As a component of a consulting engagement with a Midwestern comprehensive mental health center, an Outpatient Assessment Questionnaire (OAQ) was administered pre-post to 124 outpatient clients in a three month time series design. These comparisons yielded significant changes on thirteen of the twenty dimensions, including general affect, positive affect, negative affect, anger, depression, coping via escape methods, level of functioning, mental coping methods, mental health, psychosis, seek professional help, spouse perception, and stress perception. Results show the greatest amount of improvement on the scales that measure emotional dimensions (affect, negative and positive affect, anger, and depression). Since most of the clients had presented complaints of depression and stress-related emotional problems, it appears that therapy over the course of six weeks had its greatest effect on the kinds of problems these clients were experiencing. In addition, clients showed improvement in the use of mental methods of coping with stress and tended not to escape as much as a means of coping. Their level of daily functioning improved slightly and they reported fewer symptoms of mental health distress, personal stress, and psychotic symptoms. There was a slight improvement in perception of their spouses. At the end of therapy, they were more likely to seek professional help. No changes were observed on the seven psycho-social dimensions. (MKA)
Evaluation of outpatient treatment program on 20 mental health dimensions

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ABSTRACT

As a component of a consulting engagement with a Midwestern comprehensive mental health center, an Outpatient Assessment Questionnaire (OAQ) was administered pre-post to 124 outpatient clients in a three month time series design. The OAQ measured changes in responses on twenty psychosocial dimensions. These comparisons yielded significant changes on thirteen of the twenty dimensions including general affect, positive affect, negative affect, anger, depression, coping via escape methods, level of functioning, mental coping methods, mental health, psychosis, seek professional help, spouse perception and stress perception.
INTRODUCTION

This consultation was a program evaluation of a regional Midwest community mental health center’s services to their clients. The evaluation was a private consultation provided by Lloyd & Associates, a psychological consulting organization. This evaluation was the second part of a three phase consultation project that included the development of a mental health evaluation questionnaire, the evaluation of therapy effectiveness in producing positive changes in clients and the training of mental health staff in conducting their own future program evaluations using the instrument. The purpose of the first phase was to develop a mental health questionnaire that would reliably differentiate between normal non patients, chronic patients and outpatients. The mental health center primarily wanted an instrument they could use in evaluating the effectiveness of their outpatient services. The first phase resulted in the development of a mental health questionnaire containing 13 mental health scales and 7 psycho-social coping scales that reliably differentiated between the three comparison groups. This questionnaire is titled *The Outpatient Assessment Questionnaire* (OAQ) and a copyright is currently pending. The second phase of this consultation involved using the OAQ to evaluate the effectiveness of the outpatient mental health services provided by the Community Counseling Center. It was expected that clients seeking outpatient therapy would show positive change on scales of the OAQ over the courses of six weeks of outpatient therapy.
METHOD

Subjects:

Subjects in this evaluation were 124 adult outpatient clients from a large Midwest community mental health center that provides comprehensive mental health services. These clients were evaluated at intake not to be Chronic and therefore were treated on an outpatient basis.

Instrument:

The evaluation instrument was the *Outpatient Assessment Questionnaire* (OAQ) which was developed and validated in house for the purpose of evaluating the outpatient treatment services. The OAQ is a 75 item questionnaire containing Likert type items that provide measures on 13 clinical scales and 7 psycho-social coping scales. The instrument has demonstrated adequate validity and reliability in a previous pilot study. The 13 clinical scales include:

1. **General Affect Scale** measures degree of negative and positive affect.
   a. **Negative Affect Subscale** measures negative feelings.
   b. **Positive Affect Subscale** measures positive feelings.
2. **Anger Scale** measures degree of anger control of depression and life satisfaction.
3. **Depression Scale** measures degree and frequency depressed feelings and behavior.
4. **Interpersonal Skill Scale** measures ease and comfort of interpersonal interaction.
5. **Level Of Functioning Scale** measures degree of independent daily functioning.
6. **Mental Health Scale** measures frequency of negative mental health symptoms.
7. **Psychosis Scale** measures frequency of psychotic symptoms.
8. **Social Support Scale** measures frequency and comfort of talking about personal problems with other people.
9. **Spouse General Perception Scale** measures degree of satisfaction with spouse and family.
10. **Spouse Relationship Scale** measures frequency and degree of positive interactions with spouse.
11. **Life-Stress Perception Scale** measures degree of satisfaction with personal affairs and health.

The seven psycho-social coping scales include:

1. **Behavioral Coping** measures use of behavior methods of coping.
2. **Escape** measures use of escape as a means of coping.
3. **Injure Self** measures suicide attempts.
4. **Injure Others** measures attempts to injure other people.
5. **Mental Coping** measures use of cognitive coping and relaxation methods.
6. **Seeking Professional Help** measures comfort in seeking professional help.
7. **Substance Abuse** measures frequency and degree of substance use.

**Design & Procedure:**

This was a pre - post repeated measures design in which clients were given the OAQ at intake and again at the end of six weeks of therapy. When new clients arrived they were given a folder containing intake forms and the OAQ and an informed consent form. The receptionist instructed each new client to “*Please complete the following paper work as part of our routine admission procedures*”. Clients completed the material at a table reserved for filling out confidential materials and returned the materials to the receptionist when finished. The receptionist assured the clients that the information was confidential and asked if the client had any questions about the procedure. The receptionist printed the client’s case number on both the face sheet and the OAQ and then attached the face sheet to the OAQ. Questionnaires were stored in the intake clerk’s filing cabinet until the Center’s computer data entry clerk entered the data into a spread sheet program, giving each client a new ID number. At the end of six weeks clients were either given, or mailed a letter that read:

“**Dear (Client Name),**

*We are following up with you to see how you are doing. Please put your name on the form we have enclosed and answer some questions for us about how you have been doing. Find a quiet place to complete the questionnaire and the informed consent form by yourself. Read the instructions carefully and fill out all the information. The information you give us will be kept confidential and will be used to help us improve our services. Please put the questionnaire and form into the envelope we have provided and return it to us through the mail. There is no need for you to add postage. We are happy to have been able to provide a service to you.***

The letter contained the OAQ with the client’s case number printed on the of the form, a brief client satisfaction survey, informed consent form and a self addressed return envelope. The instructions on the OAQ read as follows: “*Please read the questions and the corresponding response scales. Please answer all questions to the best of your recollection. Your answers provide important information to your therapist for treatment and assessment purposes. Your answers on this questionnaire are confidential to the professional staff. Thank you.*” The evaluation period ran for three months during which time 124 outpatient clients completed both pre and post questionnaires.
RESULTS

Table 1 shows the pre and post test means, standard deviations and t-test values for pre-post differences on each of OAQ dimensions. Significant changes were noted in 13 of the 20 dimensions. The 13 dimensions that were observed to significantly change for the better include the General Affect, Negative Affect, Positive Affect, Anger, Depression, Escape, Level of Functioning, Mental Coping, Mental Health, Psychosis, Seeking Help, Spouse Perception and Stress Perception Scales. Those scales that did not manifest significant changes were Behavior Coping, Injure Others, Injure Self, Interpersonal Skills, Social Support, Spouse relations and Substance Abuse.

The first dimension, the General Affect Scale is comprised of two sub-scales, Negative and Positive Affect. The total Affect Scale is a five point Likert type scale in which clients rate their negative and positive feelings. After reversing the positive affect sub-scale to be congruent with desirable change in the negative affect sub-scale, where higher values correspond with improvement, a significant positive change from pre-test to post-test means (2.8 vs. 3.0) in total affect was noted at the end of six weeks of therapy. Most of this change was due changes in negative affect in which clients reported fewer negative emotions. The Positive Affect Scale, (unreversed) in which lower values correspond to desirable change, also significantly changed with an increase in slightly more positive emotions following therapy. Another emotional dimension, Anger, also changed for the better. The Anger Scale is a four point Likert rating scale in which higher values indicate less anger. The change from pre-test mean of 2.43 to post-test mean of 2.6 was also significant. The emotional dimension of Depression was measured on a five point Likert type rating scale. On this scale higher values correspond with more depression. The change from a pre-test mean of 3.2 to a post-test mean of 2.8 was significant indicating clients were somewhat less depressed after therapy. Since the most common presenting complaints were depression and stress-related emotions it appears that therapy is associated with desirable changes in these emotional dimensions.

The Escape dimension as measured on a four point Likert Scale, significantly decreased, indicating clients appeared to use escape less as a means of coping with stress following treatment. Level of functioning also demonstrated slight improvement. This scale was a four point Likert Scale where lower values are associated with improved daily functioning. The change from pre to post-test means (2.11 vs. 1.96) was slight but significant. The Mental Coping and Mental Health Scales also showed significant improvement from pre to post test. Both of these scales are four point Likert scales where higher values correspond to desirable change. Following therapy clients were using more active mental coping methods and reporting fewer negative mental health symptoms than before therapy. Clients also reported fewer occasions of experiencing psychotic symptoms following therapy. The Psychotic Scale was also a four point Likert scale where higher values indicate fewer psychotic symptoms. The change from pre-test mean of 3.28 to post-test mean of 3.51 was significant. In addition, clients also appeared more likely to seek professional help after therapy than before. This four point Likert scale showed a slight but significant increase (2.26 vs. 2.54) in willingness to seek professional help following therapy. Clients also reported more positive perceptions of their spouse, if married, following therapy. The Spouse Perception Scale is a four point
Likert scale where lower values represent more positive perceptions of spouse. Means on this scale significantly changed from pre mean of 2.18 to post mean of 2.01. The last dimension to demonstrate improvement was the stress perception scale. On this four point Likert scale lower values are associated with less perceived stress. The change from pre to post test (2.47 vs. 2.22) was significant.

Seven dimensions did not manifest significant change from pre to post test. The behavior coping scale was a four point Likert scale in which higher values indicated greater use of behavioral methods of coping. The pre test mean of 2.79 was above the midpoint for this scale. Although the post test mean of 2.8 was a slight increase in the positive direction, it was not enough of a change to be considered statistically significant. The Injure Self and Injure Others scale was a simple 1. yes or 2. no response category. The pre test and post test means on both scales were very near 2 indicating nearly all clients who answered these questions had not tried to injure other people nor had suicide attempts in the last three months. The Interpersonal Skills scale was a three point Likert scale with higher values indicative of greater ease in interpersonal interactions. Both pre and post test means are relatively high (1.94 vs. 1.92) and nearly identical. The Social support scale was a four point Likert scale where lower values indicate fewer sources of social support. Again, the pre and post test means (2.48 vs 2.41) on this scale are nearly identical and are in the midpoint area on the scale. There was also no significant change on the spouse relations scale. On this four point Likert scale lower values indicate better relations. The pretest mean of 1.74 was already relatively low and with little room for improvement the post test mean of 1.73 was almost identical. The last scale that showed no significant changes was the Substance Abuse Scale. This was comprised of a series of items asking clients to indicate frequency and degree of using legal (cigarettes/alcohol) and illegal substances (marijuana/cocaine). Response categories ranged from one to five, with lower values indicating little or no substance abuse. Again the pre and post test means are nearly identical (2.37 vs. 2.39) indicating no change in substance use over the course of therapy.
DISCUSSION

The results indicate that clients showed improvement on 13 of the 20 psycho-social dimensions as measured on the OAQ. The greatest amount of improvement occurred on the scales that measured the emotional dimensions (Affect, Negative and Positive Affect, Anger, Depression). Since most of the outpatient clients seeking therapy at this regional mental health facility had presenting complaints of depression and stress related emotional problems it appears that therapy over the course of six weeks had it’s greatest effect on the kinds of problems these clients were experiencing. In addition, clients showed improvement in the use of mental methods of coping with stress and tended not to use escape as much a means of coping. Their level of daily functioning improved slightly and they reported significantly fewer symptoms of mental health distress, personal stress and psychotic symptoms. There was also a slight improvement in their perception of their spouse. At the end of therapy they were more likely to seek professional help for their personal problems than before. Perhaps this is because of the relief they were experiencing from therapy and the trust that developed over time with their therapists.

On the seven psycho-social dimensions in which no change was observed to occur, this is probably due in part that the pre test means on many of these scales were initially in the positive area. For instance, on the Injure Self or Injure Others dimensions, the pre test means of 1.9 and 1.94 on a two point scale leaves little room for improvement. Similarly, the initial means on the dimensions of behavior coping, interpersonal skills, social support, spouse relations and substance abuse were initially in the positive area on their respective scales.

In conclusion there is good evidence that the outpatient services provided to these clients had a positive effect on their mental health as measured by the OAQ. There is a question of degree or magnitude of effect. On some scales (Escape) the significant effect was meager while on other scales (Negative Affect) the effect was more impressive. It is possible that the effect of therapy was masked to some degree by the fact that this was an overall evaluation of client improvement without regard to the particular complaint or diagnostic category at the time of intake. It would be expected that clients seeking outpatient therapy would show greater positive changes on scales relating to their particular presenting problems than on scales that do not. It stands to reason that a client coming in for a stressful crisis would not show as much change on the depression dimension as would a client coming in with signs of clinical depression. Similarly a client with a good social support network would not be expected to change as much on the social support and interpersonal skills dimension as a client who comes in because he is lonely. By lumping all clients together to evaluate therapy effects without knowledge of their initial problem it could have masked the magnitude of therapy effects on the dimensions relevant to the particular problem. It is therefore recommended that in future evaluations, a new variable be added that codes the client’s initial complaint or diagnosis. Then by grouping clients together with the same complaints (e.g. Depression) we can more accurately assess the degree of impact on OAQ dimensions that are relevant to the particular complaint.
Perhaps the most significant threats to internal validity in this evaluation are history, statistical regression, testing and placebo effects. Since this was a repeated measures design over six weeks with people in need, these threats cannot be completely ruled out. Perhaps in the future using a pre-post cyclical cohort design which allows both within and between groups comparisons with clients who arrive at different cycles, these threats may be minimized.
TABLE 1

PRE - POST COMPARISON OF 20 DIMENSIONS OF OAQ

<table>
<thead>
<tr>
<th>Dimension (Variable)</th>
<th>N</th>
<th>Pre: Mean &amp; SD</th>
<th>Post: Mean &amp; SD</th>
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<tr>
<td>Affect</td>
<td>122</td>
<td>2.8 (.385)</td>
<td>3.0 (.426)</td>
<td>-5.09**</td>
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<td>Negative Affect</td>
<td>122</td>
<td>2.5 (.837)</td>
<td>3.14 (.862)</td>
<td>-7.61**</td>
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<tr>
<td>Positive Affect</td>
<td>122</td>
<td>3.13 (.700)</td>
<td>2.8 (.703)</td>
<td>4.50**</td>
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<tr>
<td>Anger</td>
<td>122</td>
<td>2.43 (.459)</td>
<td>2.6 (.486)</td>
<td>-4.03**</td>
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<tr>
<td>Behavioral Coping</td>
<td>120</td>
<td>2.72 (.697)</td>
<td>2.8 (.754)</td>
<td>-1.92</td>
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<tr>
<td>Depression</td>
<td>122</td>
<td>3.2 (.871)</td>
<td>2.8 (.837)</td>
<td>5.16**</td>
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<tr>
<td>Escape</td>
<td>121</td>
<td>2.7 (.981)</td>
<td>2.5 (.913)</td>
<td>2.05*</td>
</tr>
<tr>
<td>Injure Others</td>
<td>122</td>
<td>1.98 (.089)</td>
<td>1.98 (.240)</td>
<td>0.00</td>
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<tr>
<td>Injure Self</td>
<td>120</td>
<td>1.90 (.301)</td>
<td>1.94 (.235)</td>
<td>-1.22</td>
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<tr>
<td>Interpersonal Skills</td>
<td>124</td>
<td>1.94 (.603)</td>
<td>1.92 (.610)</td>
<td>0.28</td>
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<tr>
<td>Level of Functioning</td>
<td>124</td>
<td>2.11 (.599)</td>
<td>1.96 (.708)</td>
<td>2.59*</td>
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<td>Mental Coping</td>
<td>120</td>
<td>2.34 (.742)</td>
<td>2.65 (.637)</td>
<td>-4.30**</td>
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<tr>
<td>Mental Health</td>
<td>122</td>
<td>2.81 (.857)</td>
<td>3.14 (.821)</td>
<td>-4.04**</td>
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<td>Psychosis</td>
<td>120</td>
<td>3.28 (.634)</td>
<td>3.51 (.512)</td>
<td>-4.11**</td>
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<td>Seek Professional Help</td>
<td>119</td>
<td>2.26 (1.16)</td>
<td>2.54 (1.15)</td>
<td>-2.63**</td>
</tr>
<tr>
<td>Social Support</td>
<td>124</td>
<td>2.48 (.679)</td>
<td>2.41 (.743)</td>
<td>1.30</td>
</tr>
<tr>
<td>Spouse Perception</td>
<td>121</td>
<td>2.18 (1.03)</td>
<td>2.01 (.969)</td>
<td>2.28*</td>
</tr>
<tr>
<td>Spouse Relations</td>
<td>121</td>
<td>1.74 (.637)</td>
<td>1.73 (.665)</td>
<td>0.22</td>
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<tr>
<td>Stress Perception</td>
<td>123</td>
<td>2.47 (.710)</td>
<td>2.22 (.657)</td>
<td>4.25**</td>
</tr>
<tr>
<td>Substance Use</td>
<td>76</td>
<td>2.37 (.514)</td>
<td>2.39 (.447)</td>
<td>-0.42</td>
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* P < .05  
** P < .01
References


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