference and WHOQOL-BREF Correlations*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Therapist gender</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Therapist age</td>
<td>.72***</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Therapist race/ethnicity</td>
<td>.43**</td>
<td>.45**</td>
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<td>4. Treatment orientation</td>
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<td>.26</td>
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<td>5. Treatment type</td>
<td>.28*</td>
<td>.37**</td>
<td>.28*</td>
<td>.74***</td>
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<td>6. Major goal</td>
<td>.59***</td>
<td>.64***</td>
<td>.41**</td>
<td>.34*</td>
<td>.38**</td>
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<td>7. Common factors</td>
<td>.57***</td>
<td>.61***</td>
<td>.29*</td>
<td>.44**</td>
<td>.43**</td>
<td>.76***</td>
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<td>8. WHOQOL-BREF</td>
<td>-.07</td>
<td>.00</td>
<td>.03</td>
<td>-.08</td>
<td>-.16</td>
<td>-.26</td>
<td>-.22</td>
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*p < .05  **p < .01  ***p < .001
CHAPTER V

DISCUSSION

In summary, results partially supported study hypotheses. A minority of participants reported changing their preference or the strength of their preference over the course of treatment in support of hypothesis one. During phase I of the study, minimal changes across time points were observed; one participant reported a change in preference for therapist gender, one participant reported a change in type of treatment preferred, and two participants reported changes in their preference for their major goal for treatment. Several changes in the importance of therapist common factor variables were reported. These changes were all within one level of the previously reported importance level (e.g. from “extremely important” to “very important”). During phase II of the study, there were some changes between initial and current preferences and the strength of those preferences. However, the majority of participants from both samples reported that their preferences or the strength of their preferences had not changed since they entered treatment. Overall, there were no statistically significant differences in reported importance of preferences between time points. However, among the reddit sample, percentages of the sample that reported a change in preference ranged from 2.6% to 32.5% depending on the variable assessed. Among participants recruited from Mturk, the percentage ranged from 3.7% to 16.7%. Among the reddit sample, those variables with the greatest number of reported changes in preference (therapist gender, treatment orientation, treatment type, major goal for treatment, and therapist supportiveness) were investigated further to better understand what relationships might exist between perception of match and change in preference. Similar analyses were not conducted with the Mturk sample due to the relatively smaller number of participants who changed preferences. Overall, there was a reported greater perception of match between
pretreatment preference and treatment received among those who reported no change in preference from pretreatment to the time they answered the survey. Those who reported a change in preference over time reported a less-close match between initial preference and treatment received. There was no difference among perceived match to current preference between the two groups (those who changed preferences and those who did not) on any of the variables assessed. Preference changers and preference maintainers were indistinguishable in terms of perceived match between treatment and current preference on all variables assessed. While causal relationships cannot be confirmed based on the cross-sectional data here, this suggests that when patients receive treatment that they perceive to align with their initial preferences, they may be less likely to change their preference over time. If this is the case, this has implications for treatment preference research that assigns participants to non-preferred treatments. Perhaps some of the variability in treatment preference literature is due to participants in non-preferred treatments changing their preferences over time.

There were group differences on initial importance of preferences for some preference variables: therapist gender, treatment orientation, and therapist supportiveness. Those who later changed their preference reported their initial preferences for therapist gender and therapist supportiveness were less important than those who maintained their preference. Those who later changed their preference reported their initial preference for treatment orientation was more important than those who maintained their preference. This lack of consistency in the relationship of strength of preference and change in preference suggests that strength of preference alone is not a reliable indicator of tendency to change preference.

Hypothesis two was only partially supported by the results of this study. During phase I, no statistical relationship could be identified between strength of preferences or perceived match
to preferences and quality of life due to the very low number of participants and relative homogeneity of the data. Strength of preference was unrelated to quality of life scores during phase II of the study; this was found consistently across time points and samples. It should be noted however that participants were able to indicate “no preference” for each of the preference variables before indicating the strength of that preference, while previous research has varied in terms of response options for participants in this regard. Some previous studies have allowed participants to indicate they have no preference, while others have not. It is possible that more variation in strength of preference would have appeared if individuals had not had the option to indicate they had no preference, thus leading to a different relationship between strength of preference and quality of life.

In partial support of hypothesis two, results from phase II of the study suggest that a relationship may exist between perceived match to preference and quality of life. However, results varied depending on the variable assessed and the sample utilized. Regression analyses conducted with the reddit sample revealed that quality of life scores are predicted by average perception of match to pretreatment preferences and average perception of match to current preferences. When the aggregate match score was deconstructed, perception of match to pretreatment preference for common factors was significantly related to quality of life. A significant regression model was found when match to current preference for treatment goal and therapist gender were included. The inclusion of these two variables predicted 10% of the variability in quality of life scores. The relatively small influence of perception of match on quality of life is not inconsistent with meta analyses of treatment preference studies that suggest a small impact of matching clients to preferred treatment on treatment outcomes (Swift & Callahan, 2009; Swift et al., 2013).
Correlations found among the reddit sample between individual perception of match to preference variables and quality of life were only partially replicated with the Mturk sample. When looking at preference variables individually, there were no significant correlations between perception of match and quality of life except for perceived match to pretreatment preference for major goal for treatment. Results of regression analyses conducted with the reddit sample were not replicated with the Mturk sample.

Although the Mturk sample failed to fully replicate results found from the reddit sample, this may have been due to a lack of power rather than true differences in relationships between variables between these populations. For both the reddit and Mturk samples, the most frequent preferences were for a female therapist older than oneself, for treatment from a cognitive behavioral orientation, utilizing CBT, with a major goal of “managing emotions.” Participants tended to have no preference for therapist race/ethnicity.

Some additional correlations found among the Mturk sample between preference match and quality of life were similar to correlations found in the reddit sample. Results of the Pearson correlation in the reddit sample for match to current preference for major goal for treatment was -.29 \((p = .002)\), while the correlation among the Mturk sample for the same variables were -.26. Results approached but failed to achieve significance at the \(p = .05\) level \((p = .06)\). Correlations between current match to common factors and quality of life were also similar. Results for the reddit sample were -.27 \((p = .003)\) and -.22 for the Mturk sample \((p = .114)\).

Relationships between these variables and quality of life may be understood from a perspective of working alliance between therapist and patient. Bordin’s (1979) model of working alliance suggests that initial alliance is formed based on agreement between therapist and patient on the goals of treatment and the tasks necessary to meet such goals, and the resulting bond that
forms out of mutual trust, respect, and liking for one another. Working alliance has been shown robust, positive relationships with treatment outcomes across numerous studies (Flückiger, Del Re, Wampold, & Horvath, 2018). Perception of match between initial and current preference for major goal for treatment was significantly correlated with quality of life scores among the reddit sample in the current study, consistent with working alliance literature. Perception of match between strength of preference for common factors was the most consistently correlated with quality of life. Together, the common factors measured here may approximate a measure of bond in the therapeutic relationship. From this perspective, it may be that match to preference for these variables suggests a stronger working alliance in therapy, which is related to greater quality of life. Several variables measured in the current study seem conceptually related to tasks of treatment (treatment orientation, specific treatment type), yet perceived match to preference with these variables was less consistently correlated with quality of life scores and was not a significant predictor of quality of life in reddit regression models. Also, a notable number of participants expressed having no preference or not being sure how the different orientations and/or treatments are different from one another. Perhaps then, agreement on specific tasks for treatment is less important to the development of a working alliance that leads to treatment gains.

Although differences in WHOQOL-BREF scores between the reddit and Mturk samples approached statistical significance (reddit sample $M = 79.18$, $SD = 17.02$; Mturk sample $M = 84.26$, $SD = 14.04$; $t(166) = -1.90$, $p = .06$), they were largely consistent with the average score of participants in phase I of the study ($M = 80.00$, $SD = 14.81$). WHOQOL-BREF scores tend to be lower among those with physical and mental illness (Guo-Zhe, et al., 2017; Skevington &McCrate, 2012). Average scores found in the current study are generally consistent with WHOQOL-BREF scores found in other studies investigating the impact of various physical and
psychological disorders on health. For example, Mas-expósito, et al. (2011) found an average total score of 81.82 on the WHOQOL-BREF among patients treated for schizophrenia living in the community. Another study found an average score of 84.13 among older adults with depression (Nuemann & Byrne, 2004). Among diabetes patients, those with symptoms of depression reported a total score of 59.78, while diabetes patients without comorbid depression reported an average total score of 75.10 (Eren, Erdi, & Sahin, 2008).

The overall purpose of the current study was to increase understanding of the disparate findings in treatment preference literature by exploring how preferences for treatment may change over time and whether the strength of preference impacts benefits received from treatment. Results of the study show that for a small percentage of patients, preferences do change over time. This study lends credibility to the idea that changes in preference may account for some of the heterogeneity that exists in treatment preference literature currently.

Limitations

Several limitations exist for the current study. While initially the study was implemented as a longitudinal assessment of preferences, limited recruitment necessitated the transition to a larger participant pool, and the move to a cross sectional design. Data can only be interpreted to the extent that they are assumed accurate and valid. Due to the cross sectional nature of phase II of the study, caution should be taken when interpreting changes in preference and strength of preference over time. It is possible that participants are inaccurate in their recollections of their preferences at the start of treatment. Individuals tend to misremember their past beliefs and actions as having been more consistent with their current beliefs than they actually were (Ross, McFarland, & Fletcher, 1981; Ross, 1989). This suggests that individuals in phase II of the
current study may have underestimated how frequently and to what degree their preferences for treatment have changed over time.

Steps were taken to identify random and/or inattentive responding among the Mturk sample due to the monetary incentive to complete the survey quickly that existed among this recruitment source. Even so, it was noted that two participants who had previously answered a screener questionnaire and been found to meet eligibility criteria later reported that they had been in treatment greater than one year. This suggests at least some inaccuracies in the current data set.

The cross-sectional nature of phase II of the study leaves open the possibility that individuals unintentionally misrepresented their preferences due to biases in memory. However, as this study utilized a self-report format with face-valid questions, it is also possible that respondents misrepresented their true beliefs on the survey in a deliberate attempt to present in a socially desirable way. However, due to the non-controversial nature of most of the survey items, it seems unlikely that there was strong motivation to deliberately provide inaccurate responses due to social desirability.

Related to difficulties with recruitment, the study overall contains a relatively small sample size. Unfortunately, statistical analyses of phase I data was limited to descriptive statistics and as a result, little in the way of prediction can be made from this data. Additionally, a large percentage of potential participants began but did not complete the survey. Because many non-completers answered very few questions, is unknown how non-completers might be different from those who responded to the entire survey. Therefore, it is unknown how results were impacted by the low completion rate.
Additionally, the use of a quality of life measure as the dependent variable for the current study limits the generalizability of results. While some other treatment preference studies have relied on quality of life measures (e.g. Le et al., 2014; Le et al., 2018), most have taken a more traditional symptom-reduction approach to assessing the impact of matching preferences to treatment and have utilized measures designed to assess the presence and severity of symptoms related to specific diagnoses. While quality of life measures offer some advantages to more specific measures of mental health symptoms in that participants with various presenting problems and diagnoses can be assessed using a common metric, such a broad measure is influenced by a vast number of factors, most of which are unmeasured in the current study. This, coupled with the fact that the WHOQOL-BREF was given just one time during phase II of the current study, after participants had already been engaged in treatment for some time, makes disentangling the potential influences on WHOQOL-BREF scores difficult. The current study also utilized overall scores from this measure but did not calculate scores for the various subscales that could have provided more nuanced information about the impact of preference matching.

**Future Directions**

Several studies have attempted to identify mediators and moderators associated with treatment preferences and treatment outcome. The current study explored the impact of a number of factors on treatment preference and outcome, however several other potential mediators have been proposed in the literature and were unexplored in the current study. Some research has suggested that matching patients to their preferred treatment enhances outcome through increased therapeutic alliance and better attendance (Kwan, Dimidjian, & Rizvi, 2010). Given that two of the variables related to quality of life scores in the current study, match to preference
for major goal for treatment and match to strength of preference for common factors, are conceptually related to working alliance as described by Bordin (1979), investigation of therapeutic alliance with a particular focus on goal and bond may be a fruitful avenue for future research.

Swan et al., (2013) was unable to identify demographic variables serving as moderators to the effect of matching to preference on outcome and retention. However, others have hypothesized that “locus of control” may impact the benefit patients receive from expressing and being matched to their preferred treatment, such that those with an internal locus of control (a preference to make decisions) will benefit more from being matched to their preferred treatment, whereas those with an external locus of control may not feel comfortable expressing preferences and may benefit more from following the recommendations of their provider (Kwan, et al., 2010). Other researchers have found that beliefs about the malleability of personal characteristics are related to treatment preferences (Schroder, Dawood, Yalch, Donnelan, & Moser, 2015). It is possible that such beliefs may impact the benefit patients receive from being matched to their preferred treatment. Future research could continue this exploration of the mediators and moderators driving the relationship between match to preference and improved outcomes.

It is also possible that matching to preferred treatments is more important for some preferences than for others. For example, it is possible that the impact of being matched to a preferred therapist matters more when the patient’s preference is for a male therapist than when the patient prefers a female therapist. Due to limited power in the current study, whether matching to some aspects of preferences over others differentially impacts treatment outcome was not assessed.
Another variable that may be affected by treatment preference matching and treatment outcome is client engagement in treatment. While treatment drop out related to treatment preference has been explored in the literature, the client’s level of engagement in the treatment process has been less so. Those who continue to attend treatment sessions when provided with a non-preferred treatment may be less engaged than those who preferred the same treatment. Number of missed and rescheduled sessions, and amount of between-session practice could be used as indicators of engagement that may be impacted by preference match. Future researchers could investigate the role of treatment engagement in driving the relationship between preference match and outcome.
REFERENCES


89


disorder (PTSD). *Quality of Life Research, 27*, 1555-1562.


Appendix A

HSIRB Approval Letter
Date: May 4, 2017

To: Scott Gaynor, Principal Investigator
    Chelsea Sage-Germain, Student Investigator for dissertation

From: Daryle Gardner-Bonneau, Ph.D., Vice Chair

Re: HSIRB Project Number 17-04-13

This letter will serve as confirmation that your research project titled “Treatment Preference, Retention, and Treatment Outcome at a University-Based Outpatient Psychology Clinic” has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., you must request a post approval change to enroll subjects beyond the number stated in your application under “Number of subjects you want to complete the study”). Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: May 3, 2018
Appendix B

Survey: Phase I Copy
First you will be asked some questions to help generate a "user ID" that will allow your responses to be linked the next time you take this survey. Please answer these questions the same way each time you answer this survey, so that your progress can be tracked confidentially over time.

Type in the last letter of your current last name.
________________________________________________________________

Type in the first letter of your mother's maiden name.
________________________________________________________________

Type in the first letter of the month you were born.
________________________________________________________________

Type the last letter of your current middle name.
________________________________________________________________

Type the first number of your current address.
________________________________________________________________

Is this your first time taking this survey?
   o   Yes
   o   No, I have taken this survey at least once before

Please indicate what gender you would prefer your therapist to have.
   o   Male
   o   Female
   o   Transgender
   o   Other
   o   No preference

Please rate how important it is to you that your therapist be of the gender you prefer.
   o   Extremely important
   o   Very important
   o   Moderately important
   o   Slightly important
   o   Not at all important

Are you unwilling to work with a therapist of a particular gender? Please indicate what gender therapist you would be unwilling to work with.
   o   Male
   o   Female
   o   Transgender
   o   Other
   o   No preference
How closely does the treatment you are receiving match your preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please indicate whether you would prefer a therapist who is older, younger, or the same age as yourself.
- I would prefer an older therapist
- I would prefer a younger therapist
- I would prefer a therapist near the same age as myself
- No preference

Please indicate what age you would prefer your therapist to be.
- No preference ...

Please rate how important it is to you that your therapist be of the age/age range you prefer.
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Are you unwilling to work with a therapist of a particular age range? Please indicate the age range of therapist you would be unwilling to work with.
- I would not work with an older therapist
- I would not work with a younger therapist
- I would not work with a therapist near the same age as myself
- No preference

How closely does the treatment you are receiving match your preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please indicate the race/ethnicity you would prefer your therapist to be.
- White/Caucasian
- Black/African American
- Asian
- Pacific Islander
- Native American/American Indian
- Hispanic/Latino(a)
- More than one race
Please rate how important it is to you that your therapist be of the race/ethnicity you prefer.

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Are you unwilling to work with a therapist of a particular race/ethnicity? Please indicate the race/ethnicity of therapist you would be unwilling to work with.

- White/Caucasian
- Black/African American
- Asian
- Pacific Islander
- Native American/American Indian
- Hispanic/Latino(a)
- More than one race
- Other
- No preference

How closely does the treatment you are receiving match your preference in this regard?

- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please indicate the orientation or approach to treatment that you would prefer.

- Behavioral
- Cognitive
- Cognitive/Behavioral
- Psychodynamic
- Humanistic
- I'm not sure how these are different
- I have no preference

Please rate how important it is to you that your treatment be from this approach/orientation.

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Please select the orientations or approaches that you would be unwilling to use.
Behavioral
Cognitive
Cognitive/Behavioral
Psychodynamic
Humanistic
I'm not sure how these are different
I have no preference

How closely does the treatment you are receiving match your preference in this regard?
Extremely close to the ideal
Very close to the ideal
Moderately close to the ideal
Slightly close to the ideal
Not close to the ideal

Please indicate the treatment you would prefer.
Acceptance and Commitment Therapy (ACT)
Behavioral Activation (BA)
Cognitive Behavioral Therapy (CBT)
Dialectical Behavior Therapy (DBT)
Exposure Therapy
Functional Analytic Psychotherapy (FAP)
Habit Reversal
Interpersonal Psychotherapy
Medication
Mindfulness
Motivational Interviewing
Psychoanalysis/Psychoanalytic Psychotherapy
Supportive therapy
Other (Please specify) ________________________________________________
No preference
I'm not sure how these are different

Please rate how important it is to you that you receive this specific treatment.
Extremely important
Very important
Moderately important
Slightly important
Not at all important

Please select the treatments you would be unwilling to use.
Acceptance and Commitment Therapy (ACT)
Behavioral Activation (BA)
Cognitive Behavioral Therapy (CBT)
Dialectical Behavior Therapy (DBT)
Exposure Therapy
- Functional Analytic Psychotherapy (FAP)
- Habit Reversal
- Interpersonal Psychotherapy
- Medication
- Mindfulness
- Motivational Interviewing
- Psychoanalysis/Psychodynamic Psychotherapy
- Supportive therapy
- Other (Please specify) ____________________________
- No preference
- I'm not sure how these are different

How closely does the treatment you are receiving match your preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please indicate your major goal for therapy.
- Acceptance of thoughts and emotions
- Doing things that are important to me
- Changing the way I think
- Managing emotions
- Facing fears
- Changing habits
- Feeling supported
- Being in the present moment
- Increasing motivation to make changes
- Changing my behavior
- Changing my emotions
- Improving my relationships
- No preference/I don't know

Please rate how important it is to you that this be your goal for treatment
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Please indicate areas you are unwilling to work on in treatment
- Acceptance of thoughts and emotions
- Doing things that are important to me
- Changing the way I think
- Managing emotions
Facing fears
Changing habits
Feeling supported
Being in the present moment
Increasing motivation to make changes
Changing my behavior
Changing my emotions
Improving my relationships
No preference/I don’t know

How closely does the treatment you are receiving match your preference in this regard?
Extremely close to the ideal
Very close to the ideal
Moderately close to the ideal
Slightly close to the ideal
Not close to the ideal

How important is it to you to have a supportive therapist?
Extremely important
Very important
Moderately important
Slightly important
Not at all important

How closely does the treatment that you are receiving match your preference in this regard?
Extremely close to the ideal
Very close to the ideal
Moderately close to the ideal
Slightly close to the ideal
Not close to the ideal

How important is it to you to have a trustworthy therapist?
Extremely important
Very important
Moderately important
Slightly important
Not at all important

How closely does the treatment you are receiving match your preference in this regard?
Extremely close to the ideal
Very close to the ideal
Moderately close to the ideal
Slightly close to the ideal
Not close to the ideal

How important is it to you to have a therapist who is a good listener?
102

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

How important is it to you to have a therapist with a warm demeanor?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

How important is it to you to have a therapist who is competent in the specific area you need help with?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

How would you rate your quality of life?
- Very good
- Good
- Neither poor nor good
How satisfied are you with your health?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

The following questions ask about how much you have experienced certain things in the last two weeks.

To what extent do you feel that physical pain prevents you from doing what you need to do?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How much do you need any medical treatment to function in your daily life?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How much do you enjoy life?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

To what extent do you feel your life to be meaningful?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How well are you able to concentrate?
- Not at all
- A little
- A moderate amount
- Very much
An extreme amount

How safe do you feel in your daily life?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How healthy is your physical environment?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

The following questions ask about how completely you experience or were able to do certain things in the last two weeks.

Do you have enough energy for everyday life?
- Not at all
- A little
- Moderately
- Mostly
- Completely

Are you able to accept your bodily appearance?
- Not at all
- A little
- Moderately
- Mostly
- Completely

Have you enough money to meet your needs?
- Not at all
- A little
- Moderately
- Mostly
- Completely

How available to you is the information that you need in your day-to-day life?
- Not at all
- A little
- Moderately
- Mostly
- Completely
To what extent do you have the opportunity for leisure activities?
- Not at all
- A little
- Moderately
- Mostly
- Completely

How well are you able to get around?
- Very poor
- Poor
- Neither poor nor well
- Well
- Very well

The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the last two weeks.

How satisfied are you with your sleep?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your ability to perform your daily living activities?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your capacity for work?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with yourself?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied
How satisfied are you with your personal relationships?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your sex life?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with the support you get from your friends?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with the conditions of your living place?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your access to health services?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your mode of transportation?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

The following question refers to how often you have felt or experienced certain things in the last two weeks.

How often do you have negative feelings, such as blue mood, despair, anxiety, depression?
- Never
What is the problem or concern that brings you to treatment? Please choose the one best answer.
- Academic difficulty
- Attention/concentration difficulty
- Anger management
- Anxiety
- Assessment
- Cognitive/memory concerns
- Depression
- Grief/bereavement
- Obsessions/compulsive behavior
- Parenting concerns
- Relationship difficulties
- Stress management
- Tic disorder
- Trauma
- Other (Please specify) ________________________________________________

Which of the following best describes your gender identity?
- Male
- Female
- Transgender
- Other
- Prefer not to answer

What is your age?
- 18 ... 66+

Which of the following best describes your ethnicity?
- White/Caucasian
- Black/African American
- Asian
- Pacific Islander
- Native American/American Indian
- Hispanic/Latino(a)
- I identify with more than one race
- I prefer not to answer
- Other ________________________________________________

Which of the following best describes your marital status?
- Never been married
- Married/committed partnership
Separated
Divorced
Widowed

Are you currently enrolled as a student?
Yes
No

What is your year in school?
Freshman undergraduate
Sophomore undergraduate
Junior undergraduate
Senior undergraduate
Graduate student--Master's Level
Graduate student--Doctoral Level
other

What is your employment status?
Employed full time
Employed part time
Not currently employed

Which of the following best describes your level of income over the past year?
$0-$9,999
$10,000-$19,999
$20,000-$29,999
$30,000-$39,999
$40,000-$49,000
$50,000 or above
Appendix C

Survey: Reddit Recruitment
How many months have you been in your current treatment?
- Less than one month
- One to three
- Four to six
- Six to eight
- Eight to ten
- Eleven or more

How many sessions of treatment have you had?
- One to three
- Four to six
- Six to eight
- Eight to ten
- Eleven or more

Please answer the following questions about your preferences prior to beginning your most recent phase of treatment. Answer as you would have before beginning your first treatment session.

Just prior to beginning treatment, what gender did you prefer your therapist to have?
- Male
- Female
- Transgender
- Other
- No preference

Please rate how important it was to you that your therapist be of the gender you prefer.
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Were you unwilling to work with a therapist of a particular gender? Please indicate what gender therapist you were unwilling to work with.
- Male
- Female
- Transgender
- Other
- No preference

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has your preference regarding therapist gender changed since you have been in treatment?
- Yes, my preference has changed, or the strength of my preference has changed
- No, my preference is the same
Just prior to beginning treatment, did you prefer a therapist who is older, younger, or the same age as yourself?

- I would prefer an older therapist
- I would prefer a younger therapist
- I would prefer a therapist near the same age as myself
- No preference

Please indicate what age you preferred your therapist to be.

- No preference ... 66+

Please rate how important it was to you that your therapist be of the age/age range you preferred

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Were you unwilling to work with a therapist of a particular age range? Please indicate the age range of therapist you were unwilling to work with.

- I would not work with an older therapist
- I would not work with a younger therapist
- I would not work with a therapist near the same age as myself
- No preference

How closely does the treatment you are receiving match your initial preference in this regard?

- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has your preference regarding therapist age changed since you have been in treatment?

- Yes, my preference has changed, or the strength of my preference has changed
- No, my preference is the same

Just prior to beginning treatment, what race/ethnicity did you prefer your therapist to be?

- White/Caucasian
- Black/African American
- Asian
- Pacific Islander
- Native American/American Indian
- Hispanic/Latino(a)
- More than one race
- other ________________________________
- No preference
Please rate how important it was to you that your therapist be of the race/ethnicity you preferred.
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Were you unwilling to work with a therapist of a particular race/ethnicity? Please indicate the race/ethnicity of therapist you were unwilling to work with.
- White/Caucasian
- Black/African American
- Asian
- Pacific Islander
- Native American/American Indian
- Hispanic/Latino(a)
- More than one race
- Other ________________________________________________
- No preference

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has your preference regarding therapist race/ethnicity changed since you have been in treatment?
- Yes, my preference has changed, or the strength of my preference has changed
- No, my preference is the same

Please answer the following questions about your preferences prior to beginning your most recent phase of treatment. Answer as you would have before beginning your first treatment session.

Just prior to beginning treatment, what orientation or approach to treatment did you prefer?
- Behavioral
- Cognitive
- Cognitive/Behavioral
- Psychodynamic
- Humanistic
- I'm not sure how these are different
- I have no preference

Please rate how important it was to you that your treatment be from this approach/orientation.
- Extremely important
Very important
Moderately important
Slightly important
Not at all important

Please select the orientations or approaches that you were unwilling to use.

Behavioral
Cognitive
Cognitive/Behavioral
Psychodynamic
Humanistic
I'm not sure how these are different
I am fine with any of these

How closely does the treatment you are receiving match your initial preference in this regard?
Extremely close to the ideal
Very close to the ideal
Moderately close to the ideal
Slightly close to the ideal
Not close to the ideal

Has your preference regarding treatment approach/orientation changed since you have been in treatment?
Yes, my preference has changed, or the strength of my preference has changed
No, my preference is the same

Just prior to beginning treatment, what treatment type did you prefer?
Acceptance and Commitment Therapy (ACT)
Behavioral Activation (BA)
Cognitive Behavioral Therapy (CBT)
Dialectical Behavior Therapy (DBT)
Exposure Therapy
Functional Analytic Psychotherapy (FAP)
Habit Reversal
Interpersonal Psychotherapy
Medication
Mindfulness
Motivational Interviewing
Psychoanalysis/Psychoanalytic Psychotherapy
Supportive therapy
Other (Please specify)  
No preference
I'm not sure how these are different

Please rate how important it was to you that you receive this specific treatment.
Extremely important
Please select the treatments you were **unwilling** to use.

- Acceptance and Commitment Therapy (ACT)
- Behavioral Activation (BA)
- Cognitive Behavioral Therapy (CBT)
- Dialectical Behavior Therapy (DBT)
- Exposure Therapy
- Functional Analytic Psychotherapy (FAP)
- Habit Reversal
- Interpersonal Psychotherapy
- Medication
- Mindfulness
- Motivational Interviewing
- Psychoanalysis/Psychoanalytic Psychotherapy
- Supportive therapy
- Other (Please specify) ________________________________________________
- No preference
- I'm not sure how these are different

How closely does the treatment you are receiving match your initial preference in this regard?

- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has your preference regarding treatment type changed since you have been in treatment?

- Yes, my preference has changed, or the strength of my preference has changed
- No, my preference is the same

Just prior to beginning treatment, what was your major goal for therapy?

- Acceptance of thoughts and emotions
- Doing things that are important to me
- Changing the way I think
- Managing emotions
- Facing fears
- Changing habits
- Feeling supported
- Being in the present moment
- Increasing motivation to make changes
- Changing my behavior
- Changing my emotions
Improving my relationships
No preference/I don't know

Please rate how important it was to you that this be your goal for treatment
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Please indicate areas you were unwilling to work on in treatment
- Acceptance of thoughts and emotions
- Doing things that are important to me
- Changing the way I think
- Managing emotions
- Facing fears
- Changing habits
- Feeling supported
- Being in the present moment
- Increasing motivation to make changes
- Changing my behavior
- Changing my emotions
- Improving my relationships
- No preference/I don't know

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has your preference regarding treatment goal changed since you have been in treatment?
- Yes, my preference has changed, or the strength of my preference has changed
- No, my preference is the same

Please answer the following questions about your preferences prior to beginning your most recent phase of treatment. Answer as you would have before beginning your first treatment session.

Just prior to beginning treatment, how important was it to you to have a supportive therapist?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important
How closely does the treatment that you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has the level of importance you place on therapist supportiveness changed since you have been in treatment?
- Yes, I feel differently about how important it is
- No, it is just as important (or unimportant) as it was before

Just prior to beginning treatment, how important was it to you to have a trustworthy therapist?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has the level of importance you place on therapist trustworthiness changed since you have been in treatment?
- Yes, I feel differently about how important it is
- No, it is just as important (or unimportant) as it was before

Just prior to beginning treatment, how important was it to you to have a therapist who is a good listener?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
Has the level of importance you place on the therapist being a good listener changed since you have been in treatment?
- Yes, I feel differently about how important it is
- No, it is just as important (or unimportant) as it was before

Just prior to beginning treatment, how important was it to you to have a therapist with a warm demeanor?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has the level of importance you place on therapist warmth changed since you have been in treatment?
- Yes, I feel differently about how important it is
- No, it is just as important (or unimportant) as it was before

Just prior to beginning treatment, how important was it to you to have a therapist who is competent in the specific area you need help with?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has the level of importance you place on therapist competence changed since you have been in treatment?
- Yes, I feel differently about how important it is
- No, it is just as important (or unimportant) as it was before
Please answer the following questions about your preferences currently.

Please indicate what gender you now prefer your therapist to have.

- Male
- Female
- Transgender
- Other
- No preference

Please rate how important it is to you that your therapist be of the gender you prefer.

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Are you unwilling to work with a therapist of a particular gender? Please indicate what gender therapist you were unwilling to work with.

- Male
- Female
- Transgender
- Other
- No preference

How closely does the treatment you are receiving match your current preference in this regard?

- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please indicate whether you currently prefer a therapist who is older, younger, or the same age as yourself.

- I would prefer an older therapist
- I would prefer a younger therapist
- I would prefer a therapist near the same age as myself
- No preference

Please indicate what age you currently prefer your therapist to be.

- No preference ...

Please rate how important it is to you that your therapist be of the age/age range you prefer.

- Extremely important
- Very important
- Moderately important
Are you unwilling to work with a therapist of a particular age range? Please indicate the age range of therapist you were unwilling to work with.
- I would not work with an older therapist
- I would not work with a younger therapist
- I would not work with a therapist near the same age as myself
- No preference

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please indicate the race/ethnicity you currently prefer your therapist to be.
- White/Caucasian
- Black/African American
- Asian
- Pacific Islander
- Native American/American Indian
- Hispanic/Latino(a)
- More than one race
- Other ______________________________________________________________________
- No preference

Please rate how important it is to you that your therapist be of the race/ethnicity you prefer
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Are you unwilling to work with a therapist of a particular race/ethnicity? Please indicate the race/ethnicity of therapist you are unwilling to work with.
- White/Caucasian
- Black/African American
- Asian
- Pacific Islander
- Native American/American Indian
- Hispanic/Latino(a)
- More than one race
- Other ______________________________________________________________________
- No preference
How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please answer the following questions about your preferences currently.

Please indicate the orientation or approach to treatment that you currently prefer.
- Behavioral
- Cognitive
- Cognitive/Behavioral
- Psychodynamic
- Humanistic
- I'm not sure how these are different
- I have no preference

Please rate how important it is to you that your treatment be from this approach/orientation.
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Please select the orientations or approaches that you are unwilling to use.
- Behavioral
- Cognitive
- Cognitive/Behavioral
- Psychodynamic
- Humanistic
- I'm not sure how these are different
- I am fine with any of these

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please indicate the treatment you currently prefer.
- Acceptance and Commitment Therapy (ACT)
- Behavioral Activation (BA)
- Cognitive Behavioral Therapy (CBT)
Dialectical Behavior Therapy (DBT)
Exposure Therapy
Functional Analytic Psychotherapy (FAP)
Habit Reversal
Interpersonal Psychotherapy
Medication
Mindfulness
Motivational Interviewing
Psychoanalysis/Psychoanalytic Psychotherapy
Supportive therapy
Other (Please specify) ________________________________________________
No preference
I'm not sure how these are different

Please rate how important it is to you that you receive this specific treatment.
Extremely important
Very important
Moderately important
Slightly important
Not at all important

Please select the treatments you are unwilling to use.
Acceptance and Commitment Therapy (ACT)
Behavioral Activation (BA)
Cognitive Behavioral Therapy (CBT)
Dialectical Behavior Therapy (DBT)
Exposure Therapy
Functional Analytic Psychotherapy (FAP)
Habit Reversal
Interpersonal Psychotherapy
Medication
Mindfulness
Motivational Interviewing
Psychoanalysis/Psychoanalytic Psychotherapy
Supportive therapy
Other (Please specify) ________________________________________________
No preference
I'm not sure how these are different

How closely does the treatment you are receiving match your current preference in this regard?
Extremely close to the ideal
Very close to the ideal
Moderately close to the ideal
Slightly close to the ideal
Not close to the ideal
Please indicate your major goal for therapy currently.
- Acceptance of thoughts and emotions
- Doing things that are important to me
- Changing the way I think
- Managing emotions
- Facing fears
- Changing habits
- Feeling supported
- Being in the present moment
- Increasing motivation to make changes
- Changing my behavior
- Changing my emotions
- Improving my relationships
- No preference/I don't know

Please rate how important it is that this be your goal for treatment.
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Please indicate areas you are unwilling to work on in treatment.
- Acceptance of thoughts and emotions
- Doing things that are important to me
- Changing the way I think
- Managing emotions
- Facing fears
- Changing habits
- Feeling supported
- Being in the present moment
- Increasing motivation to make changes
- Changing my behavior
- Changing my emotions
- Improving my relationships
- No preference/I don't know

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please answer the following questions about your preferences currently.
How important is it to you currently to have a supportive therapist?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment that you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

How important is it to you currently to have a trustworthy therapist?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

How important is it to you currently to have a therapist who is a good listener?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

How important is it to you currently to have a therapist with a warm demeanor?
- Extremely important
- Very important
How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

How important is it to you currently to have a therapist who is competent in the specific area you need help with?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

How would you rate your quality of life?
- Very good
- Good
- Neither poor nor good
- Poor
- Very poor

How satisfied are you with your health?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

The following questions ask about how much you have experienced certain things in the last two weeks.

To what extent do you feel that physical pain prevents you from doing what you need to do?
- Not at all
- A little
o A moderate amount
o Very much
o An extreme amount

How much do you need any medical treatment to function in your daily life?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How much do you enjoy life?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

To what extent do you feel your life to be meaningful?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How well are you able to concentrate?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How safe do you feel in your daily life?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How healthy is your physical environment?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount
The following questions ask about how completely you experience or were able to do certain things in the last **two weeks**.

**Do you have enough energy for everyday life?**
- Not at all
- A little
- Moderately
- Mostly
- Completely

**Are you able to accept your bodily appearance?**
- Not at all
- A little
- Moderately
- Mostly
- Completely

**Have you enough money to meet your needs?**
- Not at all
- A little
- Moderately
- Mostly
- Completely

**How available to you is the information that you need in your day-to-day life?**
- Not at all
- A little
- Moderately
- Mostly
- Completely

**To what extent do you have the opportunity for leisure activities?**
- Not at all
- A little
- Moderately
- Mostly
- Completely

**How well are you able to get around?**
- Very poor
- Poor
- Neither poor nor well
- Well
- Very well
The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the last **two weeks**.

How satisfied are you with your sleep?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your ability to perform your daily living activities?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your capacity for work?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with yourself?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your personal relationships?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your sex life?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with the support you get from your friends?
Very dissatisfied
Dissatisfied
Neither satisfied nor dissatisfied
Satisfied
Very satisfied

How satisfied are you with the conditions of your living place?
Very dissatisfied
Dissatisfied
Neither satisfied nor dissatisfied
Satisfied
Very satisfied

How satisfied are you with your access to health services?
Very dissatisfied
Dissatisfied
Neither satisfied nor dissatisfied
Satisfied
Very satisfied

How satisfied are you with your mode of transportation?
Very dissatisfied
Dissatisfied
Neither satisfied nor dissatisfied
Satisfied
Very satisfied

The following question refers to how often you have felt or experienced certain things in the last **two weeks**.

How often do you have negative feelings, such as blue mood, despair, anxiety, depression?
Never
Seldom
Quite often
Very often
Always

What is the problem or concern that brings you to treatment? Please choose the one best answer.
Academic difficulty
Attention/concentration difficulty
Anger management
Anxiety
Assessment
Cognitive/memory concerns
Depression
Grief/bereavement
Obsessions/compulsive behavior
Parenting concerns
Relationship difficulties
Stress management
Tic disorder
Trauma
Other (Please specify) ________________________________________________

Which of the following best describes your gender identity?
Male
Female
Transgender
Other
Prefer not to answer

What is your age?
18 ... 66+

Which of the following best describes your ethnicity?
White/Caucasian
Black/African American
Asian
Pacific Islander
Native American/American Indian
Hispanic/Latino(a)
I identify with more than one race
I prefer not to more than one race
Other ________________________________________________

Which of the following best describes your marital status?
Never been married
Married/committed partnership
Separated
Divorced
Widowed

Are you currently enrolled as a student?
Yes
No

What is your year in school?
Freshman undergraduate
Sophomore undergraduate
Junior undergraduate
Senior undergraduate
Graduate student--Master's Level
What is your employment status?
- Employed full time
- Employed part time
- Not currently employed

Which of the following best describes your level of income over the past year?
- $0-$9,999
- $10,000-$19,999
- $20,000-$29,999
- $30,000-$39,999
- $40,000-$49,000
- $50,000 or above

How were you directed to this survey?
- By my therapist
- By some other source
Appendix D

Survey: Mturk Screener
How often have you used alcohol in the last 90 days?
- Daily
- 4-6 times a week
- 2-3 times a week
- Once a week
- Never

Have you ever been diagnosed with a mental illness/mental disorder?
- Yes
- No

To what extent do you feel uncomfortable in social situations?
- A great deal
- A lot
- A moderate amount
- A little
- Not at all

Are you currently active in treatment for a mental health issue?
- Yes
- No

How many months have you been in your current treatment?
- Less than one month ... Over one year

How many sessions of treatment have you had?
- One to three
- Four to six
- Six to eight
- Eight to ten
- Eleven or more

Thank you for your participation. You will earn $.02 for your participation after submitting a response to this question, or you may continue to participate and earn an additional $2.98 (for a total of $3). Would you like to continue?
- Yes- take me to additional questions
- No- I am done participating
Appendix E

Survey: Mturk Recruitment
How many months have you been in your current treatment?
- Less than one month ... Over one year

How many sessions of treatment have you had?
- One to three
- Four to six
- Six to eight
- Eight to ten
- Eleven or more

Please answer the following questions about your preferences prior to beginning your most recent phase of treatment. Answer as you would have before beginning your first treatment session.

Just prior to beginning treatment, what gender did you prefer your therapist to have?
- Male
- Female
- Transgender
- Other
- No preference

Please rate how important it was to you that your therapist be of the gender you prefer.
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Were you unwilling to work with a therapist of a particular gender? Please indicate what gender therapist you were unwilling to work with.
- Male
- Female
- Transgender
- Other
- No preference

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has your preference regarding therapist gender changed since you have been in treatment?
- Yes, my preference has changed, or the strength of my preference has changed
- No, my preference is the same
I have been to every country in the world.
- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Just prior to beginning treatment, did you prefer a therapist who is older, younger, or the same age as yourself?
- I would prefer an older therapist
- I would prefer a younger therapist
- I would prefer a therapist near the same age as myself
- No preference

Please indicate what age you preferred your therapist to be.
- No preference ... 66+

Please rate how important it was to you that your therapist be of the age/age range you preferred
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Were you unwilling to work with a therapist of a particular age range? Please indicate the age range of therapist you were unwilling to work with.
- I would not work with an older therapist
- I would not work with a younger therapist
- I would not work with a therapist near the same age as myself
- No preference

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has your preference regarding therapist age changed since you have been in treatment?
- Yes, my preference has changed, or the strength of my preference has changed
- No, my preference is the same

Just prior to beginning treatment, what race/ethnicity did you prefer your therapist to be?
- White/Caucasian
- Black/African American
- Asian
Please rate how important it was to you that your therapist be of the race/ethnicity you preferred.

<table>
<thead>
<tr>
<th>Rating</th>
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<tbody>
<tr>
<td>Extremely important</td>
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<td>Very important</td>
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<tr>
<td>Moderately important</td>
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<tr>
<td>Slightly important</td>
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<tr>
<td>Not at all important</td>
</tr>
</tbody>
</table>

Were you unwilling to work with a therapist of a particular race/ethnicity? Please indicate the race/ethnicity of therapist you were unwilling to work with.

- White/Caucasian
- Black/African American
- Asian
- Pacific Islander
- Native American/American Indian
- Hispanic/Latino(a)
- More than one race
- other ________________________________
- No preference

How closely does the treatment you are receiving match your initial preference in this regard?

<table>
<thead>
<tr>
<th>Closeness</th>
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<tbody>
<tr>
<td>Extremely close to the ideal</td>
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<td>Very close to the ideal</td>
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<td>Moderately close to the ideal</td>
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<td>Slightly close to the ideal</td>
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<td>Not close to the ideal</td>
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</tbody>
</table>

Has your preference regarding therapist race/ethnicity changed since you have been in treatment?

<table>
<thead>
<tr>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, my preference has changed, or the strength of my preference has changed</td>
</tr>
<tr>
<td>No, my preference is the same</td>
</tr>
</tbody>
</table>

Please answer the following questions about your preferences prior to beginning your most recent phase of treatment. Answer as you would have before beginning your first treatment session.

Just prior to beginning treatment, what orientation or approach to treatment did you prefer?

- Behavioral
- Cognitive
- Cognitive/Behavioral
- Psychodynamic
Humanistic
I'm not sure how these are different
I have no preference

Please rate how important it was to you that your treatment be from this approach/orientation.
Extremely important
Very important
Moderately important
Slightly important
Not at all important

Please select the orientations or approaches that you were unwilling to use.
Behavioral
Cognitive
Cognitive/Behavioral
Psychodynamic
Humanistic
I'm not sure how these are different
I am fine with any of these

How closely does the treatment you are receiving match your initial preference in this regard?
Extremely close to the ideal
Very close to the ideal
Moderately close to the ideal
Slightly close to the ideal
Not close to the ideal

Has your preference regarding treatment approach/orientation changed since you have been in treatment?
Yes, my preference has changed, or the strength of my preference has changed
No, my preference is the same

Just prior to beginning treatment, what treatment type did you prefer?
Acceptance and Commitment Therapy (ACT)
Behavioral Activation (BA)
Cognitive Behavioral Therapy (CBT)
Dialectical Behavior Therapy (DBT)
Exposure Therapy
Functional Analytic Psychotherapy (FAP)
Habit Reversal
Interpersonal Psychotherapy
Medication
Mindfulness
Motivational Interviewing
Psychoanalysis/Psychoanalytic Psychotherapy
Supportive therapy
Please rate how important it was to you that you receive this specific treatment.
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Please select the treatments you were unwilling to use.
- Acceptance and Commitment Therapy (ACT)
- Behavioral Activation (BA)
- Cognitive Behavioral Therapy (CBT)
- Dialectical Behavior Therapy (DBT)
- Exposure Therapy
- Functional Analytic Psychotherapy (FAP)
- Habit Reversal
- Interpersonal Psychotherapy
- Medication
- Mindfulness
- Motivational Interviewing
- Psychoanalysis/Psychoanalytic Psychotherapy
- Supportive therapy
- Other (Please specify) ________________________________
- No preference
- I'm not sure how these are different

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has your preference regarding treatment type changed since you have been in treatment?
- Yes, my preference has changed, or the strength of my preference has changed
- No, my preference is the same

All of my friends are aliens.
- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree
Just prior to beginning treatment, what was your major goal for therapy?
- Acceptance of thoughts and emotions
- Doing things that are important to me
- Changing the way I think
- Managing emotions
- Facing fears
- Changing habits
- Feeling supported
- Being in the present moment
- Increasing motivation to make changes
- Changing my behavior
- Changing my emotions
- Improving my relationships
- No preference/I don't know

Please rate how important it was to you that this be your goal for treatment
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Please indicate areas you were unwilling to work on in treatment
- Acceptance of thoughts and emotions
- Doing things that are important to me
- Changing the way I think
- Managing emotions
- Facing fears
- Changing habits
- Feeling supported
- Being in the present moment
- Increasing motivation to make changes
- Changing my behavior
- Changing my emotions
- Improving my relationships
- No preference/I don't know

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has your preference regarding treatment goal changed since you have been in treatment?
Please answer the following questions about your preferences prior to beginning your most recent phase of treatment. Answer as you would have before beginning your first treatment session.

Just prior to beginning treatment, how important was it to you to have a supportive therapist?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment that you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has the level of importance you place on therapist supportiveness changed since you have been in treatment?
- Yes, I feel differently about how important it is
- No, it is just as important (or unimportant) as it was before

Just prior to beginning treatment, how important was it to you to have a trustworthy therapist?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has the level of importance you place on therapist trustworthiness changed since you have been in treatment?
- Yes, I feel differently about how important it is
- No, it is just as important (or unimportant) as it was before
Just prior to beginning treatment, how important was it to you to have a therapist who is a good listener?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has the level of importance you place on the therapist being a good listener changed since you have been in treatment?
- Yes, I feel differently about how important it is
- No, it is just as important (or unimportant) as it was before

Just prior to beginning treatment, how important was it to you to have a therapist with a warm demeanor?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has the level of importance you place on therapist warmth changed since you have been in treatment?
- Yes, I feel differently about how important it is
- No, it is just as important (or unimportant) as it was before

Just prior to beginning treatment, how important was it to you to have a therapist who is competent in the specific area you need help with?
- Extremely important
- Very important
- Moderately important
- Slightly important
How closely does the treatment you are receiving match your initial preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Has the level of importance you place on therapist competence changed since you have been in treatment?
- Yes, I feel differently about how important it is
- No, it is just as important (or unimportant) as it was before

Please answer the following questions about your preferences currently.

Please indicate what gender you now prefer your therapist to have.
- Male
- Female
- Transgender
- Other
- No preference

Please rate how important it is to you that your therapist be of the gender you prefer.
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Are you unwilling to work with a therapist of a particular gender? Please indicate what gender therapist you were unwilling to work with.
- Male
- Female
- Transgender
- Other
- No preference

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal
Please indicate whether you currently prefer a therapist who is older, younger, or the same age as yourself.
  o I would prefer an older therapist
  o I would prefer a younger therapist
  o I would prefer a therapist near the same age as myself
  o No preference

Please indicate what age you currently prefer your therapist to be.
  o No preference ... 66+

Please rate how important it is to you that your therapist be of the age/age range you prefer
  o Extremely important
  o Very important
  o Moderately important
  o Slightly important
  o Not at all important

Are you unwilling to work with a therapist of a particular age range? Please indicate the age range of therapist you were unwilling to work with.
  o I would not work with an older therapist
  o I would not work with a younger therapist
  o I would not work with a therapist near the same age as myself
  o No preference

How closely does the treatment you are receiving match your current preference in this regard?
  o Extremely close to the ideal
  o Very close to the ideal
  o Moderately close to the ideal
  o Slightly close to the ideal
  o Not close to the ideal

Please indicate the race/ethnicity you currently prefer your therapist to be.
  o White/Caucasian
  o Black/African American
  o Asian
  o Pacific Islander
  o Native American/American Indian
  o Hispanic/Latino(a)
  o More than one race
  o other ______________________________________________
  o No preference

Please rate how important it is to you that your therapist be of the race/ethnicity you prefer
  o Extremely important
  o Very important
  o Moderately important
  o Slightly important
Are you unwilling to work with a therapist of a particular race/ethnicity? Please indicate the race/ethnicity of therapist you are unwilling to work with.

- White/Caucasian
- Black/African American
- Asian
- Pacific Islander
- Native American/American Indian
- Hispanic/Latino(a)
- More than one race
- other ___________________________________________________
- No preference

How closely does the treatment you are receiving match your current preference in this regard?

- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please answer the following questions about your preferences currently.

Please indicate the orientation or approach to treatment that you currently prefer.

- Behavioral
- Cognitive
- Cognitive/Behavioral
- Psychodynamic
- Humanistic
- I'm not sure how these are different
- I have no preference

Please rate how important it is to you that your treatment be from this approach/orientation.

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Please select the orientations or approaches that you are unwilling to use.

- Behavioral
- Cognitive
- Cognitive/Behavioral
- Psychodynamic
- Humanistic
- I'm not sure how these are different
I am fine with any of these

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

Please indicate the treatment you currently prefer.
- Acceptance and Commitment Therapy (ACT)
- Behavioral Activation (BA)
- Cognitive Behavioral Therapy (CBT)
- Dialectical Behavior Therapy (DBT)
- Exposure Therapy
- Functional Analytic Psychotherapy (FAP)
- Habit Reversal
- Interpersonal Psychotherapy
- Medication
- Mindfulness
- Motivational Interviewing
- Psychoanalysis/Psychoanalytic Psychotherapy
- Supportive therapy
- Other (Please specify)
- No preference
- I'm not sure how these are different

Please rate how important it is to you that you receive this specific treatment.
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

Please select the treatments you are unwilling to use.
- Acceptance and Commitment Therapy (ACT)
- Behavioral Activation (BA)
- Cognitive Behavioral Therapy (CBT)
- Dialectical Behavior Therapy (DBT)
- Exposure Therapy
- Functional Analytic Psychotherapy (FAP)
- Habit Reversal
- Interpersonal Psychotherapy
- Medication
- Mindfulness
- Motivational Interviewing
Psychoanalysis/Psychoanalytic Psychotherapy
Supportive therapy
Other (Please specify) ________________________________________________
No preference
I'm not sure how these are different

How closely does the treatment you are receiving match your current preference in this regard?
Extremely close to the ideal
Very close to the ideal
Moderately close to the ideal
Slightly close to the ideal
Not close to the ideal

Please indicate your major goal for therapy currently.
Acceptance of thoughts and emotions
Doing things that are important to me
Changing the way I think
Managing emotions
Facing fears
Changing habits
Feeling supported
Being in the present moment
Increasing motivation to make changes
Changing my behavior
Changing my emotions
Improving my relationships
No preference/I don't know

Please rate how important it is that this be your goal for treatment
Extremely important
Very important
Moderately important
Slightly important
Not at all important

Please indicate areas you are unwilling to work on in treatment
Acceptance of thoughts and emotions
Doing things that are important to me
Changing the way I think
Managing emotions
Facing fears
Changing habits
Feeling supported
Being in the present moment
Increasing motivation to make changes
Changing my behavior
o Changing my emotions
o Improving my relationships
o No preference/I don't know

How closely does the treatment you are receiving match your current preference in this regard?

How important is it to you currently to have a supportive therapist?

How closely does the treatment that you are receiving match your current preference in this regard?

How important is it to you currently to have a trustworthy therapist?

How closely does the treatment you are receiving match your current preference in this regard?

I sleep less than one hour per night

Please answer the following questions about your preferences currently.
How important is it to you currently to have a therapist who is a good listener?
- Somewhat agree
- Strongly agree
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

How important is it to you currently to have a therapist with a warm demeanor?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal

How important is it to you currently to have a therapist who is competent in the specific area you need help with?
- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How closely does the treatment you are receiving match your current preference in this regard?
- Extremely close to the ideal
- Very close to the ideal
- Moderately close to the ideal
- Slightly close to the ideal
- Not close to the ideal
How would you rate your quality of life?
- Very good
- Good
- Neither poor nor good
- Poor
- Very poor

How satisfied are you with your health?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

The following questions ask about how much you have experienced certain things in the last two weeks.

To what extent do you feel that physical pain prevents you from doing what you need to do?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How much do you need any medical treatment to function in your daily life?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How much do you enjoy life?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

To what extent do you feel your life to be meaningful?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How well are you able to concentrate?
How safe do you feel in your daily life?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

How healthy is your physical environment?
- Not at all
- A little
- A moderate amount
- Very much
- An extreme amount

The following questions ask about how completely you experience or were able to do certain things in the last two weeks.

Do you have enough energy for everyday life?
- Not at all
- A little
- Moderately
- Mostly
- Completely

Are you able to accept your bodily appearance?
- Not at all
- A little
- Moderately
- Mostly
- Completely

I do not understand a word of English.
- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Have you enough money to meet your needs?
- Not at all
How available to you is the information that you need in your day-to-day life?
- Not at all
- A little
- Moderately
- Mostly
- Completely

To what extent do you have the opportunity for leisure activities?
- Not at all
- A little
- Moderately
- Mostly
- Completely

How well are you able to get around?
- Very poor
- Poor
- Neither poor nor well
- Well
- Very well

The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the last two weeks.

How satisfied are you with your sleep?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your ability to perform your daily living activities?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your capacity for work?
- Very dissatisfied
- Dissatisfied
How satisfied are you with yourself?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your personal relationships?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your sex life?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with the support you get from your friends?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

All of my friends say I would make a great poodle
- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

How satisfied are you with the conditions of your living place?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied
How satisfied are you with your access to health services?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

How satisfied are you with your mode of transportation?
- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

The following question refers to how often you have felt or experienced certain things in the last two weeks.

How often do you have negative feelings, such as blue mood, despair, anxiety, depression?
- Never
- Seldom
- Quite often
- Very often
- Always

What is the problem or concern that brings you to treatment? Please choose the one best answer.
- Academic difficulty
- Attention/concentration difficulty
- Anger management
- Anxiety
- Assessment
- Cognitive/memory concerns
- Depression
- Grief/bereavement
- Obsessions/compulsive behavior
- Parenting concerns
- Relationship difficulties
- Stress management
- Tic disorder
- Trauma
- Other (Please specify) ________________________________________________

Which of the following best describes your gender identity?
- Male
- Female
- Transgender
- Other
What is your age?
- 18 ... 66+

Which of the following best describes your ethnicity?
- White/Caucasian
- Black/African American
- Asian
- Pacific Islander
- Native American/American Indian
- Hispanic/Latino(a)
- I identify with more than one race
- I prefer not to answer
- other

Which of the following best describes your marital status?
- Never been married
- Married/committed partnership
- Separated
- Divorced
- Widowed

I am paid biweekly by leprechauns.
- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Are you currently enrolled as a student?
- Yes
- No

What is your year in school?
- Freshman undergraduate
- Sophomore undergraduate
- Junior undergraduate
- Senior undergraduate
- Graduate student--Master's Level
- Graduate student--Doctoral Level
- other

What is your employment status?
- Employed full time
- Employed part time
Not currently employed

Which of the following best describes your level of income over the past year?
- $0-$9,999
- $10,000-$19,999
- $20,000-$29,999
- $30,000-$39,999
- $40,000-$49,000
- $50,000 or above

You have reached the end of the survey
- Take me to my custom validation code