EXTENDING CONTINGENCY MANAGEMENT TO
THE TREATMENT OF HOMELESS YOUTH

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EXTENDING CONTINGENCY MANAGEMENT TO
THE TREATMENT OF HOMELESS YOUTH

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ABSTRACT

EXTENDING CONTINGENCY MANAGEMENT TO
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This study used a quasi-experimental method to examine the efficacy of a contingency management (CM) program upon the promotion of independent living among homeless youth enrolled in a transitional living program. Outcome data was collected from clients (N = 37) upon entry and exit from the transitional living program offered through a Midwestern youth homeless shelter. Those outcomes assessed included clinicians’ ratings of their clients’ Global Assessment of Functioning (GAF), and clients’ scores on both the Quality of Life (QL) and Decision-Making/Empowerment (MD/E) subscales, as measured by the Ohio Mental Health Consumer Outcomes System (Ohio Department of Mental Health, 2009). Comparisons of changes in outcome measures between (1) those who were exposed to the CM program who also graduated from the transitional living program (CM-C); (2) those exposed to the CM program who did not graduate from the transitional living
program (CM-Inc.); and (3) those who were never exposed to the CM program and did not graduate from the transitional living program (NCM - Inc.) revealed significant interactions for clinicians’ GAF ratings and clients’ MD/E scores. These results indicate that programs for homeless youth based on the principals of CM may promote this successful transition into independent living. However, the study’s use of a quasi-experimental design prevents causal inference.
ACKNOWLEDGEMENTS

I would like to thank Dr. Ronald Katsuyama for his direction and seemingly endless supply of patience. I would also like to express my gratitude for the guidance, support and knowledge gained in working with Dr. Roger Reeb and Cindy Minton.
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INTRODUCTION

While the exact number of youth living apart from their families and without shelter is unknown, the National Law Center on Homelessness and Poverty (2004) estimates that approximately 3.5 million people are likely to experience homelessness in a given year. Of these, it is estimated that 1.35 million are children. To further demonstrate the magnitude of the problem, the National Law Center on Homelessness and Poverty conducted the National Survey of Homeless Assistance Providers to estimate the number of individuals experiencing homelessness at two different points in time. They found that on any given night in October, 440,000 people experienced homelessness, which was equivalent to 6.3% of the population of those living in poverty. Further, this number increased to 842,000 people who had experienced homelessness on any given night in February, in 1996. This translates to approximately 10% of people living in poverty at that time. Given the more recent recession, it is probably safe to assume that this proportion has grown.

Though it is very difficult to precisely estimate the extent of youth homelessness, more recent research has suggested that a large number of youth in agency-affiliated residencies may have experienced homelessness at some point during their life. According to Ringwalt, Green, Robertson, and McPheeters (1998), 7.5% of 12 – 27 year-
olds youth living in the United States had experienced an episode of homelessness in the prior 12 months. This percent is equivalent to 1.5 million youth nationally.

Homeless children and youth are an extremely high-risk population who suffer from innumerable problems, both physically and mentally. Many of these problems appear to be associated with their parents’ poverty. Infants born in poverty often face substantial challenges from conception, with a lack of adequate prenatal care resulting in their being 50% more likely to be born with a low birth weight, and 50% more likely to die before their first birthday (Torquati & Gamble, 2001). Subsequently, there is a high prevalence of developmental delays in intellectual, social, and emotional functioning among homeless youth. They often suffer from multiple health problems, such as hunger and poor nutrition, and “high incidence of poor psychological health, including internalizing and externalizing problems, depression, and anxiety” (Kidd & Scrimenti, 2004). Additionally, these youth tend to have troubled pasts and face an array of social, psychological and medical challenges. A considerable amount of research has also documented the elevated rates at which physical and sexual abuse occur for this population (Ringwalt, Green, & Robertson, 1998). Incidences of emotional abuse and neglect were also found to be higher among homeless youth (Ringwalt, Green, & Robertson, 1998; Dadds et al., 1993).

Related to these health problems are the socioecological contexts in which they occur. Homeless youth who are often exposed to chronic poverty are at a much greater risk of experiencing “severely stressful life events, including family/residential instability, domestic violence, neighborhood violence, substance abuse, parental mental
illness, and social isolation” (Bassuk et al., 1996; Ensign & Bell, 2007; Vostanis et al., 1997; Zima et al., 1999). High rates of parental drug and alcohol abuse are found among the parents of homeless youth, as are parental criminality, poverty, domestic violence, and instability (Kidd & Scrimenti, 2004). For homeless youth, drug abuse is a common way of coping, and addiction is a major problem among the homeless population. Furthermore, there is a high incidence of mental disorders among this population; particularly, rates of depression (Whitebeck, Hoyt, & Bao, 2000).

Once on the streets, these youth engage in numerous maladaptive behaviors, such as “…prostitution, survival sex (sex for food, shelter, etc.), dealing drugs, and theft” (Kidd & Scrimenti, 2004). Large numbers of homeless youth lack shelter, and street life presents numerous dangers and stresses that significantly impact their well-being. Given the shockingly high estimates of youth homelessness and associated physical and mental health problems that plague this population, it is apparent that solutions must be sought to help alleviate the serious problems that face homeless youth. Accordingly, the need for additional service providers and creative intervention programs must be implemented to better serve the needs of this growing population.

One approach to intervention is CM(CM) treatment which utilizes operant conditioning techniques, wherein positive reinforcement is provided to the individual at regular intervals when he or she engages in a specific target behavior. In fact, B. F. Skinner (1978) suggested behavior modification as a means for solving some of the most pressing human issues (e.g. warfare and over-population). While it has been argued that CM programs undermine the intrinsic motivation individuals have to change their
behavior (Deci, Koestner, & Ryan, 1999), several studies have demonstrated their
efficacy in reducing adverse behaviors and increasing those that promote well-being
(Eisenberger & Cameron, 1996; Higgins & Silverman, 1999). Empirical evidence
supports the utility of such programs, especially when used in conjunction with other
services (Silverman, et al., 1999; Petry et al., 2006).

Research has further demonstrated the effectiveness of these types of programs in
treating a variety of behavioral problems. These problems range from reducing substance
abuse to managing the symptoms of post-traumatic stress disorder (Tzilos et al., 2009;
Lester et al., 2007). Aside from the clinical setting, operant conditioning techniques have
been applied to individual behavior modification, teaching, classroom management,
instructional development, programmed instruction and management, and organizational
behavior modification as well (Higgins & Silverman, 1999).

The Present Study

It is the aim of the proposed research to assess the effectiveness of a particular
CM program, which has been designed to facilitate a healthy transition into independent
living for local homeless youth. Presently, with regard to the homeless youth population,
there are no known studies to have explored the effectiveness of a CM program as an
ongoing and primary structure for treatment. Given its widespread applicability and
success in treating a variety of problems, it is the purpose of the present research to
evaluate the effectiveness of utilizing a CM program as a potential intervention for youth
homelessness.
The mission of *Daybreak* youth homelessness shelter is to eliminate youth homelessness through comprehensive and results-oriented programs that provide safety and stability for runaway, troubled, and homeless youth ages 10 to 21. In keeping with this objective, the agency designed and implemented a CM program which was administered to all clients in its “transitional living” program. The transitional living program was comprised of homeless youth, who were provided apartments within the organization’s facilities. The goal of the program was to increase the frequency of behaviors considered to be adaptive for the clients’ smooth transition into autonomous lifestyles. As part of the transitional living program, clients were expected to participate in the agency’s CM program.

The agency’s CM program required clients to “earn” their rental subsidies through three means. First, clients may earn their subsidies by participating in agency services, which include group and/or individual psychotherapy sessions and group and/or individual psychoeducational sessions. Individual and group psychotherapy sessions consisted of 60-minute meetings, during which clients focused on meeting their mental health needs. Differing from the psychotherapy services, the psychoeducational service provided were structured around topics related to autonomous living. Second, clients may also receive “earnings” by maintaining employment and/or working toward obtaining a high school diploma, G. E. D., or technical degree. Finally, clients may earn credits by participating in volunteer activities.

In order to track their earnings, clients are required to provide written verification for each hour of participation. A minimum of 22 hours per week is required in order to
earn their rental subsidies, and each hour is rewarded with 5 “agency dollars.” Those who engage in rewardable behaviors beyond those required to maintain their housing are offered additional options for spending their agency dollars. Items can be purchased from (1) a pantry which includes food, toiletries, and child care products; (2) a catalogue containing a number of items (e.g., iPods, televisions, cookware, etc.). Alternatively, up to one thousand agency dollars can be exchanged for American cash at a 50% rate upon successful graduation from the transitional living program.

The primary goal of the present research was to evaluate the effects of the CM program upon promotion of independent living, self-efficacy, and mental health among its clients. In order to avoid withholding potentially beneficial services to youth in need of intervention, a quasi-experimental design was utilized to examine potential benefits of the CM program.

The present study will utilize three primary outcome measures to evaluate the program. The first is the Global Assessment of Functioning (GAF) scale. The GAF rating scale is a clinical judgment of an individual’s psychological, social, and occupational functioning on a hypothetical continuum of mental health. A score was determined for all Daybreak clients upon their intake and again upon termination or completion of the program. GAF scores among clients who successfully completed the CM program were compared to scores among those who (a) did not successfully complete the program and (b) those who previously failed to complete a residential program without exposure to the CM program. It was hypothesized that changes in GAF ratings among those who graduated from the transitional living program and were exposed to the CM system will
be greater than those who failed to complete the transitional living program, regardless of exposure to the CM system.

The second outcome measure is clients’ ratings of their Quality of Life (QL), as reported on the Ohio Mental Health Consumer Outcomes System Adult Consumer Form, which is administered at intake and, again, at discharge from the program. The final outcome measure, also obtained from the Ohio Mental Health Consumer Outcomes System Adult Consumer Form, is clients’ Decision-Making/Empowerment (MD/E) score. Changes in the QL and MD/E scores among clients who successfully graduated from the transitional living program, who also participated in the CM program, were expected to be higher than corresponding changes among those who either (a) did not successfully complete the program or (b) previously failed to complete a residential program without contingency management.
METHOD

Participants

Thirty seven individuals between the ages of 17 and 20 participated in this study. All participants were clients of Daybreak, a youth homeless shelter in the Midwestern United States and had voluntarily enrolled themselves in the shelter’s transitional living program. At the time that the CM program was implemented, the agency had recently transitioned into a new facility, and had begun to fill its transitional living apartments with clients who met the basic criteria for admittance into the transitional living program. Upon intake, clients were required to verify that they (1) were homeless; (2) had not been convicted of a violent crime or sexual offense; and (3) were between the ages of 17 and 21. As such, the number of participants from whom data could be collected was limited. Table 1 indicates the race, age, sex, and treatment group of the 37 participants.

Participants were in one of three treatment groups: (1) Those who were exposed to the CM program who also successfully graduated from the transitional living program (group “CM – C”); (2) those who were exposed to the CM program who did not successfully graduate, either because of their decision to withdraw or a staff decision to terminate the client from the transitional living program due to behavioral
Table 1: Participants' demographics.

<table>
<thead>
<tr>
<th>Race</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>African American</td>
<td>27</td>
<td>73</td>
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<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>17 years</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>18 years</td>
<td>18</td>
<td>48.6</td>
</tr>
<tr>
<td>19 years</td>
<td>17</td>
<td>45.9</td>
</tr>
<tr>
<td>20 years</td>
<td>1</td>
<td>2.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>14</td>
<td>37.8</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>62.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM – Inc.</td>
<td>13</td>
<td>35.1</td>
</tr>
<tr>
<td>CM – C</td>
<td>13</td>
<td>35.1</td>
</tr>
<tr>
<td>NCM - Inc.</td>
<td>11</td>
<td>29.7</td>
</tr>
</tbody>
</table>

problems (group “CM – Inc.”); and (3) those who were never exposed to the CM program who also failed to graduate from the transitional living program or were prematurely terminated from the transitional living program (group “NCM - Inc.”). Those participants who encompass the NCM - Inc. group were selected from the limited number of residential clients enrolled in the transitional living program for whom the agency had outcome data, before the agency had implemented the CM program. In order to determine whether participants were graduates or non-graduates of the transitional living program, we used the guidelines set forth by the agency. Successful graduation was defined as participants’ transition into stable, autonomous living. All participants
who failed to meet this criterion were, for the purposes of this study, categorized as non-graduates.

**Development of “Daybreak Dollars”**

The present author proposed the CM program at a meeting of Daybreak’s administrative staff. During the following weeks, the policy and procedures of the program were written in consultation with the Daybreak’s Chief Program Officer/Clinical Director. Shortly after its development, the “Daybreak Dollars” was implemented and funded through an Ohio housing grant. Since its inception in 2008, the program has continued to serve as a platform for the development of clients’ independence.

**Procedure**

As part of the agency’s transitional living program, clients who live in Dyabreak’s housing are expected to comply with agency policy and programming. This includes full participation in the CM program. Those participants represented in Table 1 include agency clients, who were previously enrolled in the transitional living program, including those participants who were enrolled on the transitional living program prior to the implementation of the CM program.

In order to explore the effect of the program upon promotion of global functioning, quality of life, and self-efficacy, a comparison was made between the respective sources of participants in CM – C, CM – Inc., and NCM – Inc. All archival data regarding clients’ demographic characteristics (i.e. race, age, and sex), psychosocial histories, psychological functioning, time in the program, quantity and type of services rendered, and conditions of termination were obtained through examination of their case
files. All data gathered was kept confidential, and was locked in a key-protected storage room within the agency’s facilities. All identifying information was removed during the data entry process to ensure clients’ confidentiality.

Measures

**Global Assessment of Functioning scale (GAF).** The Global Assessment of Functioning (GAF) scale (see Appendix B) is a clinician's judgment of an individual's overall level of functioning (American Psychiatric Association, 2000). After a detailed clinical interview, the clinician considers the individual’s ability to function in important areas (e.g., social, academic, and/or professional settings) and assigns a score between 1 and 100. This information is useful in planning treatment and/or assessing its impact. The GAF Scale may be particularly useful in tracking the clinical progress of individuals in global terms, using a single measure. The GAF Scale is to be rated with respect only to psychological, social, and occupational functioning. The instructions specify, "Do not include impairment in functioning due to physical (or environmental) limitations" (American Psychiatric Association, 2000).

In a study conducted by Hilsenroth et al. (2000), the GAF was compared to the Global Assessment of Relational Functioning Scale and the Social and Occupational Functioning Scale using the Intraclass Correlation Coefficient (ICC). The authors reported ICCs of the three scales to be in the “excellent range.” Supporting the scale’s concurrent validity, Hilsenroth et al. (2000) found that the “Global Assessment of Functioning Scale was significantly related to concurrent patient responses on the SCL-90-R global severity index” ($r = .46$, $n = 36$, $p = .005$). In short, as a patients’ level of
functioning decreased (became more symptomatic), his/her number of psychological symptoms/distress on the SLC-90-R was found to increase.

**Quality of Life scale (QL).** The Ohio Mental Health Consumer Outcomes System was created as a means of assessing the health or well-being of those receiving mental health services. Through the use of subscales or “consumer outcome” scales, it is believed one can gain an overall “status report” of an individual or family receiving services. This study utilized two “consumer outcome” scales to assess adults over the age of 18 utilizing the resources of *Daybreak* youth homelessness shelter: the Quality of Life Adult Consumer Form and the Making Decisions Empowerment Scale (Ohio Department of Mental Health, 2009).

The Quality of Life scale is a subscale used within The Ohio Mental Health Consumer Outcomes System. This scale consists of 12 items and includes statements which assess an individual’s physical health, medical concerns, and perceived stigma in the agency and in the community and can be used to calculate an Overall Quality of Life score. This scale has been found to have good internal consistency (*Cronbach’s alpha* = .86, *n* = 1,442) (Ohio Department of Mental Health, 2009).

**Making Decisions/Empowerment scale (MD/E).** Like the Quality of Life subscale, the Making Decisions Empowerment Scale (Rogers, Chamberlin, Ellison, & Crean, 1997) is a subscale used within The Ohio Mental Health Consumer Outcomes System. This scale consists of 28 items and assesses the subjective construct of overall personal empowerment as experienced by the individual. This scale has been found to have good internal consistency (*Cronbach’s alpha* = .77, *n* = 1376). With regard to
construct validity, scores on this scale have been significantly correlated with social support, quality of life, and self-esteem scores (Ohio Department of Mental Health, 2009). Furthermore, in other studies, this scale was able to discriminate between state hospitals patients, individuals in self-help programs, and college students (Corrigan, Faber, Rashid, & Leary, 1999; Rogers, Chamberlin, Ellison, & Crean, 1997; Wowra & McCarter, 1999).
RESULTS

A 3 (Group) x 2 (Test) analysis of variance was performed on participants’ GAF ratings with test (upon entry and exit/termination from the transitional living program) as a repeated measures factor. When determining significance, an alpha level of .05 was used for all statistical tests. Results indicated that the main effects of group ($F(2, 29) = 2.504, p = .099$) and test ($F(1, 32) = 1.603, p = .216$) were not statistically significant. However, confirming the hypothesis, there was a significant interaction of group and test ($F(2, 29) = 4.361, p = .022$). Table 2 shows how GAF ratings vary according to group and test.

Table 2: Mean Global Assessment of Functioning ratings as a function of group and test sequence.

<table>
<thead>
<tr>
<th>Group</th>
<th>Test</th>
<th>Mean</th>
<th>S.D.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM – Inc.</td>
<td>Pre</td>
<td>56.917</td>
<td>7.489</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>54.583</td>
<td>9.090</td>
<td>12</td>
</tr>
<tr>
<td>CM – C</td>
<td>Pre</td>
<td>58.308</td>
<td>6.872</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>66.769</td>
<td>12.310</td>
<td>13</td>
</tr>
<tr>
<td>NCM - Inc.</td>
<td>Pre</td>
<td>61.857</td>
<td>9.788</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>62.286</td>
<td>10.177</td>
<td>7</td>
</tr>
</tbody>
</table>

Results Pertaining to Main Effects (i.e., Marginal Values)

<table>
<thead>
<tr>
<th>Group</th>
<th>Std. Error</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM – Inc.</td>
<td>2.344</td>
<td>12</td>
</tr>
<tr>
<td>CM – C</td>
<td>2.252</td>
<td>13</td>
</tr>
<tr>
<td>NCM - Inc.</td>
<td>3.069</td>
<td>7</td>
</tr>
<tr>
<td>Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>1.492</td>
<td>32</td>
</tr>
<tr>
<td>Post</td>
<td>1.972</td>
<td>32</td>
</tr>
</tbody>
</table>
Figure 1 demonstrates the pre-treatment and post-treatment GAF ratings for each treatment group; CM – Inc., CM – C, and NCM - Inc. Post hoc analysis revealed a statistically significant increase in mean GAF ratings for group CM-C \((t(12) = -2.754, p = .008)\), but not for groups CM – Inc. \((t(11) = .704, p = .496)\) or NCM - Inc. \((t(6) = .528, p = .617)\).

![Graph showing mean GAF ratings](image)

Figure 1. Mean differences in pre and post Global Assessment of Functioning ratings between groups.

A 3 (Group) x 2 (Test) analysis of variance was also performed upon Quality of Life (QL) self- ratings. Results indicated no significant main effect of group \((F(2, 27) = 1.058, p = .361)\); however, a significant main effect of test \((F(2, 27) = 7.358, p = .011)\) was obtained. No significant interaction was obtained \((F(2, 27) = 1.678, p = .206)\).
Figure 2 presents the mean Pretest and Posttest scores for each of the three comparison groups, CM – C, CM – Inc., and NCM - Inc.

![Figure 2](image-url)

Figure 2. Mean differences in pre and post Quality of Life scores between groups.

A third 3 (Group) x 2 (Test) analysis of variance was performed on participants’ MD/E scores. Results indicated that the main effect of group \((F(2, 30) = .708, p = .502)\) was not statistically significant; however, the main effect of test \((F(1, 30) = 8.04, p = .009)\) was statistically significant. Furthermore, a significant interaction was found between group and test \((F(2, 30) = 5.666, p = .009)\). *Table 3* presents MD/E scores according to group and test.
Table 3: Mean Making Decisions/Empowerment scores as a function of group and test sequence.

<table>
<thead>
<tr>
<th>Group</th>
<th>Test</th>
<th>Mean</th>
<th>S.D.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM – Inc.</td>
<td>Pre</td>
<td>2.846</td>
<td>.582</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>2.995</td>
<td>.721</td>
<td>12</td>
</tr>
<tr>
<td>CM – C</td>
<td>Pre</td>
<td>2.831</td>
<td>.402</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.440</td>
<td>.604</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.153</td>
<td>.648</td>
<td>7</td>
</tr>
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</table>

Results Pertaining to Main Effects (i.e., Marginal Values)

<table>
<thead>
<tr>
<th>Group</th>
<th>Test</th>
<th>Mean</th>
<th>Std. Error</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM – Inc.</td>
<td>Pre</td>
<td>2.920</td>
<td>.153</td>
<td>12</td>
</tr>
<tr>
<td>CM – C</td>
<td>Pre</td>
<td>3.135</td>
<td>.160</td>
<td>11</td>
</tr>
<tr>
<td>NCM - Inc.</td>
<td>Pre</td>
<td>3.181</td>
<td>.201</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.196</td>
<td>.120</td>
<td>30</td>
</tr>
</tbody>
</table>

Figure 3 illustrates the greater increase in MD/E scores among participants in the CM-C group compared to their counterparts in the other two groups. Post hoc analysis revealed a statistically significant increase in mean MD/E scores for those in group CM-C ($t(12) = 3.205, p = .003$), but not for those in groups CM – Inc. ($t(11) = 1.186, p = .261$) or NCM - Inc. ($t(6) = -.591, p = .576$).
Figure 3. Mean differences in pre and post Making Decisions/Empowerment scores between groups.
DISCUSSION

The primary objective of the present research was to evaluate the effects of the CM program upon promotion of independent living, self-efficacy, and mental health among its clients. The results confirm two of three hypotheses. The implementation of a CM system appears to have facilitated the overall functioning and personal empowerment of those homeless youths who participated in, and successfully completed, the program.

Change in GAF scores. A significant increase in Global Assessment of Functioning (GAF) scores from intake to exit occurred only among those who were both exposed to the CM system and who also graduated from the transitional living program. These participants’ exit ratings may indicate their greater preparedness for the transition into sustained, autonomous living than those who were either (1) exposed to the CM system but who failed to graduate the program or (2) were never exposed to the CM system and who failed to graduate from the transitional living program.

As discussed earlier, GAF ratings are a clinician’s judgment of an individual’s overall functioning. Only participants in group CM – C demonstrated improvement from moderate to mild symptoms of psychopathology, which is of considerable clinical significance.

This increase in participants’ GAF ratings may have occurred because of unique components of the CM program. Those participants in group CM – C were rewarded for their participation in activities that promoted personal growth. More specifically, clients
who participated in academic (i.e., attending classes), work (i.e., looking for and maintaining employment), volunteer (i.e., assisting other not-for-profit agencies), or personal growth behaviors (i.e., individual and/or group psychotherapy/psychoeducation) were recognized by staff and their peers and rewarded for their efforts. According to Yalom (1995), within a group setting there are a number of factors associated with positive personal growth, which include “the installation of hope, universality, imparting of information, altruism, corrective recapitulation of the primary family group, development of socializing techniques, imitative behavior, catharsis, existential factors, direct advice, and interpersonal healing.” One might explain the program’s positive effect as an extension of the curative factors associated with a supportive group environment. Those curative factors that may have been particularly beneficial include the installation of hope, universality, socializing techniques and the imparting of information, as many of the services were geared around group activities designed to inform, develop, guide and encourage participants’ interpersonal growth. Individuals who engaged in academic pursuits, maintained employment, volunteered, participated in constructive social interactions, and/or took part in self-constructive behaviors may have promoted their overall functioning.

An alternative explanation for the observed increases in GAF ratings may be that participants’ involvement in the program supplanted their involvement in maladaptive relationships, behaviors, and/or environments. Many who were granted entry into the transitional living program had escaped domestic environments characterized by emotional, physical, and sexual abuse. In order to function within these environments,
many of these youth had developed harmful coping strategies such as alcohol and drug use (i.e., diagnosed substance abuse/dependence disorders), criminal conduct (e.g., juvenile adjudication histories), and sexual bartering (i.e., the provision of sexual favors in exchange for food, housing, and/or substances). By providing participants the opportunity to “earn” their rental subsidies through active involvement in pro-social behaviors, the program may have allowed them to replace the self-destructive coping mechanisms established prior to their intake with healthy coping strategies and behaviors for managing stress. Though the mediator/s of change is unclear, one may theorize that the information imparted during their involvement in psychoeducational services may have provided clients with a different conceptual framework for evaluating the manageability of stressors. Furthermore, clients’ may have modified and/or expanded their socialization techniques through their involvement in the growth-centered services offered through the agency.

The failure of those participants in group CM – Inc. to successfully graduate from the transitional living program may be explained as a function of unmet needs. It is possible that those participants in group CM – Inc. required treatments that fell outside of the services offered though the agency. Alternatively, these participants may have required more intensive utilization of existing services or different services, altogether.

**Change in QL Scores.** The results failed to confirm the second hypothesis that changes in QL scores among participants in the treatment group CM – C would be significantly higher than those in treatment groups CM – Inc. and NCM – Inc. While a trend in the expected direction for group CM – C, there was also a significant increase
among those in the other groups. Results did reveal a main effect of test. These overall increases observed in clients’ QL provides evidence for the efficacy of the agency’s services, generally. Once admitted into the shelter, clients’ are provided access to healthcare services, a secure environment and nourishment. As such, it is not surprising the clients would rate their overall health as improved.

Given the significant increases in participants’ GAF ratings, it was surprising that their differences in QL were not statistically significant. How could the results of one measure of overall functioning exhibit significant increases and not the other? It may be that the items within the QL form subscale are not sensitive to the unique developmental considerations of youth who are chronically homeless. That is to say, items within the QL subscale may not be sensitive to the unique perspectives held by homeless youths on the topic of life satisfaction. It may be unreasonable to expect increases in participants’ ratings of their financial stability or living arrangements, when items within the measure are phrased in such broad terms (e.g., “How comfortable and well-off are you, financially?”).

Alternatively, participants’ perceptions of their overall functioning may differ from those of their treating clinicians. The clinician’s assessment of a client’s level of functioning is based upon his or her training and expectations. These may not align with their client’s perceptions of self, especially if the appraisal could suggest a diminished capacity to thrive. In other words, participants may be biased against perceiving of themselves in terms of their weaknesses or vulnerabilities. Consequently, the ratings of all participants could have been relatively high.
Change in MD/E Scores. Results confirmed the third hypothesis that participants’ changes in MD/E scores were higher among those in group CM - C than in the CM – Inc. and NCM – Inc. groups.

The CM program was initially designed to increase the likelihood that those enrolled in the shelter’s transitional living program would successfully transition into autonomous lifestyles. Paramount to an individual’s ability to live independently is his or her sense of personal empowerment; the ability to perceive of his or her goals as attainable and due to personal efforts. For example, an individual may feel overwhelmed at the idea of managing his or her personal budget. However, with appropriate financial planning, the individual may begin to perceive his or her financial obligations as manageable. The aim of the CM program was, therefore, to assist clients in gaining a greater sense of control over their lives and achieving valued roles in society by reinforcing behaviors important to living independently.

The provision of rewards following participants’ engagement in adaptive, autonomy-affirming behaviors may have produced the success experiences crucial in sustaining their independence. Given that chronically homeless youth are at a much greater risk of experiencing severely stressful life events, it seems unlikely that their lifestyles, prior to entering the shelter, allowed for the development of the cognitive (i.e., decision-making) and emotional skills necessary for independent living. It is possible that separation from pre-shelter lifestyles was not as great among those in group CM – Inc., thus inhibiting their ability to distinguish healthy and unhealthy decisions.
It is also possible that participants’ greater sense of efficacy in their decision-making stemmed from the insightful thinking promoted by the CM program. That is, the program may have stimulated the metacognitive process of evaluating one’s decisions against their outcomes. This would, in turn, allow for the opportunity to judge the utility of their decisions. This shift in awareness may be associated with increased empowerment.

**Strengths and Weaknesses**

As a result of the study’s quasi-experimental design, the researcher had no control over the administration of the CM system. Therefore, any potential conclusions must be tempered with knowledge of the potential weaknesses inherent in a quasi-experimental design. When compared to a well-controlled experimental design, the present study’s design does not control the numerous extraneous, and potentially confounding, variables present in a complex social milieu. Therefore, it is impossible to identify a causal relationship between exposure to the CM system and the outcomes measured. Of course, without random assignment, quasi-experimental designs are always vulnerable to naturalistic influences.

Due to the absence of experimental control over exposure to the CM program, generalizations cannot be made about the effectiveness of the CM program independent of the particular group of CM – C participants and the particular experiences of those participants. Without random assignment, one cannot rule out the effects of confounding variables (e.g., group difference). Furthermore, this study does not address the specific subject variables that may influence participants’ success within the shelter.
In addition, the current study did not address the effects of specific components of the CM program. Given the relatively small sample of clients ($N=37$), the generalizability of the results should be carefully considered. In order to assess the utility of specific program components, a larger sample would be required. At the time that data for this study was collected, relatively few clients had participated in the transitional living program, either with or without exposure to the CM procedures, consequently limiting the data available for analysis.

**Future Studies**

All of these considerations may drive future research in delineating the role of CM programs in the successful intervention with homeless youth in shelter settings. Once an individual has been admitted into the transitional living program, the increased stability of the environment is, typically, a beneficial factor. Unfortunately, this is by no means a guarantee of success. Though infrequent, a small portion of the participants demonstrated decreases in functioning. These clients may have been ill-equipped to perform within a system designed to facilitate self-reliance. Finding steady employment and housing and/or performing in academic/vocational settings are goals that require a variety of skills. As such, some clients may have become overwhelmed with the stresses involved in pursuing such objectives. For example, those participants who remain consumed with familial problems seemed to have less interest in accessing the agency services. This relationship was often discussed during staff meetings while reviewing clients’ cases.
Whatever the reason(s), it is clear that some lack the social, cognitive, or emotional skills necessary to navigate the complex challenges of the shelter’s environment. The etiology of this problem has been explained, anecdotally, as a function of the clients’ confrontation with the reality of their psychopathology. In other words, some participants may struggle to accept the reality of their psychological health prior to entering shelter, and are not prepared to enter an environment designed to promote personal growth. Future studies may seek to explore this pattern and the associated subject variables (i.e., self-awareness) that may explain this phenomenon.

Due to the relatively small number of participants involved in the study, multivariate correlational analyses could not be performed. However, future research may seek to identify those subject variables that predict successful graduation from the transitional living program. It is possible that those clients who successfully graduated from the transitional living program were equipped with the self-efficacy and desire for change that would allow for personal growth. Perhaps, clients who possess these two characteristics are more likely to succeed as a function of their overall empowerment and accurate self-perceptions.

Though there are no known measures that have been used in the assessment of the process of change for homeless youth population, several measures have been developed based on the transtheoretical model (TTM) of behavior change (DiClemente et al., 1998). In order to assess clients’ propensity for change, future research may develop a modified version of the University of Rhode Island Change Assessment Scale (Levesque, Gelles & Velicer, 2000). A measure based on the TTM
could be beneficial to the agency in assessing clients’ readiness for the transitional living program.

Future studies may also seek to explore the relationship between clients’ coping strategies and their success within the program. It is possible that clients possessing both emotion-focused and problem-focused coping strategies fare better than those whose coping behaviors are polarized in either direction (Lazarus & Folkman, 1984). Data on the coping strategies was not available at the time of analysis, but could inform the selection process for the transitional living program and treatments most appropriate for those enrolled.

Given the surprising results of the QL measure, future research may examine the factors that would allow for the development of a psychometric sensitive to differences in the subjective experience of quality of life among the homeless youth population.

Another potential for future research may seek to explore the impact of the specific components within a CM system. This may serve to demonstrate the efficacy of specific components of the CM system with regard to participants’ overall functioning. For example, a critical component of this study’s CM system allowed for client to engage in therapy/counseling. It may be that those clients who successfully demonstrated increases in GAF and MD/E scores had participated more frequently in therapeutic services, thereby increasing their mental health and overall functioning. On the other hand, one may observe an inverse relationship between success and therapy if those clients without psychopathology were less likely to participate in therapy. By introducing greater control through more precise measurement, evidence may be
provided for the necessity of mental health services as youth progress through such programs.

Future research could utilize a “dismantling procedure” or “component-analysis design” in order to evaluate the extent to which distinct elements of the CM program contribute to clients’ successful transition into autonomous lifestyles (Gravetter & Forzano, 2009, p. 404). Identification of the component, or components, of a CM program is critical to its success can improve the cost-effectiveness of future programs without sacrificing their benefits. Such research would involve random assignment of participants to different versions of a CM program (e.g., one associated with individual psychotherapy and another associated with group psychotherapy).

As mentioned earlier, studies related to the lasting impact of CM programs may be useful in determining their efficacy across time. Should future research suggest that those who were exposed to the program maintain or grow in their ability to function, there would be significant programmatic implications for homeless youth shelters across the nation. Determining which intervention strategies are of the greatest use among this specific population would be of great value, not only to those agencies who provide the services, but also to those individuals and institutions who provide the funding for these agencies. This information could also benefit society at large. According to a study conducted by the Partnership for America’s Economic Success (2008):

Eliminating poverty early in childhood is estimated to increase adult productivity (earnings gains) between $53,000 and $100,000. That total does not account for those benefits for which it is hard to assign a dollar value, such as the child’s
greater enjoyment of growing up in a non-poor household, or the psychological value of being a more productive member of the labor force. From a taxpayer perspective, such a program would result in savings of about $2,800 per poor child as a result of reductions in welfare payments and food stamps. It would also result in between $10,700 and $20,000 in increased tax revenue from the higher earnings, [annually]. (p. 3)

Considering both economic and potential psychological benefits that derive from programs for homeless youth, increased support for studies that can contribute to our understanding of successful intervention seem to be urgently needed.

In the current behavioral healthcare market, consumers of outcome data want evidence that clients benefit from treatment. There is a significant gap between the research and the practice of empirically supported interventions. Most practitioners operate in a feedback vacuum, receiving little or no useful information to allow for the development of effective programs. As such, it is of great importance that who develop, implement and maintain service-based programs are empowered with the means to properly assess the efficacy of their work.
REFERENCES


Eisenberger, R., Cameron, J. (1996). Detrimental effects of reward: reality or myth?  


Cengage Learnin, Inc., Belmont, CA.


Ohio Mental Health Consumer Outcomes System
Adult Consumer Form

Today's Date ___/___/____

Name __________________________

Date of Birth ___/___/____

Gender (check one): Male ☐ Female ☐

Agency Use Only

Client’s Medical Record Number

We are very interested in how you are doing, and how our services may or may not be helping you. Please answer all of the questions below, then give the questionnaire to your case manager or another staff person at the mental health agency.

Part 1

Below are some questions about how satisfied you are with various aspects of your life in the past 6 months. For each question, checkmark ☐ the answer that best describes how you feel.

4. How much money you have to spend for fun?
☐ Terrible
☐ Mostly dissatisfied
☐ Equally satisfied/dissatisfied
☐ Mostly satisfied
☐ Very pleased

5. The amount of meaningful activity in your life (such as work, school, volunteer activity, leisure activity)?
☐ Terrible
☐ Mostly dissatisfied
☐ Equally satisfied/dissatisfied
☐ Mostly satisfied
☐ Very pleased

6. The amount of freedom you have?
☐ Terrible
☐ Mostly dissatisfied
☐ Equally satisfied/dissatisfied
☐ Mostly satisfied
☐ Very pleased

7. The way you and your family act toward each other?
☐ Terrible
☐ Mostly dissatisfied
☐ Equally satisfied/dissatisfied
☐ Mostly satisfied
☐ Very pleased
☐ Does not apply

Please turn to the next page →
8. Your personal safety?
   □ Terrible
   □ Mostly dissatisfied
   □ Equally satisfied/dissatisfied
   □ Mostly satisfied
   □ Very pleased

9. The neighborhood in which you live?
   □ Terrible
   □ Mostly dissatisfied
   □ Equally satisfied/dissatisfied
   □ Mostly satisfied
   □ Very pleased

10. Your housing/living arrangements?
    □ Terrible
    □ Mostly dissatisfied
    □ Equally satisfied/dissatisfied
    □ Mostly satisfied
    □ Very pleased

11. Your health in general?
    □ Terrible
    □ Mostly dissatisfied
    □ Equally satisfied/dissatisfied
    □ Mostly satisfied
    □ Very pleased

12. How often do you have the opportunity to spend time with people you really like?
    □ Never
    □ Seldom/rarely
    □ Sometimes
    □ Often
    □ Always

13. How often does your physical condition interfere with your day-to-day functioning?
    □ Never
    □ Seldom/rarely
    □ Sometimes
    □ Often
    □ Always

14. Concerns about my medications (such as side effects, dosage, type of medication) are addressed:
    □ Never
    □ Seldom/rarely
    □ Sometimes
    □ Often
    □ Always
    □ Not applicable/no medications

The next two items deal with how you have been treated by other people.

15. I have been treated with dignity and respect at this agency.
    □ Never
    □ Seldom/rarely
    □ Sometimes
    □ Often
    □ Always

16. How often do you feel threatened by people’s reactions to your mental health problems?
    □ Never
    □ Seldom/rarely
    □ Sometimes
    □ Often
    □ Always

Part 3

The following questions ask you about how much you were distressed or bothered by some things during the last seven days. Please mark the answer that best describes how you feel.

During the past 7 days, about how much were you distressed or bothered by:

17. Nervousness or shakiness inside
    □ Not at all
    □ A little bit
    □ Some
    □ Quite a bit
    □ Extremely

Please turn to the next page ➔
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.</td>
<td>Being suddenly scared for no reason</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
</tr>
<tr>
<td>19.</td>
<td>Feeling fearful</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
</tr>
<tr>
<td>20.</td>
<td>Feeling tense or keyed up</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
</tr>
<tr>
<td>21.</td>
<td>Spells of terror or panic</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
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<td>22.</td>
<td>Feeling so restless you couldn't sit still</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
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<tr>
<td>23.</td>
<td>Heavy feelings in arms or legs</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
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<tr>
<td>24.</td>
<td>Feeling afraid to go out of your home alone</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
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<tr>
<td>25.</td>
<td>Feeling of worthlessness</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
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<tr>
<td>26.</td>
<td>Feeling lonely even when you are with people</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
</tr>
<tr>
<td>27.</td>
<td>Feeling weak in parts of your body</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
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<tr>
<td>28.</td>
<td>Feeling blue</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
</tr>
<tr>
<td>29.</td>
<td>Feeling lonely</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
</tr>
<tr>
<td>30.</td>
<td>Feeling no interest in things</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
</tr>
<tr>
<td>31.</td>
<td>Feeling afraid in open spaces or on the streets</td>
<td>Not at all, A little bit, Some, Quite a bit, Extremely</td>
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</table>

Please turn to the next page ➔
32. How often can you tell when mental or emotional problems are about to occur?

☐ Never
☐ Seldom/rarely
☐ Sometimes
☐ Often
☐ Always

33. When you can tell, how often can you take care of the problems before they become worse?

☐ Never
☐ Seldom/rarely
☐ Sometimes
☐ Often
☐ Always

<table>
<thead>
<tr>
<th>Part 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below are several statements relating to one's view about life and having to make decisions. Please check the response that is closest to how you feel about the statement. Check the word or words that best describes how you feel now.</td>
</tr>
</tbody>
</table>

34. I can pretty much determine what will happen in my life.

☐ Strongly agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

35. People are limited only by what they think is possible.

☐ Strongly agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

36. People have more power if they join together as a group.

☐ Strongly agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

37. Getting angry about something never helps.

☐ Strongly agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

38. I have a positive attitude toward myself.

☐ Strongly agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

39. I am usually confident about the decisions I make.

☐ Strongly agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

40. People have no right to get angry just because they don't like something.

☐ Strongly agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

41. Most of the misfortunes in my life were due to bad luck.

☐ Strongly agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

42. I see myself as a capable person.

☐ Strongly agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

43. Making waves never gets you anywhere.

☐ Strongly agree
☐ Agree
☐ Disagree
☐ Strongly Disagree

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>44. People working together can have an effect on their community.</td>
<td>51. I am able to do things as well as most other people.</td>
</tr>
<tr>
<td>[ ] Strongly agree</td>
<td>[ ] Strongly agree</td>
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<tr>
<td>[ ] Agree</td>
<td>[ ] Agree</td>
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<tr>
<td>[ ] Disagree</td>
<td>[ ] Disagree</td>
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<tr>
<td>[ ] Strongly Disagree</td>
<td>[ ] Strongly Disagree</td>
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<tr>
<td>45. I am often able to overcome barriers.</td>
<td>52. I generally accomplish what I set out to do.</td>
</tr>
<tr>
<td>[ ] Strongly agree</td>
<td>[ ] Strongly agree</td>
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<tr>
<td>[ ] Agree</td>
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<td>[ ] Disagree</td>
<td>[ ] Disagree</td>
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<tr>
<td>[ ] Strongly Disagree</td>
<td>[ ] Strongly Disagree</td>
</tr>
<tr>
<td>46. I am generally optimistic about the future.</td>
<td>53. People should try to live their lives the way they want to.</td>
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<tr>
<td>[ ] Strongly agree</td>
<td>[ ] Strongly agree</td>
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<td>[ ] Agree</td>
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<tr>
<td>[ ] Disagree</td>
<td>[ ] Disagree</td>
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<tr>
<td>[ ] Strongly Disagree</td>
<td>[ ] Strongly Disagree</td>
</tr>
<tr>
<td>47. When I make plans, I am almost certain to make them work.</td>
<td>54. You can’t fight city hall (authority).</td>
</tr>
<tr>
<td>[ ] Strongly agree</td>
<td>[ ] Strongly agree</td>
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<tr>
<td>[ ] Agree</td>
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<td>[ ] Disagree</td>
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<tr>
<td>[ ] Strongly Disagree</td>
<td>[ ] Strongly Disagree</td>
</tr>
<tr>
<td>48. Getting angry about something is often the first step toward changing it.</td>
<td>55. I feel powerless most of the time.</td>
</tr>
<tr>
<td>[ ] Strongly agree</td>
<td>[ ] Strongly agree</td>
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<tr>
<td>[ ] Agree</td>
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<td>[ ] Disagree</td>
<td>[ ] Disagree</td>
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<tr>
<td>[ ] Strongly Disagree</td>
<td>[ ] Strongly Disagree</td>
</tr>
<tr>
<td>49. Usually I feel alone.</td>
<td>56. When I am unsure about something, I usually go along with the rest of the group.</td>
</tr>
<tr>
<td>[ ] Strongly agree</td>
<td>[ ] Strongly agree</td>
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<tr>
<td>[ ] Agree</td>
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<td>[ ] Disagree</td>
<td>[ ] Disagree</td>
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<tr>
<td>[ ] Strongly Disagree</td>
<td>[ ] Strongly Disagree</td>
</tr>
<tr>
<td>50. Experts are in the best position to decide what people should do or learn.</td>
<td>57. I feel I am a person of worth, at least on an equal basis with others.</td>
</tr>
<tr>
<td>[ ] Strongly agree</td>
<td>[ ] Strongly agree</td>
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<tr>
<td>[ ] Agree</td>
<td>[ ] Agree</td>
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<td>[ ] Disagree</td>
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<tr>
<td>[ ] Strongly Disagree</td>
<td>[ ] Strongly Disagree</td>
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Global Assessment of Functioning (GAF) Scale

91-100 Superior functioning in a wide range of activities, life's problems never seem to get out of hand, is sought out by others because of his or her many positive qualities. No symptoms

81-90 Absent or minimal symptoms (e.g., mild anxiety before an exam), good functioning in all areas, interested and involved in a wide range of activities, socially effective, generally satisfied with life, no more than everyday problems or concerns (e.g., an occasional argument with family members)

71-80 If symptoms are present, they are transient and expectable reactions to psychosocial stressors (e.g., difficulty concentrating after family argument); no more than slight impairment in social occupational, or school functioning (e.g., temporarily falling behind in schoolwork).

61-70 Some mild symptoms (e.g., depressed mood and mild insomnia) OR some difficulty in social occupational, or school functioning (e.g., occasional truancy or theft within the household), but generally functioning pretty well, has some meaningful interpersonal relationships.

51-60 Moderate symptoms (e.g., flat affect and circumstantial speech, occasional panic attacks) OR moderate difficulty in social, occupational, or school functioning (e.g., few friends, conflicts with peers or co-workers).

41-50 Severe symptoms (e.g., suicidal ideation, severe obsessional rituals, frequent shoplifting) OR any serious impairment in social, occupational or school functioning (e.g., no friends, unable to keep a job).

31-40 Some impairment in reality testing or communication (e.g., speech is at times illogical, obscure, or irrelevant) OR major impairment in several areas, such as work or school, family relations, judgment, thinking, or mood (e.g., depressed man avoids friends,
neglects family, and is unable to work; child frequently beats up younger children, is
defiant at home, and is failing at school).

21-30 Behavior is considerably influenced by delusions or hallucinations OR serious
impairment in communication or judgment (e.g., sometimes incoherent, acts grossly
inappropriately, suicidal preoccupation) OR inability to function in almost all areas (e.g.,
stays in bed all day, no job, home, or friends).

11-20 Some danger of hurting self or others (e.g., suicidal attempts without clear
expectation of death; frequently violent; manic excitement) OR occasionally fails to
maintain minimal personal hygiene (e.g., smears feces) OR gross impairment in
communication (e.g., largely incoherent or mute).

1-10 Persistent danger of severely hurting self or others (e.g., recurrent violence) OR
persistent inability to maintain minimal personal hygiene OR serious suicidal act with
clear expectation of death.

0 Inadequate information.