Predicting Attrition from Counseling in a University Counseling Center Sample Using the Outcome Questionnaire-45.2

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Abstract
Background Premature termination from counseling is a pervasive problem across college campuses; thus, predicting counseling dropout may encourage counseling centers to develop methods to reduce the risk of attrition from counseling. This study examined the relationship between psychological distress and premature termination from therapy in counseling center clients, as measured by the Outcome Questionnaire-45.2. Method Archival data were collected from a student counseling center at a large Midwestern university. Across the previous five year period, 70 male and 128 female client files were grouped by attrition status (intake only, premature termination, planned termination). Results There was a significant gender by termination status interaction for symptom distress. Women with higher symptom distress scores were at a higher risk for premature dropout from counseling. Conclusions These results suggest the importance of considering the potential impact of symptom distress on early dropout in university counseling centers.

INTRODUCTION
Premature termination from counseling is an issue that concerns many counseling center professionals. As many as 50% of students who seek services drop out of counseling prematurely (1). Counseling center resources are not utilized effectively when clients drop out of counseling prematurely. Even more importantly, clients’ needs may not be addressed adequately when early termination occurs.

Premature termination from counseling may happen for a variety of reasons. Sometimes clients experience decreased distress or symptom relief and drop out of counseling after only one session, though the counselor may be left to wonder whether problems may recur due to unresolved underlying issues. Perhaps factors extraneous to counseling, such as financial difficulties, job requirements, or other situational stressors may interfere with the ability of clients to continue in counseling. In addition, seeking services elsewhere or dissatisfaction with counseling services sometimes leads to premature dropout (5). Thus, dropping out of counseling prematurely may mean that client needs are not being met and problems presented by clients remain unaddressed in counseling. Furthermore, premature termination of counseling may impact the counselor’s own sense of well-being in that the counselor may worry about the client and the outcome of the client’s situation. Also, if premature terminations are perceived as treatment failures by peers or supervisors, counselors may have self-doubts about their performance as therapists (3).

From a resource management standpoint, when clients do not return for scheduled sessions, counselors may not be available for other client appointments, resulting in wasted counseling resources in terms of counselor time. This squandered resource is problematic – particularly so in tight budget conditions when counseling center directors are called upon to justify resource expenditures and minimize client time spent on waiting lists. While changes in intake procedures have been studied for their impact on reducing this problem (4), using assessment data at intake is another important preventative strategy to consider. For these reasons, helping counseling center professionals predict the risk of premature termination and then developing and implementing strategies to reduce that risk is important. Variables that have been examined include assessment instruments (5) and sex-related variables (6).

The use of assessment data in clinical decision making in counseling center practice has been studied, and in particular
the Outcome Questionnaire-45.2 (OQ-45)\(^7\) has been used to predict client outcome based upon severity level of presenting concern. The OQ-45 is a widely used and useful clinical and research tool\(^8\). The OQ-45 has been used to identify the number of sessions required for university counseling students to experience clinically significant change\(^9,10\), to examine the amount of treatment necessary for clinical change needed by clients with varying severity levels\(^10\), and to predict treatment recovery or failure in university counseling students\(^8,11,12\). According to prior research, minor differences on subscales of the OQ-45 have been found between genders in a Dutch sample\(^13\); however, no significant gender differences have been discovered for American samples\(^7,13\). Yet, research has shown that women and men tend to utilize counseling resources differently. For example, previous studies indicate that men in North America use psychological resources less than half as often as women do\(^14,15\). Men have lower rates of help-seeking behavior than women for problems ranging from stressful life events and depression to substance abuse\(^16,17\). Research suggests that an emphasis on traditional masculinity may be a contributing factor to a negative attitude toward seeking psychological help\(^18\). Therefore, it is important to explore differences in patterns of premature termination associated with gender in this study. However, in general, we expect that those with higher OQ-45 distress scores will be more likely to successfully complete counseling, whereas those with lower scores may be at higher risk for premature termination.

The purpose of the present study is to predict unplanned and planned termination of counseling services in a university counseling center using scores from the Outcome Questionnaire-45.2\(^7\). The present research examines three categories of counseling center clients: 1) those who attend only the intake session and then prematurely terminate, 2) those who attend the intake session and at least one additional session and then prematurely terminate, and 3) those who have a planned termination. For the present study, scores from initial administrations of the OQ-45 were analyzed to assess differences among these three groups. While this study is exploratory in nature, we believe that for both men and women, clients who dropped out of counseling prior to a planned termination would have lower OQ distress scores due to their self-perception of not needing further counseling, while clients who successfully completed counseling would present with high distress levels upon intake and through treatment perceived benefit from the counseling process.

**METHOD**

**PROCEDURE AND PARTICIPANTS**

This study was approved by the university’s Institutional Review Board for the collection of archival data from the counseling center. In order to assess differences in OQ-45 scores for clients who prematurely terminated from those who had planned terminations, 220 files from a large Midwestern university counseling center were randomly selected for review. The files represented clients who had been seen at the counseling center during the previous five years. During the time of the data collection, the center was staffed by psychologists, licensed professional counselors, unlicensed counselors, and student trainees. The counselors experience ranged from over 20 years to new professionals. Student trainees were from doctoral level psychology training programs and masters level training programs. The staff race/ethnicities were Caucasian, African American, Native American, and there were international students among the trainee groups.

The intake procedure at this counseling center is as follows: the majority of clients who contact the center requesting counseling are seen initially by an intake counselor, who would typically refer that client on to another counselor at the center for counseling. The OQ-45 is routinely administered to clients as part of the intake procedure.

Utilizing counselor notes from the files, client termination status was determined and categorized into one of three groups: those who dropped out after completing only the initial intake session (intake only) \((n=33)\), those who attended at least one counseling session after the intake (premature termination) \((n=94)\), and those who completed counseling (planned termination) \((n=71)\). This procedure yielded 198 client files with complete data. All clients were current students at the university. Of these clients, 70 were men and 128 were women, and 76 of the clients were seen by a male therapist, and 122 were seen by a female therapist. Clients’ mean age and standard deviation were 22.83 and 5.65, respectively. No significant differences in age were found by termination group or gender. The race/ethnicity of the clients was noted as 82% Caucasian American, 5% International, 3% African American, 3% Native American, 3% Hispanic American, 2% multiracial, and 1% Asian American. The demographics of this sample are representative of the university counseling center population.
where the study was conducted.

**INSTRUMENT**

The OQ-45 is a theoretically derived instrument with subscales assessing three constructs: Symptom Distress (SD), Interpersonal Relations (IR), and Social Role performance (SR)\(^7\). The questionnaire includes items for assessing anxiety, depression, interpersonal conflict, and performance concerns. It is a 45-item self-report measure that asks clients to respond to the statements using a 5-point scale, ranging from (0) Never to (4) Almost Always. Some items are reverse scored. Total scores can range from 0 to 180. The total score is highly correlated with the distress subscale and is best conceived of as a measure of psychological distress\(^9\). The Symptom Distress subscale consists of 25 items. An example item is, “I feel blue”; higher scores are indicative of experiencing distress from symptoms common across a wide range of mental health disorders such as anxiety, depression, and substance abuse problems. The Interpersonal Relations subscale consists of 11 items. An example item is, “I feel lonely”. Higher scores on this subscale are indicative of poor functioning in relationships with others. The Social Role performance subscale has 9 items. An example item is, “I feel stressed at work/school”. Higher scores on this subscale are indicative of lower functioning in work and school settings.

In a university sample, internal consistencies for the SD subscale, IR subscale, SR subscale, and total score were 0.92, 0.74, 0.70, and 0.93, respectively. In a clinical sample, internal consistencies for the SD subscale, IR subscale, SR subscale, and total score were 0.91, 0.74, 0.71, and 0.93, respectively\(^7\). These findings indicate adequate reliability and validity for the OQ Total score and SD subscale score, while the reliabilities of the IR and SR subscale scores are sufficient. OQ-45 scores were obtained following the administration of the instrument immediately preceding the intake interview. Cronbach alpha reliability coefficients for this sample were: SD = 0.93, IR = 0.78, SR = 0.70, and Total score = 0.94.

**STATISTICAL ANALYSIS**

In order to assess differences among gender and termination group status (intake only, premature termination, or planned termination) a series of four two-way analyses of variance (ANOVA) (gender x group termination status) were conducted, using the three subscales and total score of the OQ-45 as the dependent variables. In order to further explore whether or not individuals with a certain presenting concern were distributed equally across the three groups, Fisher’s exact probabilities were computed using an on-line program\(^20\). ANOVAs were computed using SPSS 16.0 computer software\(^21\).

**RESULTS**

A series of four two-way analyses of variances (gender by termination status) were conducted on OQ total scores, OQ Symptom Distress subscale scores, OQ Interpersonal Relations subscale scores, and OQ Social Role performance subscale scores. Results yielded significant interaction effects for OQ total scores, \(F(2, 192) = 3.41, p = 0.035\), and Symptom Distress scores \(F(2, 192) = 4.92, p = 0.015\), yielding partial eta squared effect sizes of 0.034 and 0.043, respectively. The only other significant difference was a gender main effect difference for Symptom Distress scores, \(F(1, 192) = 5.52, p = 0.020\) with a partial eta squared effect size of 0.028. There were no significant main effect differences for termination classification group. Mean scores and standard deviations for the OQ total score and the OQ SD subscale scores by termination classification and gender are presented in Table 1.

**Figure 1**

Table 1: OQ-45 Total and Symptom Distress Subscale Mean Scores and Standard Deviations by Gender and Termination Group

In order to further understand the interaction effects, follow-up t tests were computed between men and women in each of the three groups for both the OQ Total Scores and the Symptom Distress Scores. For those in the intake only group, men scored significantly lower on both their Total OQ scores \((t = 2.49, df = 31, p = 0.019)\) as well as their
Symptom Distress scores ($t = 3.25, \text{df} = 31, p = 0.003$). There was no significant difference between men and women in the premature termination status group for both total scores ($t = 1.40, \text{df} = 92, p = 0.164$) and Symptom Distress scores ($t = 1.36, \text{df} = 92, p = 0.176$). There was also no significant difference between men and women in the planned termination group for both total scores ($t = 1.06, \text{df} = 69, p = 0.294$) and Symptom Distress scores ($t = 0.831, \text{df} = 69, p = 0.410$). Figure 1 shows the interaction effect for the OQ-45 Total scores; Figure 2 displays the interaction effect for the Symptom Distress subscale scores. As can be seen from these figures, for both analyses (OQ Total scores and OQ Symptom Distress scores), mean scores for women were highest in the group which terminated after the initial intake, lower for those who prematurely terminated, and lowest for those who successfully completed counseling. For men, the opposite was the case. Men’s scores were lowest for those who dropped out immediately after the intake, higher for those who prematurely terminated, and highest for those who successfully completed counseling.

To further explore these results, data regarding presenting concerns were collected from client files. It should be noted that clients were instructed to indicate all of the presenting concerns that needed addressing. These data are summarized in Table 2. As indicated in Table 2, stress, relationship issues, depression, and anxiety were the most often indicated concerns across the client groups.

In order to assess whether the three therapy groups differed between those with and those without a particular concern, a series of Fisher exact probabilities were computed for both men and women. As can be seen from Table 2, only one area of concern in the female sample (Anxiety) was statistically significant at the 0.05 alpha level. This difference, however, should be interpreted with caution since 30 separate analyses were conducted and it is quite possible that this difference is due to chance. In fact, had the Bonferroni correction been made to the alpha level, this concern would have not been statistically significant. Thus, these concerns appear to be equally spread across the client groups, with no one concern being most evident in any one category of client status.
Figure 4
Table 2: Number of Clients Indicating Presenting Concerns by Gender, Termination Group, and Fisher Exact Probabilities

<table>
<thead>
<tr>
<th>Concern</th>
<th>Gender</th>
<th>Intake Only</th>
<th>Premature Termination</th>
<th>Planned Termination</th>
<th>Fisher (p-value)</th>
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<tr>
<td>Current indisc</td>
<td>Men</td>
<td>12</td>
<td>10</td>
<td>2</td>
<td>0.73</td>
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<tr>
<td>Relationship</td>
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<td>12</td>
<td>4</td>
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<tr>
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<td>Men</td>
<td>18</td>
<td>10</td>
<td>4</td>
<td>0.48</td>
</tr>
<tr>
<td>Stress</td>
<td>Men</td>
<td>18</td>
<td>10</td>
<td>4</td>
<td>0.48</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Men</td>
<td>18</td>
<td>10</td>
<td>4</td>
<td>0.48</td>
</tr>
<tr>
<td>Symptom Distress</td>
<td>Men</td>
<td>18</td>
<td>10</td>
<td>4</td>
<td>0.48</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Men</td>
<td>18</td>
<td>10</td>
<td>4</td>
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<tr>
<td>Social Role</td>
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<td>10</td>
<td>4</td>
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DISCUSSION

In the present study, we expected that clients who dropped out of counseling prior to a planned termination would have lower OQ distress scores, while clients who successfully completed counseling would present with high distress levels upon intake. Among men, we found a suggestion of this pattern for the total OQ score due to the presence of a significant interaction without a significant gender main effect. This pattern occurred for the Symptom Distress subscale where there was a significant main effect for gender and also a significant interaction. Surprisingly, the Symptom Distress subscale shows that for women, those with higher Symptom Distress subscale scores at intake completed therapy (i.e., premature and planned termination) at a lower rate than men. We did not find any such patterns for Interpersonal Relations and Social Role performance subscale scores.

Prior research has not revealed significant gender differences for therapy termination in American samples\(^7\,13\); thus, the findings in the current study that women who have higher scores on the OQ Symptom Distress subscale upon intake tend to drop out of counseling prematurely, while men with higher scores tend to complete therapy, is somewhat puzzling and is of concern. Specifically, we are concerned that women who sought psychological services at this center are at risk of premature dropout from therapy. This premature termination could result in unmet clinical needs for these women. Quite simply, those who need help the most may not be receiving the services they need. If this trend – premature termination by women with high levels of symptom distress is present at university counseling centers, it is important to alert counselors to the possibility that women who need services are not completing the counseling process. Moreover, gender differences in mental health-seeking behavior and duration of therapy need to be examined further.

Considering possible explanations for premature termination by distressed women will help to generate hypotheses that may be tested empirically and possible interventions to lower premature termination rates in the counseling population. Possible reasons for premature termination suggested by other researchers include personal or extraneous difficulties unrelated to counseling, receipt of services elsewhere, or dissatisfaction with counseling services\(^2\). Other possible explanations for the findings in this study include the following: 1. High rates of premature termination by distressed women may be unique to the sample of clients from the university counseling center examined in the present research and these results may not generalize to other university counseling centers. This hypothesis should be tested empirically in future research. 2. Perhaps women who present with higher symptom distress scores receive a cathartic benefit from the intake session and do not need or do not perceive a need for additional services. 3. Another possibility is that women may have alternatives to counseling, such as a wider social support system, journaling, or various other resources that men may not be as likely to utilize or have available. However, this alternative explanation does not explain why women with lower levels of symptom distress complete therapy at higher rates than those with higher levels of distress. 4. As discussed previously, these clients could have situational stressors arise that prevent their return to counseling.

While the aforementioned explanations for the findings in this study all relate to the clients, it is also important to consider the role of the counselor in the issue of premature termination. Were the counselors in this study skilled at...
assessing clients’ need to return for additional services? Was there a tendency on the part of the counselors to err on the side of safety with the client and schedule a follow-up appointment that may not have been therapeutically necessary? This explanation would make some sense for the men in this study, but it does not fit the data as well for the women. However, we have no reason to suggest that men were considered any different than women with regard to scheduling appointments. It is important to know the possible reasons for early dropout from counseling. However, without knowing the true underlying reasons for terminating services, as in the present study, counselors in university counseling settings are left with unanswered questions regarding why their clients are not returning for expected sessions. As with this study, most researchers have used archival data as a means to investigate premature termination; additionally, only a few studies have asked clients about their personal reasons for discontinuing counseling\(^{(22)}\). Based on the current findings, it is not only critical to ascertain reasons for early dropout of counseling services in order to effectively serve clients, but it is also necessary to investigate gender differences in dropout based on levels of symptom distress. It also is important to consider testing and implementing new strategies to prevent unplanned termination.

**LIMITATIONS**

Several limitations to this study are apparent. First, data were drawn from one university counseling center, limiting the ability to generalize to other counseling centers. While we have no evidence to suggest this result is unique to the one site where we collected data, it is important to replicate this study to determine if this is an isolated finding from this center, or if in fact this tendency for women with greater symptom distress to prematurely terminate is found at other counseling centers. Further research should collect data from multiple sites to improve the generalizability of these findings. Also, data regarding reasons for terminating counseling services were unavailable for analysis in this study. Perhaps with more data from a larger sample of counseling centers with documented reasons for client dropout, the questions raised regarding the differences in client gender and levels of symptom distress upon intake can be studied more thoroughly. Another limitation is that the number of men in the intake only group was smaller than the size of the other groups in the analysis. In future studies, a sample that included more men would address this concern. Another limitation is that the change in therapists after the initial evaluation may have had a negative impact upon therapeutic alliance, particularly with women with higher reported symptoms. Also, as questions about the use of the subscales of this instrument have been raised\(^{(9,11)}\), some could argue against our findings for the Symptom Distress subscale. Lastly, only one measure of symptom distress was used in this study. Perhaps using other personality or behavioral measures other than psychological distress could provide additional insight into the issues surrounding premature termination.

**PRACTICE IMPLICATIONS**

While this study was limited to one site and has other limitations noted above, we propose the following strategies in hopes of preventing premature termination for women, as well as men, in treatment at university counseling centers, and suggest that these strategies be tested empirically. We suggest that counselors quickly identify female clients with high levels of symptom distress and in the first counseling session directly discuss with them the tendency for women with higher symptom distress scores to prematurely terminate counseling. Discussing assessment results and predicting premature termination is an immediate and low-cost step that could be taken with highly distressed female clients that may have an ameliorative effect on this problem. This is consistent with those who believe that if counselors communicate effectively with clients\(^{(9,11)}\) they may be able to minimize attrition. Conversely, addressing premature termination concerns with men who present with lower symptom distress scores on the OQ-45 may also reduce attrition. We also think it wise to more closely examine the induction to counseling process used by counseling centers and begin treatment with women sooner. A suggestion for counseling center staff would be to engage in additional follow-up contacts with women who present with high symptom distress scores prior to the next counseling session. More specifically, with client permission, initiating an e-mail, telephone, or text message follow-up with appointment reminders is suggested. We also encourage centers to examine the traditional clinic procedures used for client management and allow for more variation in scheduling procedures for clients with higher symptom distress scores. While it is common now for clients assessed to be in immediate crisis to be seen more often and have an appointment scheduled very soon after an intake interview, perhaps this flexibility should be extended to women clients with high symptom distress scores at intake.
References

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