

Measuring Psychotherapy Outcomes: Feedback to Counselors and Clients

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Abstract

Objective: To evaluate methods of measuring psychotherapy outcomes and uses of feedback to improve clinical services to clients in a college counseling center setting.

Design: Systematic review of research evaluating use of outcome measures and feedback to counselors and clients. This review focused primarily on RCTs comparing feedback conditions to treatment as usual in university or college counseling center settings.

Results: Two well-researched measures were identified: OQ-45 and PCOMS. Feedback to counselors or both counselors and clients using these measures significantly improved outcomes over treatment as usual. Clients achieved clinically significant change more often and in fewer sessions than those clients who did not receive feedback or whose therapist did not receive feedback. This was especially true for those clients at risk for dropout or poor outcomes.

Conclusions: Of the two measures, PCOMS was selected as the most practical and effective for use in a college counseling center setting. Routine outcome monitoring and feedback is recommended for current counselors as well as counselors in training. Limitations of the current study and directions for future research are presented.

Measuring Psychotherapy Outcomes: Feedback to Counselors and Clients

It is increasingly evident that there is a need for measuring and tracking psychotherapy outcomes. Community mental health centers and private practices are required to provide documentation to managed health care companies supporting the efficacy of their services in order to receive reimbursement. College and university counseling and student mental health centers must justify their existence among other campus programs vying for funding (Talley & Clack, 2006). Grant funding for various programs and initiatives requires program evaluation. Providing data which support the claim that counseling produces measurable improvement in clients' well-being is essential for fiscal and institutional effectiveness accountability (Talley & Clack, 2006).

There are a multitude of other, non-financial reasons for tracking therapy outcomes. Counselors in training need feedback on their developing skills. Research on the outcomes of counseling furthers scientific knowledge about the connections between mind, body, and emotions. And, most importantly, therapists have an ethical mandate to provide the most efficient, practical, and effective treatments available.

Many researchers and practitioners agree that *evidence-based practice* is the standard for which to aim. Counselors are encouraged to use theories and techniques that have empirical support for being effective for particular types of mental health issues or with particular populations. Other researchers point out that by incorporating continuous outcome measurement into practice and providing this as feedback to counselors and even clients, that the direction of therapy can be adjusted on an individual basis (Duncan, 2012; Sparks & Duncan, 2018). This strategy is referred to as using *practice-based evidence*.

Conducting client-focused research examining what is working or not working for a particular client right now is to be distinguished from research on average client response in experimental settings (efficacy research) or in naturalistic settings (effectiveness research). Client-focused research is especially relevant and practically helpful for practicing therapists (Lambert et al., 2002). Client-focused research can be used to make decisions about the course of therapy one client at a time.

In order to measure and track counseling outcomes, reliable and valid outcome assessments are necessary. These assessments must be of practical usefulness (i.e., counselors must see a benefit of using them and they must not be too cumbersome for routine use). Additionally, a system is needed for differentiating clients who are making good progress, those who have achieved all the benefit they can from counseling, those whose therapy is not progressing as expected, and those who are at risk for dropout or poor outcomes (Whipple et al., 2003).

In sum, measuring outcomes is increasingly expected of therapists, whether due to requirements of managed care, in order to contribute to knowledge in the field, to improve counselor skills, or to provide the highest level of care to clients. Making outcome data available to counselors and clients allows counselors to make adjustments in the course of therapy and empowers clients to take an active role in their own therapy. Because college and university counseling centers are important settings for providing services, training new counselors, conducting valuable research, and measuring institutional effectiveness, they are a good place to begin an examination of outcomes and feedback. Consequently, this research focused on identifying effective ways to measure outcomes and use feedback to improve services in a college counseling setting.

Literature Search

I searched for articles that addressed measuring outcomes of counseling or psychotherapy and found more than thirty. Some of them were theoretical articles that discussed effectiveness of therapy generally, the common factors that contribute to client change, or the importance of evaluating outcomes. Some analyzed outcomes at the therapist level (Goldberg et al., 2016; Okiishi et al, 2006). Some articles described and evaluated specific outcome assessments. The assessments identified included the Working Alliance Inventory (WAI), the Partners for Change Outcome Management System (PCOMS; Duncan, 2012), the Outcome Questionnaire-45 (OQ-45; Lambert et al, 2002), the College Adjustment Scales (CAS; Nafziger, Couillard, & Smith, 1999), the Problem Resolution Outcome Survey (PROS; Heppner, Cooper, Mulholland, & Wei, 2001), and the Behavior And Symptom Identification Scale (BASIS-32; Brattland et al, 2018).

Two measures stood out above the others as being well-researched and having good reliability and validity: the OQ-45 (Appendix A) and PCOMS (Appendix B) instruments. These instruments had also both been incorporated into systems of continuous outcome monitoring and feedback to counselors or counselors and clients. Because I was also interested in how feedback could be used to benefit counselors and clients, I narrowed my search to focus mainly on random controlled trials (RCTs) using these instruments. I was primarily interested in use of these systems in college counseling centers, so I chose studies done in this type of setting. I selected 10 well-designed studies to include in the annotated bibliography (Appendix C) and, from those, five representative studies are presented in more depth in the next section.

In several of the studies comparing a feedback condition to treatment as usual, investigators reported results in terms of *reliable change* and *clinically significant* or *meaningful change*, terms posited by Jacobson and Truax (1991). Reliable change is change in an outcome

measure score that exceeds measurement error based on the reliability of the measure and the sample standard deviation. Clinically significant change requires both reliable change and movement from a score representative of a dysfunctional population to a score representative of a functional population (Jacobson & Truax, 1991).

The OQ-45 is a 45-item, self-report checklist of symptoms which takes approximately 7 minutes to complete (Talley & Clack, 2006). Internal consistency for the OQ-45 was $r = 0.93$ and 3-week test-retest reliability was $r = 0.84$. Concurrent validity estimates comparing the OQ-45 with a variety of other self-report outcome scales ranged from 0.50 to 0.85 (Lambert et al., 2002). The Reliable Change Index (RCI) for the OQ-45 was estimated to be 14 points and the cut-off score which demarcates a change from a dysfunctional to a functional population to be 64 (Lambert et al., 2002). Scores on the OQ-45 can range from 0 to 180, with higher scores indicating more clinical symptoms. Thus, clients scoring 64 or above are considered to be in the clinical range of dysfunction. A copy of the OQ-45 checklist and instructions for scoring can be found in Appendix A.

PCOMS is a measure of client outcomes and therapeutic alliance that is designed to be integrated into the therapy process. PCOMS is very brief, consisting of two 4-item scales. The Outcome Rating Scale (ORS) focuses on clinical outcomes and the Session Rating Scale (SRS) focuses on assessing the therapeutic alliance. This system is quick and easy to use and incorporates discussion of the results by therapist and client into each session (Lambert & Vermeersch, 2008). Internal consistency for PCOMS as reported by Reese, Norsworthy, and Rowlands (2009) was $r = 0.88$ and $r = 0.84$ for two separate samples. And the test-retest reliability was $r = 0.51$ and $r = 0.72$ (Reese et al., 2009). Evidence for construct validity was demonstrated by a correlation between PCOMS and the OQ-45, $r = 0.59$ (Reese et al., 2009). A

number of other studies cite evidence for PCOM's concurrent and predictive validity (Duncan, 2012; Duncan & Reese, 2015; Reese, Norsworthy, & Rowlands, 2009; Sparks & Duncan, 2018). The RCI for PCOMS is 6 points and the cut-off score is 25 (Duncan & Reese, 2015). Scores on the ORS can range from 0 to 40 with lower scores indicating greater dysfunction. A copy of the ORS and SRS can be found in Appendix B.

Findings

Brattland et al. (2018) randomly assigned 161 clients in a mental health clinic to either routine outcome monitoring or treatment as usual groups. In the routine outcome monitoring condition therapists used PCOMS to measure and give feedback on outcomes to clients. Clients who received routine outcome monitoring were 2.5 times more likely than treatment as usual clients to show improvement as measured by another outcome measure, BASIS-32. The pre-post effect size was $d = 0.42$. This is considered a small to medium effect size.

In a meta-analysis of 13 RCTs, Lambert and Shimokawa (2011) compared four different conditions using two outcome measurement systems: 1) PCOMS used to provide feedback to all clients and therapists, 2) the OQ-45 used to provide feedback for therapists with clients who were not on track to show improvement, 3) the OQ-45 used to provide feedback and Clinical Support Tools for therapists of not-on-track clients, and 4) the OQ-45 used to provide feedback to both not-on-track clients and their therapists. Feedback significantly improved clinical outcomes over treatment as usual. Effect sizes for these conditions varied from $r = 0.23$ to $r = 0.33$, 95% CI, $p < .001$. The authors recommended that clinicians consider including formal methods of client feedback into their routine practice.

In an RCT of 1020 university counseling center clients, using the OQ-45, Lambert et al. (2002) found that the average outcome for clients who were not progressing as expected (not-on-track) and whose therapists were given feedback on their status was significantly better than those clients who were not-on-track and there was no feedback given. The effect size of this difference was $d = 0.40$. This study also found that almost twice as many clients in the feedback condition achieved reliable or clinically significant change as in the no-feedback condition and fewer deteriorated during therapy (Lambert et al, 2002).

Reese, Norsworthy, and Rowlands (2009) studied 74 university counseling center clients and 74 graduate training center clients who were randomly assigned to a routine outcome monitoring group or a treatment as usual group. Therapists of those clients assigned to routine outcome monitoring used PCOMS at each session to measure outcomes and therapeutic alliance, charted the data, and shared it with clients. Results in this study indicated that clients who received feedback on their rated outcomes and quality of therapeutic alliance reported more change than clients who did not receive feedback (and whose therapists did not receive feedback on their clients' outcomes). Additionally, clients in the feedback condition achieved reliable change in fewer sessions than clients in the no-feedback condition. Effect sizes for the two samples were $d = .54$ and $d = .49$.

Wolgast, Lambert, and Puschner (2004) studied 788 university counseling center clients and performed survival analysis to determine number of sessions required to achieve *reliable* and *clinically significant* change (Appendix C). Using the OQ-45, they found that 24% of clients achieved *reliable* change by 4 sessions, 51% achieved reliable change by 10 sessions, and 75% achieved reliable change after 24 sessions. The study showed that 26% of clients achieved *clinically significant* change after 7 sessions, 51% percent achieved clinically significant change

after 14 sessions, and 68% achieved clinically significant change after 24 sessions. This study demonstrated the importance of measuring outcomes and the effective use of the OQ-45. It also brought into question the practice of setting arbitrary session limits on college counseling centers, thus preventing the recovery of a large number of clients that could otherwise be helped.

Results from these five studies are summarized in Table 1.

Table 1

Use of Psychotherapy Outcome Measures and Feedback to Improve Services

References	Participants	Type of Study	Outcome Measures Used	Findings
Brattland, H., Koksvik, J. M., Burkeland, O., Grawe, R. W., Klockner, C., Linaker, O. M., . . . Iversen, V. C. (2018)	161 clients at a hospital-based mental health clinic	RCT: routine outcome monitoring (ROM) vs. treatment as usual (TAU)	PCOMS ^a , BASIS-32 ^b	Clients who received ROM were 2.5 times more likely than TAU to show improvement as measured by BASIS-32. The prepost effect size was $d = .42$.
Lambert, M. J. & Shimokawa, K. (2011)	2,042 therapy clients (combined from 13 studies)	Meta-analysis of 13 RCTs	PCOMS OQ-45 ^c	Providing continuous feedback on client outcomes to both therapists and clients or therapists alone improved clinical outcomes over TAU. Effect sizes varied from $r = .23$ to $r = .33$, 95% <i>CI</i> , $p < .001$.
Lambert, M. J., Whipple, J. L., Vermeersch, D. A., Smart, D. W., Hawkins, E. J., Nielsen, S. L., & Goates, M. (2002)	1020 university counseling center clients	Experimental (ROM and feedback) and control (TAU) groups comparison	OQ-45	Feedback to therapists significantly improved outcomes for those clients who were deemed at risk for poor therapy outcomes. Almost twice as many clients in the feedback group achieved clinically significant or reliable change ^d compared to controls. Effect size was $d = .40$.
Reese, R. J., Norsworthy, L. A., & Rowlands, S. R. (2009)	74 college counseling center clients; 74 graduate training clinic clients	2 RCTs	PCOMS	Feedback to therapists and clients on clients' ratings of outcomes and therapeutic alliance resulted in significantly more improvement compared to controls. Effect sizes for the two samples were $d = .54$ and $d = .49$.
Wolgast, B. M., Lambert, M. J., & Puschner, B. (2004)	788 university counseling center clients	Survival analysis of outcomes and number of therapy sessions	OQ-45	This study found that 51% of clients achieved reliable change by 10 sessions and 51% of clients achieved clinically significant change ^d by 14 sessions.

^aPCOMS – Partnership for Change Outcome Management System. ^bBASIS-32 – Behavior And Symptom Identification Scale. ^cOQ-45 – Outcome Questionnaire. ^dClinically significant change is defined as 1) client improvement beyond a cutoff score which distinguishes functional from non-functional samples, and 2) the change across time is statistically reliable (i.e., greater than measurement error).

Conclusions

Two outcome measures with good reliability and validity were found: the Outcome Questionnaire (OQ-45) and Partnership for Change Outcome Management System (PCOMS). Both OQ-45 and PCOMS provide systems of measuring outcomes and giving feedback. OQ-45 is a 45-item symptom checklist which takes approximately 7 minutes to complete. Because of its length, some research participants and counselors were resistant to using it at every session. Although it is a robust measure, it would be difficult to ensure good cooperation and routine monitoring and feedback with this system.

PCOMS consists of two 4-item assessments designed to be integrated into the beginning and end of each therapy session. It is designed to make the client an equal partner in the therapeutic alliance, and prioritize the client's theory of change. It could easily be used in graduate counselor training programs to help ensure high quality service, to train graduate level counselors, and measure clinical effectiveness. Because of its ease of use and therapeutic benefits, PCOMS is the most practical and beneficial choice for use in a college counseling center.

The studies in this systematic review demonstrated support for the idea that routine outcome monitoring, combined with feedback to therapists and clients, significantly improved clients' outcomes over treatment as usual. Specifically, feedback to counselors and clients using OQ-45 and PCOMS increased the effectiveness of counseling. With the OQ-45 system presented by Lambert and colleagues (Choi, Buskey, & Johnson, 2010; Lambert et al, 2002;

Lambert & Shimokawa, 2011; Shimokawa, Lambert, & Smart, 2010; Talley & Clack, 2006; Whipple et al, 2003; Wolgast et al, 2004), those clients who were at risk of poor outcomes were identified and counselors were notified and, in some cases, given suggestions regarding what measures they could take to correct the trajectory. Overall, feedback to therapists significantly improved outcomes for these clients. Clients in the feedback groups achieved clinically significant or reliable change more often than those in control groups.

In the PCOMS system, counselors incorporated discussion of therapeutic gains and the quality of the therapeutic alliance into the therapy session with significantly improved outcomes for those clients compared to treatment as usual clients (Brattland et al, 2018; Duncan, 2012; Duncan, 2014; Duncan & Moynihan, 1994; Duncan & Reese, 2015; Lambert & Shimokawa, 2011; Reese et al, 2009). Clients who received routine outcome monitoring and feedback from their therapists using PCOMS experienced more improvement in their functioning than did controls.

Strengths and Limitations

Many of the studies examined in this systematic review were RCTs, a methodological design which can provide clear evidence for or against the effectiveness of a treatment. All of the RCTs showed evidence that feedback improved therapeutic outcomes. A few of the studies were conducted in a setting other than a university counseling center setting, giving support for the claim that feedback is beneficial irrespective of setting.

There were several limitations of the studies examined here. One was the cost of implementing these outcome monitoring and feedback systems. Subscriptions to software for administering PCOMS and OQ-45, computer tablets, and training for supervisors and counselors

are required for full implementation (Brattland et al, 2018). These are not within the budget for many private practices, mental health clinics, or small college counseling centers (Vespia, 2007). The financial profit to developers of these systems also constitutes a conflict of interest in research that they conducted on the effectiveness of their own measures.

Another limitation is the variability in training for and implementation of the feedback systems. In some studies, supervisors and counselors were trained by developers of the instruments and in others, training was not described. Most counselors will not have the benefit of being trained by experts, thus, generalizability of these studies is compromised. Implementation factors were not well measured in any of the studies. Amount of training, adherence to guidelines, therapists' attitudes towards the system, and whether cases were discussed in supervision were not considered in these studies (Brattland et al, 2018).

Further limitations included the fact that other treatments clients may have received outside the studies were not assessed, there was sole reliance on self-report measures in all the studies, and many potential participants were not included in studies because of missing data or other noncompliance. All of these things limit the generalizability of this research.

There are many possibilities for new directions for future research on outcome measurement and feedback. A closer examination of when routine outcome monitoring is and is not effective as well as looking at therapist effects would shed light on the mechanisms through which feedback benefits clients (Brattland et al, 2018). Studies looking at the ways that routine outcome monitoring and feedback might interact with different theories or techniques used by therapists would be helpful. Future research focusing on using feedback in counselor training could improve counselor education.

An examination of a wider range of treatment settings and patient populations would be beneficial (Lambert & Shimokawa, 2011). Much research is done with college students and is therefore not always generalizable to other populations. Although this was the focus of interest here, more research on other populations and with various theoretical orientations would be helpful to further support the evidence presented here that continuous outcome monitoring and feedback to clients and counselors is an effective addition to whatever style of counseling a therapist uses.

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Appendix A

Outcome Questionnaire Instrument and Instructions

Outcome Questionnaire (OQ®-45.2)

Instructions: Looking back over the last week, including today, help us understand how you have been feeling. Read each item carefully and mark the box under the category which best describes your current situation. For this questionnaire, work is defined as employment, school, housework, volunteer work, and so forth. Please do not make any marks in the shaded areas.

Name: _____ Age: _____ yrs.
 Sex
 ID# _____ M F

Session # _____ Date ____/____/____

	Never	Rarely	Sometimes	Frequently	Almost Always	SD	IR	SR
1. I get along well with others.....	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0			
2. I tire quickly.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
3. I feel no interest in things.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
4. I feel stressed at work/school.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
5. I blame myself for things.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
6. I feel irritated.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
7. I feel unhappy in my marriage/significant relationship.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
8. I have thoughts of ending my life.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
9. I feel weak.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
10. I feel fearful.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
11. After heavy drinking, I need a drink the next morning to get going. (If you do not drink, mark "never")	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
12. I find my work/school satisfying.....	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0			<input type="checkbox"/>
13. I am a happy person.....	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0			
14. I work/study too much.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
15. I feel worthless.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
16. I am concerned about family troubles.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
17. I have an unfulfilling sex life.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
18. I feel lonely.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
19. I have frequent arguments.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
20. I feel loved and wanted.....	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0		<input type="checkbox"/>	
21. I enjoy my spare time.....	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0			<input type="checkbox"/>
22. I have difficulty concentrating.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
23. I feel hopeless about the future.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
24. I like myself.....	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0			
25. Disturbing thoughts come into my mind that I cannot get rid of.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
26. I feel annoyed by people who criticize my drinking (or drug use)..... (If not applicable, mark "never")	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
27. I have an upset stomach.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
28. I am not working/studying as well as I used to.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
29. My heart pounds too much.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
30. I have trouble getting along with friends and close acquaintances.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
31. I am satisfied with my life.....	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0			
32. I have trouble at work/school because of drinking or drug use..... (If not applicable, mark "never")	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
33. I feel that something bad is going to happen.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
34. I have sore muscles.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
35. I feel afraid of open spaces, of driving, or being on buses, subways, and so forth.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
36. I feel nervous.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
37. I feel my love relationships are full and complete.....	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0		<input type="checkbox"/>	
38. I feel that I am not doing well at work/school.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
39. I have too many disagreements at work/school.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
40. I feel something is wrong with my mind.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
41. I have trouble falling asleep or staying asleep.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
42. I feel blue.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
43. I am satisfied with my relationships with others.....	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0		<input type="checkbox"/>	
44. I feel angry enough at work/school to do something I might regret.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
45. I have headaches.....	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			
							<input type="checkbox"/>	<input type="checkbox"/>
							Total=	

Developed by Michael J. Lambert, Ph.D. and Gary M. Borfingens, Ph.D.
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Scoring and Interpreting the Outcome Questionnaire-45

Scoring

The OQ-45 provides a total score and three subscores.

1. To score the OQ-45, simply write the numeric value (found next to each client response box) selected by the client in the corresponding scoring box found to the right of each item on the right side of the questionnaire. There is one scoring box for each item which will automatically place the score for any item into its specific subscale category. *Please note that the numeric values for items 1, 12, 13, 20, 21, 24, 31, 37, 43 are in reverse.*
2. When the score for each item has been written in the corresponding box, add up each vertical column of numbers, and write the total for each column in the space provided in the bottom right-hand corner of the sheet. This will leave 3 column totals, each representing one of the three subscales for the OQ.
3. When these three column totals are added together, a total score for the questionnaire will be obtained which should be written in the total box found at the bottom.
4. *Missing data:* If a client leaves an item blank, use the average score for the remaining subscale items rounded to the nearest whole number in place of the missing value.

Interpreting

There are three elements to consider when interpreting the OQ-45:

- The client's answers to certain *critical items*
- The *total score*
- The *subscale scores*

I. Critical items

Any *critical item* with an answer other than zero should be flagged for follow-up in the clinical interview:

- Item 8: Suicide
- Items 11, 32: Substance abuse
- Item 44: Violence

II. Total Score

Range: 0-180

Cut-off score: 63 or more – indicates symptoms of clinical significance

Reliable change: indicated when a client's score changes by 14 points or more (useful if you give the OQ-45 at two different points in time).

This score is calculated by summing all 45 items. The higher the score, the more disturbed the client.

A high score suggests that the client is admitting to a large number of *symptoms* of distress (mainly anxiety, depression, somatic problems and stress) as well as difficulties in *interpersonal relationships*, *social role* (such as work or school), and in their general *quality of life*.

III. Subscales

Symptom Distress (SD) Score

Range: 0-100

Clinical cut-off score: 36 or more – indicates symptoms of clinical significance

Reliable change: indicated when a client's score changes by 10 points or more (useful if you give the OQ-45 at two different points in time).

Research suggests that the most common disorders are anxiety disorders, affective disorders, adjustment disorders and stress related illness. The SD subscale is composed of items that have been found to reflect the symptoms of these disorders. A high score indicates the client is bothered by these symptoms, while low scores indicate either absence or a denial of the symptoms. Symptom scores correlate highly with various measures of depression (e.g., the BDI) and anxiety (e.g., the State-Trait Anxiety Inventory).

Interpersonal Relations (IR) Score

Range: 0-44

Clinical cut-off score: 15 or more – indicates symptoms of clinical significance

Reliable change: indicated when a client's score changes by 8 points or more (useful if you give the OQ-45 at two different points in time).

IR items assess complaints such as loneliness, conflicts with others, family and marriage problems. High scores suggest difficulties in these areas, while low scores suggest both the absence of interpersonal problems *as well as* satisfaction with the quality of intimate relationships.

Social Role (SR) Score

Range: 0-36

Clinical cut-off score: 12 or more – indicates symptoms of clinical significance

Reliable change: indicated when a client's score changes by 7 points or more (useful if you give the OQ-45 at two different points in time).

SR items measure the extent to which difficulties in the social roles of worker, homemaker or student are present. Conflicts at work, overwork, distress and inefficiency in these roles are assessed. High scores indicate difficulty in social roles, while low scores indicate adequate social role adjustment.

Note: Additional attention should be given to low scores to determine whether they result from role satisfaction or from the client's unemployment (e.g., the client arbitrarily marking the items 0 for never or not applicable).

The above document is summarized from the *OQ-45 Administration and Scoring Manual*. In addition to scoring and interpretation instructions, the manual provides details about the development and norming of the OQ-45, reliability and validity; age, gender, and ethnicity differences; a factor analytic study of the OQ-45; references, and other miscellaneous material. See David Cullen Thomas if you are interested in looking at the manual.

Appendix B

Partners for Change Outcome Management System (PCOMS) Instrument

Outcome Rating Scale (ORS)

Name _____	Age (Yrs.): _____	Gender: _____
Session # _____	Date: _____	
Who is filling out this form? Please check one: Self _____ Other _____		
If other, what is your relationship to this person? _____		

Looking back over the last week, including today, help us understand how you have been feeling by rating how well you have been doing in the following areas of your life, where marks to the left represent low levels and marks to the right indicate high levels. *If you are filling out this form for another person, please fill out according to how you think he or she is doing.*

Individually
(Personal well-being)

I-----I

Interpersonally
(Family, close relationships)

I-----I

Socially
(Work, school, friendships)

I-----I

Overall
(General sense of well-being)

I-----I

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Session Rating Scale (SRS V.3.0)

Name _____	Age (Yrs.): ____
ID# _____	Gender: _____
Session # ____	Date: _____

Please rate today's session by placing a mark on the line nearest to the description that best fits your experience.

Relationship

I did not feel heard, understood, and respected.

-----|

I felt heard, understood, and respected.

Goals and Topics

We did not work on or talk about what I wanted to work on and talk about.

-----|

We worked on and talked about what I wanted to work on and talk about.

Approach or Method

The therapist's approach is *not* a good fit for me.

-----|

The therapist's approach is a good fit for me.

Overall

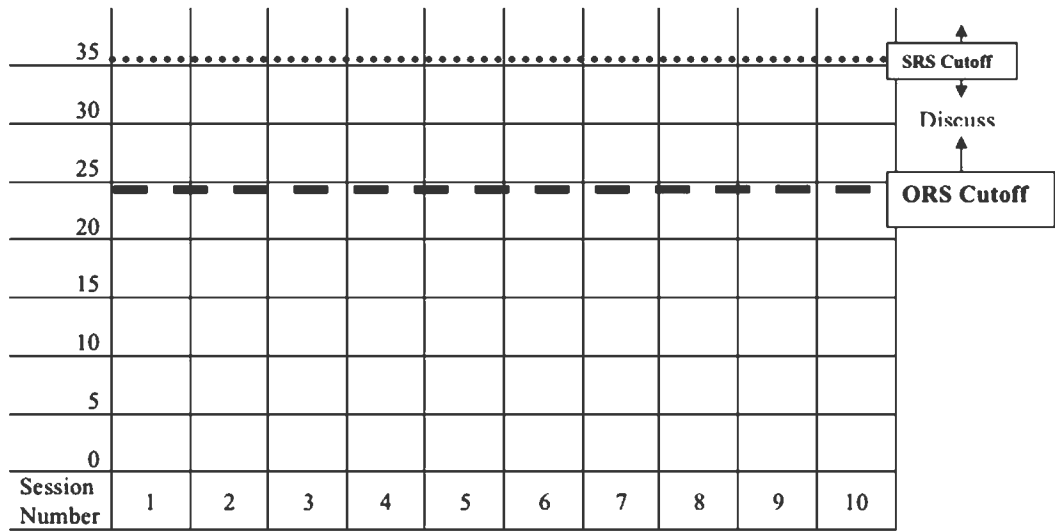
There was something missing in the session today.

-----|

Overall, today's session was right for me.

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Appendix C

Annotated Bibliography

What is the most effective way to measure outcomes in a college counseling center? How can feedback be used to improve services?

Brattland, H., Koksvik, J. M., Burkeland, O., Grawe, R. W., Klockner, C., Linaker, O. M., . . .

Iversen, V. C. (2018). The effects of routine outcome monitoring (ROM) on therapy outcomes in the course of an implementation process: A randomized clinical trial.

Journal of Counseling Psychology, 65(5), 641-652.

<http://dx.doi.org/10.1037/cou0000286>

Participants in this study were 161 clients in a Norwegian general psychiatric outpatient mental health clinic. Participants were randomly assigned to one of two conditions: routine outcome monitoring (ROM) or treatment as usual (TAU). In the ROM condition, The Partners for Change Outcome Management System (PCOMS) was used to measure outcomes and the therapeutic alliance at each session. The PCOMS Outcome Rating Scale (ORS) has four items which measure clients' well-being with regard to their symptoms, relational functioning, social role functioning, and global functioning. The PCOMS Session Rating Scale (SRS) has four items on which clients rate the therapeutic alliance: relationship, goals and topics, approach or method, and overall experience of the alliance during the session. After clients completed the ORS and SRS at each session, therapists shared and discussed the ratings with the clients. If problems with therapy were detected, therapists and clients discussed how to redirect their efforts in a way that was more beneficial to the client. The dependent variable was

level of symptoms and functioning after treatment ended as measured by the Behavior And Symptom Identification Scale (BASIS-32) and the ORS. BASIS-32 is a 32-item, Likert scale, self-report measure of a wide range of problems. Clients who received ROM were 2.5 times more likely to show improvement as measured by the BASIS-32. The effects of the ROM condition increased over time, possibly indicating that therapists used PCOMS more effectively as their experience with it increased. This study gives support for the effectiveness of therapist/client feedback in improving outcomes and therapeutic alliance in an outpatient mental health clinic setting. Although conditions here differ somewhat from a college counseling center, the results are applicable to the general therapeutic setting.

Choi, K. H., Buskey, W., & Johnson, B. (2010). Evaluation of counseling outcomes at a university counseling center: The impact of clinically significant change on problem resolution and academic functioning. *Journal of Counseling Psychology, 57*(3), 297-303. <http://dx.doi.org/10.1037/a0020029>

Participants in this study were 78 clients from a university counseling center. Clients who made clinically reliable and significant change, as measured by the Outcome Questionnaire-45 (OQ-45), had the highest academic improvement, as measured by the Student Adaptation to College Questionnaire (SACQ), Academic Adjustment (AA), and Institutional Attachment/Goal Commitment (IA/GC), and highest perceptions of how well they were dealing with the problems that they sought counseling for, as measured by the Problem Resolution Outcome Survey (PROS), compared to those clients who did not make clinically significant change. The study provides support for the idea that students need effective counseling to deal with mental health issues in order to be able to focus

academically. The study also provides support for the benefits of routine monitoring and tracking of clients' clinical outcomes in each session. The OQ-45 is 45-item, Likert-type scale measuring three domains of client functioning. It is presented as a reliable and valid instrument for measuring outcomes. Use of the OQ-45 requires the purchase of a license which costs between \$250 and \$850 per year. The cost could be prohibitive for some counseling centers.

Duncan, B. L. (2014). So you want to be a better therapist. In B. L. Duncan, *On becoming a better therapist: Evidence-based practice one client at a time* (pp. 3-33). Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/h0090215>

This chapter on factors that impact therapeutic efficacy and outcomes emphasizes the importance of client feedback. The author points out that although therapy has been shown to be effective overall, there are several problems that are significant when considering therapeutic effectiveness: client dropout rates, clients who do not benefit, variability in therapists' effectiveness, and the fact that therapists are not good judges of how well their clients are doing. The author proposes a "client directed" perspective which focuses on clients' resources, strengths, perception of the alliance, and theories of change and which incorporates client feedback into therapy. The positive effects of feedback are independent of what measures are used. Feedback improves outcomes whether it is given to both clients and therapists or therapists only, it works across professional discipline, setting, population, and therapist experience, and it can be used with most, if not all, theoretical models. This chapter presents a rationale for using routine client feedback regarding outcomes and the therapeutic alliance to inform both therapists and clients about progress in therapy. This author has developed and sells a

system for measuring, recording, and presenting outcome data. He also makes a version of the system available at no cost for individual therapists. This could constitute a conflict of interest in his research on the efficacy of the instrument.

Lambert, M. J. & Shimokawa, K. (2011). Collecting client feedback. *Psychotherapy, 48*(1), 72-79. <http://dx.doi.org/10.1037/a0022238>

This meta-analytic study compared four different conditions using two outcome measurement systems: 1) the Partners for Change Outcome Management System (PCOMS) used to provide feedback to all clients and therapists, 2) the Outcome Questionnaire (OQ) used to provide feedback for therapists with clients who are not on track to show improvement, 3) the OQ used to provide feedback and Clinical Support Tools (CST) for therapists of not-on-track clients, and 4) the OQ used to provide feedback to both not-on-track clients and their therapists. Feedback significantly improved clinical outcomes over treatment as usual (TAU). Effect sizes for these conditions varied from $r = .23$ to $r = .33$, 95% CI, $p < .001$. The authors recommended that clinicians consider including formal methods of client feedback into their routine practice. This article addresses the positive impact of measuring outcomes and giving ongoing feedback to therapists.

Lambert, M. J., Whipple, J. L., Vermeersch, D. A., Smart, D. W., Hawkins, E. J., Nielsen, S. L., & Goates, M. (2002). Enhancing psychotherapy outcomes via providing feedback on client progress: A replication. *Clinical Psychology and Psychotherapy, 9*, 91-103. <https://dx.doi.org/10.1002/cpp.324>

This study looked at the dependent variables of counseling outcomes and number of sessions attended as a function of feedback to therapists using non-randomly assigned experimental and control groups. Participants were 1020 clients in a university counseling center who presented for counseling over a school year. The OQ-45 was the outcome measure used for both weekly feedback and for dividing clients into outcome groups (those making adequate progress and those not making adequate progress). As hypothesized, they found that feedback significantly improved outcomes for those clients who were deemed at risk for poor therapy outcomes. They found that feedback did not produce significantly different outcomes for those clients who were already on track to benefit from therapy. This study provides strong evidence for the benefit of continuous measurement of therapeutic outcomes and for giving therapists feedback about their clients' status.

Nafziger, M. A., Couillard, G. C., & Smith, T. B. (1999). Evaluating therapy outcome at a university counseling center with the College Adjustment Scales. *Journal of College Counseling, 2*, 3-13. <http://dx.doi.org/10.1002/j.2161-1882.1999.tb00137.x>

Participants in this study were 1043 undergraduate and graduate students who presented for services at a college counseling center. Outcomes were measured using the College Adjustment Scales, a 108-item instrument designed to assess psychological and developmental problems of college students. Results showed a significant decrease in scores from pre- to posttest on all nine subscales of the CAS. No randomized control group was used, therefore other possible explanations of the results such as statistical regression to the mean or time-related reduction of symptoms cannot be ruled out. The authors call for data collection at college counseling centers to provide a picture of client

problems, inform decisions about session limits or fees, and provide pedagogical feedback to therapists. This study addressed my research question by giving another example of an outcome measure and highlighting the importance of measuring outcomes for the benefit of the counseling center, therapists, and clients.

Reese, R. J., Norsworthy, L. A., & Rowlands, S. R. (2009). Does a continuous feedback system improve psychotherapy outcome? *Psychotherapy Theory, Research, Practice, Training*, 46(4), 418-431. <http://dx.doi.org/10.1037/a0017901>

This study investigated the use of PCOMS with 74 clients at a university counseling center and 74 clients at a graduate training clinic. PCOMS is an outcome and alliance measure that is designed to be integrated into the therapy process with therapists and clients discussing feedback data together. Results in this study indicated that clients who received feedback on their rated outcomes and quality of therapeutic alliance reported more change than clients who did not receive feedback (and whose therapists did not receive feedback on their clients' outcomes). Additionally, clients in the feedback condition achieved reliable change in fewer sessions than clients in the no-feedback condition. This study is applicable to my research question because it uses a sample similar to the client population I am interested in and it describes an effective outcome measure which can be incorporated into therapy to facilitate discussion with clients about their progress and which improves outcomes of therapy. The strengths of this instrument include its simplicity and brevity which make it more likely that therapists will actually use it on a regular basis.

Talley, J. E. & Clack, R. J. (2006). Use of the Outcome Questionnaire 45.2 with a university population. *Journal of College Student Psychotherapy, 20*(4), 5-15.

http://dx.doi.org/10.1300/J035v20N04_02

Participants in this study were 435 undergraduate and graduate students who presented for services at a college counseling center. The purpose of the study was simply to test for significant differences between pretreatment and post-treatment scores on the Outcome Questionnaire (OQ-45). The OQ-45 (a 45-item assessment which takes approximately 7 to 10 minutes to complete) was designed to be used at every session, however this study reports that clients were resistant to completing it as little as every third session. Results showed a statistically significant improvement in scores from pre- to post-treatment. There was no control group in this study, therefore the changes observed cannot be unequivocally attributed therapy. The authors conclude that the OQ-45 was well-suited to demonstrate the effectiveness of college counseling centers, however they point out that students were resistant to completing such a long instrument and that therapists were also resistant to using it partially because of concerns of being evaluated. This study is helpful in addressing my research question by providing a description of the practical difficulties as well as the clear results that were obtained using this outcome measure in a college counseling center.

Whipple, J. L., Lambert, M. J., Vermeersch, D. A., Smart, D. W., Nielsen, S. L., & Hawkins, E. J. (2003). Improving the effects of psychotherapy: The use of early identification of treatment failure and problem-solving strategies in routine practice. *Journal of Counseling Psychology, 50*(1), 59-68. <http://dx.doi.org/10.1037/0022-0167.50.1.59>

A premise of this study was that measuring outcomes is not only for the purpose of effectiveness research, but also to improve services to clients. The researchers hypothesized that providing therapists with ongoing information about clients' progress would allow them to make changes in the direction of counseling in order to provide better service. Participants were 981 clients from a university counseling center. They were randomly assigned to no-feedback and feedback conditions. Within the group receiving feedback, therapists independently chose whether or not to use provided clinical support tools (CST), thus creating a third group. Groups were compared on client outcomes as measured by the OQ-45 and number of sessions attended. Clients in the feedback plus CST group stayed in therapy longer and more of them achieved clinically significant or reliable change. Feedback alone did not improve outcomes. Feedback was only provided to the therapist, not the client.

Wolgast, B. M., Lambert, M. J., & Puschner, B. (2004). The dose-response relationship at a college counseling center. *Journal of College Student Psychotherapy, 18*(2), 15-29.

http://dx.doi.org/10.1300/J035v18n02_03

The sample in this study was composed of 788 students at a university counseling center. The study found that 24% of clients achieved reliable change by 4 sessions, 51% achieved reliable change by 10 sessions, and 75% achieved reliable change after 24 sessions. The study showed that 26% of clients achieved clinically significant change after 7 sessions, 51% percent achieved clinically significant change after 14 sessions, and 68% achieved clinically significant change after 24 sessions. Clinically significant change was defined as improvement on the outcome measure (in this case, the OQ-45) into the functional range from below a cutoff score which distinguishes functional from

dysfunctional clients. Reliable change was defined as change that was greater than the measurement error of the outcome instrument. The implications of the findings are that setting arbitrary session limits on college counseling centers may be preventing recovery of a large number of clients that would otherwise be helped. The study addresses my research question by demonstrating the effective use of the OQ-45 as an outcome measure and the benefits of tracking outcomes and length of service.