One factor thought to contribute to the underutilization of mental health services, especially among rural Americans, is the stigma attached to mental illness and the associated help seeking process. This study investigated the effects of an instructional unit on mental illness and related issues on rural adolescents' concept of mental illness and their attitudes about seeking professional help for emotional problems. A total of 40 students enrolled in a rural high school were chosen as participants. Twenty were designated as the treatment group and 20 served as the control group. Survey instruments were administered to gather data on 2 dependent variables: (1) participants' concepts of mental illness; and (2) participants' attitudes toward seeking psychological help. Results indicated that changes in both variables were significant, and furthermore, that these changes did not decrease significantly when tested again 12 weeks later. These results are discussed in the context of educating rural youth about mental illness with the express purpose of removing the stigma associated with the help seeking process. (Contains 16 references and 1 table.) (Author/RB)
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Effects of a Unit in Mental Health on Rural Adolescents’ Attitudes About Seeking Help and Concepts of Mental Illness

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Abstract

The present study investigated the effects of an instructional unit on mental illness and related issues on rural adolescents' concept of mental illness and their attitudes about seeking professional help for emotional problems. A total of forty students enrolled in a rural Mississippi high school were chosen as participants. Twenty were designated as the treatment group and twenty served as the control group. A 2x2 analysis of covariance (ANCOVA) with pre-test scores serving as the covariate was used to test for a statistically significant difference between treatment and control pre-test and post-test scores on measures of two dependant variables. A dependant groups t-test was used to test for statistical significant difference between post-test 1 scores and scores obtained twelve weeks after the unit was completed. Results indicated that changes in both dependant variables (attitudes about seeking professional help and concepts of mental illness) were significant, and furthermore, that these changes did not decrease significantly when tested again twelve weeks later. These results are discussed in the context of educating rural youth about mental illness with the express purpose of removing the stigma associated with the help seeking process.

Introduction

According to recent estimates of the prevalence of mental disorders and data collected on the use of mental health services, it is clear that services designed to assist those in need of mental health care are underused (Horwitz, 1987). One factor thought to contribute to the underutilization of mental health services, especially among rural Americans, is the stigma attached to mental illness and the associated help seeking process.

The presence of stigma is evident in the rural population's concept of mental illness and attitudes about seeking professional help. Wodarski (1983) has suggested that stigma connotes a lack of social acceptance by others, and that the very act of seeking help, whether a diagnosis of mental illness is substantiated or not, may initiate social bias directed at the help seeker. Rural Americans, perhaps more so than other groups under study, are susceptible to the effects of stigma associated with mental illness. Certain characteristics of rural residents such as their high regard for...
autonomy and self-help, and other related cultural values and attitudes are reportedly related to the propagation of stigma (Kelleher, Taylor, & Rickert, 1992). Stigma tolerance has been cited as a mediator to help seeking, and perhaps consequently, proportionately fewer rural residents use mental health services than do urban residents (Flaskerud & Kviz, 1982). It would seem that a next logical step in removing the stigma of mental illness, and thus in removing an obstacle to service delivery, is to promote positive attitudes about seeking psychological help and to foster a concept of mental illness which is less stereotypical and myth-laden (M. O. Wagenfeld, personal correspondence, 1994).

Napoletano (1981) has suggested five factors which seem to influence attitudes about mental illness. They are: (a) classroom instruction, (b) age of participant, (c) contact with mental patients, (d) fear reduction, and (e) length of practicum in mental health. These factors were shown to influence participants’ attitudes about mental illness and the mentally ill. Adolescence is a prime time to introduce change in attitudes and concepts related to mental illness and help seeking, especially if one considers that only a small number of adolescents perceive therapeutic methods as an option for help when faced with emotional problems. Of paramount importance is the observation that behavioral problems have replaced infectious disease as the major cause of morbidity and mortality among adolescents. Several researchers have noted that depression, substance abuse, physical and sexual abuse, and teenage pregnancy are considered to be the "new morbidities of youth" (Battaglia, Coverdale, & Bushong, 1990; Blum, 1987; Offer & Schonert-Reichl, 1992). The purpose of the present study then, was to determine if a unit of instruction designed to change concepts about mental illness and attitudes about seeking professional help was effective. The changes facilitated by the intervention were also tested for durability over time.

Method

Participants

The participants in this study were forty adolescents, 13 through 17 years of age (M = 14.7 years). The participants were enrolled in a public school district which serves a rural area in north Mississippi. The district from which the participants were chosen is characterized by farming and furniture manufacturing as the primary source of income for the residents of the area. Regarding socioeconomic status of the participants’ families, the median per capita income of the
district has been reported to be $8,700. Of the families living within the school district, 14.17% were reported to have incomes below the poverty level. The school from which participants were recruited is located in a rural area near a township with a population of less than 700. All adolescents in the ninth grade who were currently enrolled in Health, who had parents' or guardians' permission to participate, who themselves agreed to take part in the study, and who were present during all phases of the treatment period completed the program of instruction and the accompanying measures. Female participants made up 62.5% of the sample (n = 25) while 37.5% of the sample were males (n = 15). All participants were assigned to either the treatment group or the control group, based on their class assignments.

**Measures**

Two instruments were used in the present study. The first dependent variable, participants' concepts of mental illness, was measured using the Opinions about Mental Illness Questionnaire (OMI; Cohen & Struening, 1962). The OMI was developed to identify opinions about the cause, treatment, and prognosis of mental illness. The instrument contains 51 items and is scored on a 6-point Likert scale, with an individual item range of strongly disagree (0) to strongly agree (5), and, consequently, a full scale range of 0 to 255. Scores derived from Factor A, Factor D, and Factor E were used exclusively in the analysis due to reports from several sources regarding the poor internal consistency of the other factors. Factor A, is most accurately defined as authoritarianism. This factor measures opinions about the mentally ill as an inferior class requiring coercive handling. Factor D, identified as social restrictiveness, measures the respondents' opinion that the mentally ill are dangerous and should be controlled in some way. Factor E is identified as interpersonal etiology and measures the opinion that mental illness is caused by interpersonal experiences, especially parental deprivation during childhood. The raw scores were used for comparison purposes in the present study.

The second dependent variable, participants' attitudes toward seeking psychological help, was measured with the Fischer-Turner Pro-Con Attitude Scale (Fischer & Turner, 1970). The scale consists of 29 Likert-type items presented in a 4-point agree-disagree format, with an individual item
range from disagree (0) to agree (3), and a full scale range of 0 to 87. Although four factors have been identified, full scale scores were used in the present analyses.

Participants were also presented with an open ended question asking them if and from whom they had sought help for a personal/emotional problem.

Procedures

Permission to proceed with the study was obtained from the principal of the school, the Health teacher and the superintendent of the district. Students who had obtained parental permission attended their regularly scheduled Health classes where they completed all measures and participated in the instructional unit. Both classes met for a total of 270 minutes during the week of treatment.

On the first day of experimenter contact, participants completed the two instrument pre-test in their respective classes. Packets including the Opinions About Mental Illness Questionnaire, and the Fischer -Turner Pro-Con Attitude Scale were prepared. Participants were also asked to report if and from whom they had sought help for an emotional problem. Standardized instructions for completion of the instruments were provided to participants. Following instructions, the participants completed each instrument. Total time required for this phase was approximately twenty minutes. On the following three days of class, treatment was administered to the treatment group only. The treatment was based on a video program designed for use with adolescents (Petchers, Beigel, and Drescher, 1988) supplemented with information pertaining to the sources of help in the immediate community, definition and qualifications of different types of helpers, and the reality of associated stigma. The control group attended regularly scheduled classes, unrelated to mental health. During the final fifteen minutes of the final day of treatment, the first post-test was given. At a date twelve weeks after the first post-test, a second post-test was given in the same manner.

Results

Several assumptions of the analysis of covariance (to be completed in two separate analyses using FTAS and OMI scores) not satisfied by the research design were tested. A visual examination of scatterplot diagrams and calculated r-values of pre-test scores (X) on post-test scores (Y) demonstrated a strong linear relationship between the covariate and the dependant variable (r = .92 for FTAS and r = .83 for OMI). Homogeneity of variance was demonstrated by a comparison of the
variances of the groups involved in the analysis ($F_{\text{MAX}} = 1.76$ for FTAS and $F_{\text{MAX}} = 1.71$ for OMI). Homogeneity of regression was examined by inspecting the regression coefficients for each group (for FTAS: $b_1 = 1.01; b_2 = 1.05$ and for OMI: $b_1 = .88; b_2 = .84$). Inspection of these regression coefficients suggests that the slopes are not significantly different. Consequently, other steps in the ANCOVA were conducted.

Results of the analyses conducted with the Fischer-Turner Pro-Con Attitude Scale serving as the dependent variable are reported first. Based on a calculated $F$ value of 9.60 ($df = 1.37; p < .025$) the null hypothesis ($H_0: \mu_i = \mu_j$ for all $i \neq j$) was rejected, and the alternative (not $H_0$) was accepted. A statistically significant difference did seem to exist. Twenty-one percent ($\eta^2$) of the variance was accounted for by the treatment.

It was further determined that there was no statistically significant difference between post-test 1 and post-test 2 scores on the FTAS based on a calculated $t$-value of .47 ($df = 19; p > .025$). That is to say, FTAS full scale scores obtained immediately after treatment and again twelve weeks later did not differ significantly.

Results of the analyses conducted with The Opinions about Mental Illness Questionnaire were strikingly similar. Based on a calculated $F$ value of 30.66 ($df = 1.37; p < .025$) the null hypothesis ($H_0: \mu_i = \mu_j$ for all $i \neq j$) was rejected and the alternative (not $H_0$) was accepted. A statistically significant difference was discernable. Forty-five percent ($\eta^2$) of the variance was accounted for by the treatment.

As in the first analysis, a dependant groups $t$-test was used to determine if the treatment group OMI post-test 1 score mean and the treatment group OMI post-test 2 score mean differed significantly. Based on a calculated $t$-value of 2.01 ($df = 19; p > .025$), it can be said that the difference is not statistically significant. That is to say, the means of the selected factor scores, taken collectively, did not decrease significantly when retested twelve weeks after the administration of post-test 1. A summary of these results for each dependant variable is presented in Table 1.
Table 1

Means and Standard Deviations for the Dependent Variables

<table>
<thead>
<tr>
<th>Treatment Level</th>
<th>Dependent Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>FTAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>44.45</td>
<td>9.10</td>
<td></td>
</tr>
<tr>
<td>Post-test 1</td>
<td>50.50</td>
<td>12.12</td>
<td></td>
</tr>
<tr>
<td>Post-test 2</td>
<td>50.00</td>
<td>11.70</td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>103.55</td>
<td>10.96</td>
<td></td>
</tr>
<tr>
<td>Post-test 1</td>
<td>115.10</td>
<td>13.00</td>
<td></td>
</tr>
<tr>
<td>Post-test 2</td>
<td>111.05</td>
<td>16.16</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>FTAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>45.80</td>
<td>9.07</td>
<td></td>
</tr>
<tr>
<td>Post-test 1</td>
<td>44.35</td>
<td>11.07</td>
<td></td>
</tr>
<tr>
<td>Post-test 2</td>
<td>43.80</td>
<td>9.31</td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>105.90</td>
<td>12.99</td>
<td></td>
</tr>
<tr>
<td>Post-test 1</td>
<td>101.35</td>
<td>14.32</td>
<td></td>
</tr>
<tr>
<td>Post-test 2</td>
<td>104.35</td>
<td>13.61</td>
<td></td>
</tr>
</tbody>
</table>

Note. n = 20 for all groups. FTAS = Fischer-Turner Pro-Con Attitude Scale full scale scores. OMI = Opinions About Mental Illness Questionnaire raw scores from factors A, D, and E.

Twenty-nine of the forty participants reported that they had sought help for emotional problems in the past. Of those reporting seeking help, 48.4% (n = 15) reported that their choice of helper was a friend. Parents/Grandparents was the second most frequently cited category of helpers (35.5%; n = 11). Siblings were reported as helpers for two participants. The School Counselor, Ministers, and Teachers were each cited by one participant as the helper of choice. Altogether, 31 sources of help were reported (two participants reported two sources each).

Discussion

The purpose of this study was to examine the effectiveness of a unit in mental health issues on adolescents' attitudes about seeking professional help for emotional problems and their opinions
about and concepts of mental illness. The unit emphasized the definition and roles of mental health professionals and the etiology, symptomatology, diagnosis, prognosis, and treatment of mental illnesses.

It has been noted that people from rural areas underutilize mental health professionals even when resources are plentiful. One explanation for this is that the stigma associated with seeking help, and certain values espoused in the rural society, discourage such use. The propagation of stigma has often been identified as having its genesis in inaccurate information about mental illness and mental health professionals.

Based on a review of the literature available on (a) rural populations, (b) adolescents, (c) help seeking, (e) opinions and concepts regarding mental illness, and (f) mental health education practices, a unit of instruction was designed and implemented. The participants were tested before the unit, immediately after the unit, and again twelve weeks later.

Participants were forty students who attended a high school in a rural area of north Mississippi. Twenty students comprised the control group and twenty students comprised the treatment group. Four analyses were conducted employing two independent variables (two analyses per dependant variable). Analyses of both sets of data revealed similar results. ANCOVA's, with pre-test scores on each dependant variable serving as the covariate revealed that the intervention was successful in raising the scores on the FTAS and the OMI. Participants' attitudes became more favorable toward seeking professional help for emotional problems, and perhaps just as importantly, this improvement did not decrease significantly over twelve weeks. Participants concepts of mental illness and their opinions about mental illness became more like those of mental health professionals, and as with the FTAS, the change did not differ significantly when tested twelve weeks later.

The results are particularly encouraging if the cognitive changes demonstrated in the present study transfer to actual utilization of professional care givers as has been suggested by several researchers. Regardless, the present study has demonstrated the efficacy of the treatment in changing attitudes and concepts. These cognitive variables are considered to be two important precursors to the help seeking process (cf. Greenley, Mechanic, & Cleary, 1987; Hourani & Khlat, 1986; Lockwood, 1984; Rosenstock, 1974), and are related to stigma tolerance.
The implications on the development of a mental health curriculum are twofold. First, it has been demonstrated that education about mental illnesses and mental health professionals changes the attitudes and concepts regarding mental illnesses that seem to be obstacles in the path to treatment. These attitudes and concepts, if unfavorable or inaccurate, contribute to stigma which compounds the reluctance of an individual to seek professional help. It should be noted that the attitude measure scores in the present study were much lower than those obtained with a sample of urban youth (Fischer & Cohen, 1972). Only after treatment did the rural youth's scores approach the scores of urban youth (obtained in absence of treatment). In light of this, it is evident that the rural adolescent population can benefit from the utilization of the curriculum.

Second, the role of the school counselor and other mental health professionals has been brought into focus. Very few of the participants indicated that they had utilized the school counselor or other trained professionals for help with emotional problems: most had turned to friends and family. Arguably, the school counselor is on the "front line" for providing assistance to rural youth, but at least in the present study, is not being called upon. Perhaps it is within the duties of the counselor to educate the student body about help seeking and the counselor's role in the school. It has been noted that the mental health professional's role as teacher in the delivery of the instructional unit may be one of the most efficacious components of the intervention (cf. Battaglia, Coverdale, & Bushong, 1990). Community based professionals may also be called upon to fill the role as teacher of mental health issues, strengthening the linkage of mental health services and resources in the rural area to the public education system.

In conclusion, it is recommended that the role of the mental health professional as a medium by which to deliver the curriculum be considered in future research. Furthermore, future research should emphasize the use of similar curriculum, especially the use of more comprehensive methods which engage the student for a considerably longer amount of time than in the present study. The researcher should also be cautioned about using the term "rural" as an all inclusive descriptor for non-urban areas. Rural areas differ considerably and some of these differences may influence the variables to be measured. Finally, as evidenced by the underutilization of the school counselor's skills and services in the present study, the role of the counselor in rural schools should be subjected to
further study. Studies helping to identify the current role played by the counselor, as well as suggestions pertaining to the training of counselors wishing to work in rural areas, should be considered.
References


