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Effectiveness of a Psychoeducational Parenting Group on Child, Parent and Family Behavior: A Pilot Study in a Family Practice Clinic with an Underserved Population

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Abstract

Background—Although integrated care for adults in primary care has steadily increased over the last several decades, there remains a paucity of research regarding integrated care for children in primary care.

Purpose—To report results of a pilot study testing initial feasibility of a parenting psychoeducational group targeting child behavioral problems within a primary care clinic.

Method—The participants (n = 35) were parents representing an underserved population from an inner-city primary care clinic. Participants attended a 12-week psychoeducational parenting group and reported pre- and post-measures of family functioning, child misbehavior and dyadic functioning. Paired t-tests and effects sizes are reported.

Results—Participants reported statistically significant improvement in family functioning, child misbehavior and couple functioning after participating in the parenting psychoeducational group.

Conclusions—Results suggest initial feasibility of a parenting psychoeducational group within a primary care clinic with an underserved population. This intervention may be useful for other primary care clinics seeking to offer more integrative care options for children and their families.

Keywords

Parenting Psychoeducational Groups; Primary Care; Underserved Population

Over the last several decades the medical and mental health fields have worked to create collaborative relationships in order to provide integrated (mind-body) care for adults (Frank, McDaniel, Bray, & Heldring, 2003; Gatchel & Oordt, 2003; Haas, 2004; McDaniel, Hepworth & Doherty, 1992; Moss, McGrady, Davies & Wickramasekera, 2003). Results have suggested that adult integrated primary care: (1) increases communication between doctor and patient, (2) increases management of behavioral health symptoms, (3) increases management of chronic conditions such as diabetes and asthma, and (4) reduces overall visit frequency (Gallo, et al., 2004; Law & Crane, 2000; Law, Crane & Berge, 2003; Mendenhall & Berge, in press; Moss, et. al., 2003). These promising results have suggested the need to

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look at providing integrated care for children in primary care, but there has been a lack of research in this area outside of specialty care clinics (Bradley, et. al., 1999; Cunningham, et.al., 2008; Kitchiner & Bundred, 1996). Thus, the main purpose of this paper is to report results of a pilot study testing initial feasibility of a parenting psychoeducational group targeting child behavioral problems within a primary care clinic in order to improve integrated care options for children and their families.

Parenting/Relational Issues and Primary Care

There is a need for more relational interventions housed within primary care clinics. Research on mental health problems in primary care indicate that over 65% of patients who report mental health problems (e.g. depression, anxiety) to primary care doctors report "relationship problems" as one of the main causes of the mental health problem (Kroenke, & Mangelsdorff; 1989). Based on experiential evidence within the clinic where this study was conducted, MD residents and faculty report that over half of the parents that present for primary care visits identify that one of the main reasons for their visit is "problems with their kids," or "stress because of their family." Thus, parenting psychoeducational groups may offer a resource for the primary care doctor, the patient, and the child.

Psychoeducational groups are not new to primary care clinics, many chronic health conditions (e.g. diabetes, asthma, chronic pain) are being treated with a combination of individual primary care visits and "group visits" (Gatchel & Oordt, 2003). For instance, in treating diabetes many primary care clinics offer group visits to patients where they learn about basic diabetes education, psychosocial symptoms that may co-occur with diabetes, specific management techniques (e.g. lifestyle changes), and receive social support. Research has identified that these types of groups have been effective in decreasing isolation, increasing management behaviors, and in some cases reducing hemoglobin A1c levels in diabetic patients (Crane & Marshall, 2006; Gatchel & Oordt, 2003; Mendenhall & Berge, in press; Moss, et.al., 2003). Similarly, parenting psychoeducational groups could be utilized to manage chronic relational problems between children and their parents as an outlet for integrated care within primary care clinics.

Parent Management Training

A wide variety of research studies over more than twenty years have shown that children's behavior reliably improves as a result of training the parents to behaviorally manage and communicate more effectively with their children. Programs have included therapists with individual couples or single parents, therapists working conjointly with parents and the child, and psychoeducational group training programs (O'Dell, 1985).

Moreover, there is an abundant developmental literature defining parental styles and their positive or negative outcomes on children. Each parent management training approach typically has overlapping elements, as well as, specific constructs unique to their individual approach. Reviews of the literature (Hart, Newell, & Olsen, 2003; Ladd & Pettit, 2002) identify three major overlapping dimensions across parent management approaches that link parenting practices to confident and competent children. Earlier studies referred to these dimensions as warmth, expectation, and respect for individuality (Baumrind, 1967, 1971; Damon, 1988); later definitions utilized the terms connection, regulation, and autonomy (Hart et al., 2003). The present study uses a parenting curriculum that focuses on these three dimensions of parenting and calls them Love, Limits and Latitude (LLL).

Underserved Populations and Primary Care

Because underserved populations are typically difficult to reach and have high drop-out rates in research, they are an important population to learn about (Fiscella & Holt, 2007; Miranda, et.al., 2004; Reschovsky, & O'Malley, 2008). Patients who are mostly minority, with low income and low education levels are commonly found within inner city primary care clinics (Fiscella & Holt, 2007; Miranda, Schoenbaum, Sherbourne, Duan, & Wells, 2004; Reschovsky, & O'Malley, 2008). Providing parenting psychoeducational groups to underserved populations within primary care clinics provides a natural avenue to access and engage a population that is typically hard to reach. Using primary care clinics as a research base may allow for: (a) underserved populations to feel less stigmatized because they are comfortable in the primary care setting, (b) increased convenience for research involvement, (c) potential increase in the adherence to research protocol or reduced drop-out rates.

Research Questions

In order to establish initial feasibility of a parenting psychoeducational program in an underserved population in Minneapolis, a pilot study was conducted to address three main research questions. These questions were primarily chosen based on the needs of the families in the clinic, which were most commonly communicated as "complaints" relayed to their primary care doctors at medical visits (i.e. family functioning problems, child misbehavior and couple relationships problems). The following research questions were addressed in this study: (a) Does self-reported family functioning increase after participation in the LLL parent psychoeducational group? (b) Does self-reported child misbehavior decrease after participation in the LLL parent psychoeducational group? and (c) Does self-reported couple relationship distress decrease after participation in the LLL parent psychoeducational group?

Methods

Participants

Participants were from an inner-city neighborhood in North Minneapolis, Minnesota. Of the 47 participants who began the 12-session parent psychoeducational group, 35 completed the group. All of the 35 parents attended at least 10 of the 12 sessions. Of the 35 parents who completed the group, 85% were female and 15% were male. The majority of parents were African-American (79%), with 11% Caucasian, 6% Native American, 2% Hispanic and 2% other. Over half of the parents participating (68%) were single parents. Of the 32% of parents who were married, the mean years of marriage was 3 (sd = 5.16). Over 60% of the parents made less than \$30,000 a year and 56% of parents were unemployed (31% were employed full-time, and 13% were part-time employed). Educational level of the parents included: 43% of parents never finished high school, 34% finished high school or received a GED, and the other 23% had finished some college (e.g. associates degree or bachelors degree). The target child of the intervention was between the ages 5–10 (mean = 7.13; SD = 1.67) with 65% boys and 35% girls. Parents had an average of 2 children (mean = 2.29 sd = 1.18; range = 1–6).

Analyses to test whether completers and non-completers were different from each other indicated that non-completers had more children (t = 2.29, p = .027). The 12 non-completers had an average of 3 children (mean = 3.25; sd = 1.49), whereas the 35 completers had an average of 2 children (mean = 2.29; sd = 1.18). Completers and non-completers did not significantly differ on any other demographic variables.

Procedures

Recruitment—Parents were recruited from a primary care clinic in North Minneapolis. This clinic is also connected to the University of Minnesota as a resident training facility for MDs. All parents who attended this clinic were offered an opportunity to participate in the group if they had a child between the ages 5–10. Flyers were hung in the waiting rooms and doctor offices, nurses gave out flyers during appointments, and doctors (both medical and mental health) offered the group to their patients. All components of the study were approved by the University of Minnesota IRB.

Parent psychoeducational group—There were three consecutive parent psychoeducational groups facilitated between October 2007 and June 2008. Families were invited to bring their children ages 5–10 and their spouses or people who co-parented with them. The groups were held from 4:30–6:30 pm on a weeknight and ran for 12 weeks. The parenting groups were held in the family practice clinic where the parents and their children attended for medical services. Families would gather at 4:30 pm and split into two groups. Parents would attend the parenting group while children attended a skills-based class that focused on teaching basic social skills through activities and play. The two classes were 90 minutes long. Parents were told they could bring their other children between the ages of 5–10 to participate in the child's skill-based class, but that they needed to identify one child as the "target child" for the intervention. Parents were also provided babysitting resources for their younger children.

After the classes ended parents and children would re-convene to eat a family meal and participate in a family connecting activity. The connecting activities included playing the "ungame" or "family meal questions" during dinnertime, in order to convey that family dinners could be a time for not only exchanging information but building relationships. Incentives were used to reward participation in the intervention. Parents were given \$25 gift cards to a local grocery store when they completed baseline and follow-up assessment measures.

Each parenting group contained between 10–14 parents. In the first group there were 11 parents, in the second group there were 14 parents and in the third group there were 10 parents. In each of the three groups, only one parent filled out assessment instruments. This was due to the fact that in all three groups only 3 couples attended together, and one was a mother-grandmother dyad. Analyses indicated no significant differences between the three groups on any demographic variables reported above. On weeks in which some families were not present at the groups, material from the psychoeducational parenting groups and child skills group were given to the absent family. Because there only 1 or 2 families gone at any given time during the groups, the overall participation in the groups was not affected by low attendance numbers.

Love, Limits & Latitude (LLL) Parenting Psychoeducational Program Description

The psychoeducational parent management training used in the groups was the "Love, Limits, and Latitude: A Thousand Small Moments of Parenting" (LLL) program (Wells, Law, & Johnson, 2001). As it is used in this program, *Love* refers to the connection, attachment, and bond between parents and children (see Table 1). It provides children a sense of belonging in the family and of being important as a person, which is critical to their emotional and moral development (Damon & Hart, 1988). Four sessions make up the love section of the program.

Limits are addressed in the next five sessions, which teach parents how to provide appropriate structure and discipline. The program teaches that when parents set limits,

children experience a sense of regulation, consistency, and control that gradually changes from parent-control to self-control. Such children experience a sense of control over their lives and surroundings because they understand the rules and the consequences if those rules are not kept, providing them a growing confidence in their ability to be competent (Eccles, Early, Frasier, Belansky, & McCarthy, 1997).

Latitude, or parental respect for children's individuality, is taught in the last three sessions. Latitude means acknowledging and appreciating that children are unique individuals. Parents who offer children latitude value their children as unique individuals, validate children's ideas and preferences, and give children permission to differ from them in thoughts and feelings, helping children feel valued and loved (Damon, 1988). Moreover, they recognize that children bring with them their own personality and temperaments that parents must take into account; that some children are more "high maintenance" than others (Greene, 1998). This part of the program is designed to help parents help their children develop a sense of self that is stable as children mature and makes children less likely to feel the need to rebel against parental limits to prove they are different from their parents (Barber & Harmon, 2002).

The format for the training in the LLL program is a psychoeducational group. Groups of 8 - 14 parents meet with two instructor/group facilitators for two-hour periods each week for 12 weeks. In each session, the instructors review concepts from previous weeks, call for discussion of homework assignments, and lead the group members through the concepts of the current session. They assist members where appropriate through the group process, but are alert to the balance between task focus and interpersonal disclosure.

Measures

Family functioning—Family functioning was measured using the Family Assessment Device (FAD: Epstein, Baldwin & Bishop; 1983). This sixty item assessment describes structural and organizational properties of the family group and the patterns of transactions among family members which have been found to distinguish between healthy and unhealthy families. Each FAD question is scored on a four-point Likert scale from Strongly Agree to Strongly Disagree. Examples of questions on the FAD include: (1) In times of crisis we can turn to each other for support, (2) We talk to people directly rather than through go-betweens, and (3) We are able to make decisions about how to solve problems. Higher FAD scores equate to higher levels of distress within the family.

The FAD is made up of seven scales, one measuring overall family functioning and one for each of the six dimensions/scales. The seven scales are General Functioning, Problem Solving, Communication, Roles, Affective Responsiveness, Affective Involvement, and Behavior Control. The FAD has been demonstrated to have adequate internal consistency, validity, and test-retest reliability with the scales ranging from .66 – .76 (Miller, Epstein, Bishop, & Keitner, 1985).

Child misbehavior—Child misbehavior was measured using the Youth Outcome Questionnaire (Y-OQ; Burlingame, Wells, & Lambert, 1996), a 64-item parent report measure constructed specifically to track progress of mental health treatment in children and adolescents. Items are scored on a 5-point Likert scale from "Never or Almost Never" to "Almost Always or Always". Examples of questions on the Y-OQ include: (1) My child appears sad or unhappy, (2) My child deliberately breaks rules, laws or expectations, and (3) My child has difficulty waiting his/her turn in activities or conversations. Higher Y-OQ scores equate to higher levels of child distress. The Y-OQ has six subscales which when summed give a Total Score: Intrapersonal Distress, Somatic, Interpersonal Relations, Social Problems, Behavioral Dysfunction, and Critical Items (e.g. paranoia, obsessive-compulsive behaviors, hallucination, delusions, suicide, mania, and eating disorders). The Y-OQ has been shown to be reliable (Chronbach's Alpha = .94; test-retest = .84), valid, and sensitive to treatment related change (Atkin et al., 1997; Wells, Burlingame, & Lambert, 1999). Each parent participating in the program chose one of the children living with them as a "target child" for this scale.

Dyadic functioning—Dyadic functioning of parents as couples was measured using the Revised Dyadic Adjustment Scale (RDAS: Busby, Crane, Larsen, & Christensen, 1995). This 14 item assessment measures the dimensions of dyadic consensus, satisfaction and cohesion which are summed into the overall dyadic score. Items are scored on a 6-point Likert scale from "All the Time" to "Never". Examples of questions on the RDAS include: (1) Do you and your mate engage in outside interests together?, (2) Do you ever regret that you married (or live together)?, and (3) How often do you calmly discuss something? The overall dyadic score is used for this study. Higher RDAS scores indicate higher dyadic adjustment. The RDAS has a Chronbach's Alpha of .90, as well as demonstrated criterion validity with standardized discriminant coefficients of .34, .55. and .32 respectively for the Consensus, Satisfaction, and Cohesion subscales (Busby et al. 1995).

Statistical Analyses

All three parenting psychoeducational groups were grouped together for analysis, based on the earlier finding that the three groups did not differ significantly on important demographic information. Table 2 reports average family functioning, dyadic functioning, and child misbehavior before and after parents started the 12 week group. These tables also contain mean difference scores, change over time measured by paired t-tests, confidence intervals and effect sizes. Pre-post effect sizes (Cohen's *d*) were calculated using the formula suggested by Rosenthal (1984) for matched-pairs data (d = t/df). In addition, analyses were stratified by household structure to identify if single-parent households differed from two-headed households on outcomes. Results did not differ significantly between the groups, thus results are reported with households collapsed.

Results

Family Functioning

The first research question was, "Does family functioning increase after participation in the LLL parent psychoeducational group?" As shown in Table 2, participants reported significant improvement on four of the seven subscales: General Functioning (t= 3.14, p= . 014, d= .54), Problem Solving (t= 3.93, p= < .0001, d= .67), Communication (t= 3.55, p = .001, d= .62), and Roles (t= 2.58, p= .015, d= .47). These significant t values had moderate effect sizes ranging from d= .47 to d= .67.

Child Behavior

The second research question was, "Does child misbehavior decrease after participation in the LLL parent psychoeducational group?" As shown in Table 2, children of LLL participants were perceived by parents to have significantly improved on five of the six subscales: Intrapersonal Distress (t= 3.51, p= .001, d= .60), Somatic (t= 2.60, p= .014, d= .45), Interpersonal Relations (t= 3.26, p= .003, d= .57), Social Problems (t= 3.27, p= . 002, d= .56) and Critical Items (t= 2.55, p= .015, d= .44). The change over time in the Total YOQ Score was also significant (t= 3.12, p= .004, d= .55). The significant t values had moderate effect sizes ranging from d= .44 to d= .60.

Dyadic Functioning

The final research question was, "Does couple relationship distress decrease after participation in the LLL parent psychoeducational group?" In Table 2, results indicate that participants reported significant improvement in their overall RDAS score (t = -3.91, p = .001, d = .74). This significant *t* had a moderate effect size.

Feasibility Results

Questionnaires and/or informal interviews were conducted with a random group of physicians/residents, clinic staff, and participants to identify initial feasibility of the program. Anecdotal reports showed high feasibility of the psychoeductional groups, the logistics to carry-out the groups, and physician and patient satifaction.

Anecdotal reports from residents and faculty doctors indicated that they were extremely pleased with their patient's participation in the program. Several residents and faculty doctors commented that the patients they referred to the groups reported less "family problems," "relationship stresses," and made fewer medical appointments to see them since participating in the LLL parenting group.

Anecdotal reports from clinic staff indicated high feasibility with implementing of the intervention. Staff scheduled the group visits the same way they did other appointments, allowing for their work flow to be uninterrupted. Also, participants were able to get reminder calls because they were in the electronic system. Staff also reported hearing families involved in the intervention talking with other families about the program in a positive manner in the waiting room before the groups started each week. As a result, several other families asked to be involved.

Anecdotal reports from participants also indicated success and feasibility of the program. Many of the parents asked how they could participate again. Parents and youth reported especially liking LLL home activities and the furnished meals each week. Parents also reported that they felt like they had learned more about "parenting" in the LLL group than anywhere else. Although these are anecdotal reports, the quantitative results reported above also corroborate the success and feasibility of the program.

Discussion

The main aim of this study was to establish initial feasibility of the LLL parenting psychoeducational program in a primary care clinic with an underserved population by testing for significant changes in the following outcomes: family functioning, child misbehavior and couple functioning.

Results indicated that the LLL parenting program significantly increased family and dyadic functioning, and decreased child misbehavior as reported by parents. In terms of family functioning the subscale of most interest to this study is General Functioning because it is the most commonly used subscale to measure overall family functioning. Participants made strong positive changes in General Functioning as demonstrated by statistically significant change and a moderate effect size of d = .54. Thus, with the significant changes in the overall General Functioning Scale, the significant changes in four of the other seven subscales, and the moderate effect sizes, results suggest feasibility and preliminary efficacy for the LLL program in increasing family functioning.

In terms of child misbehavior, as perceived by the parent, children improved on five of the six subscales and the total overall Y-OQ score. Thus, with the significant changes in the total overall Y-OQ score, the significant changes in five of the other six subscales, and the

moderate effect sizes, results suggest feasibility and initial efficacy for the LLL program in decreasing child misbehavior, as perceived by the parent.

With regards to dyadic functioning, analyses showed that parents reported significantly improved relationships with their significant other. Thus, with the significant changes in overall dyadic functioning and a moderate effect size, results suggest feasibility and preliminary efficacy for the LLL in improving couple functioning.

Implications

The results of this study indicated that participant's reports of family functioning, child misbehavior and couple functioning significantly improved after participating in a 12-week LLL parenting psychoeducational group. There are several implications that have particular relevance to primary care clinics in relation to providing integrated care options for children and their families. First, this study was conducted and carried out entirely within a primary care clinic. Participants were recruited through the clinic staff, nurses, physicians, residents and mental health providers, the parenting groups were facilitated within the clinic, and the group facilitators were providers and mental health doctoral students already providing mental health services in the clinic. Thus, the results of this study indicate initial feasibility, or viability, of this intervention for primary care clinics.

Future research using follow-up designs, as well as, research that utilizes a control group is needed to validate results and show longitudinal success. Also, future research should incorporate medical information as outcome variables, now that initial feasibility of the LLL parenting program has been indicated. Such studies could include measures such as: frequency of medical visits, a measure of somatic symptoms, or a pre-/post- measure from medical residents/doctors indicating their reasons for referral and if the problems have improved.

A second important implication for primary care relates to the population of this study. This study was conducted with an underserved population. Our participants were primarily families on welfare, with the majority being African-American. Only 12 of the original 47 parents dropped out of the program (25%). This is considered a low drop-out rate for underserved populations, which are often hard to reach and engage (Fiscella & Holt, 2007; Miranda, et.al., 2004; Reschovsky, & O'Malley, 2008). This completion rate represents a measure of acceptability by the population served. Also, the results of our study indicate initial support for the universality of the parenting concepts taught in LLL. To date, LLL has been used with Caucasian and Native American Families (Law, Wells, Berge, 2006; Law, wells & Johnson, 2006). The SES levels for Caucasian families have been mid-high and for the Native American families low-mid (Law, et.al., 2006; Law, et.al., 2006). Thus, providers can feel confident that the curriculum in the LLL program will be suitable for the populations that many primary care clinics, especially resident training programs, see on a day-to-day basis.

A third implication for primary care relates to being able to meet multiple needs simultaneously with this intervention. In this study, both patients and providers at the primary care clinic reported benefitting from the intervention. Although our study only statistically measured outcomes on patients who were participants, anecdotal reports relayed above indicate that both patients and medical doctors were satisfied with the intervention. In primary care, where keeping on track with scheduled appointments is essential, providing other services to address patients' psychosocial needs is important. It is common for medical residents and faculty doctors to spend up to an hour or more with patients with multiple physical and mental health needs. Providing an integrated care resource, such as a parenting psychoeducational group, that could meet some of the underlying psychosocial needs of

patients would allow for medical providers to experience less stress and keep the primary care clinic running smoothly.

Limitations

There were some limitations to this study. First, the "real-world" nature of this study is both a weakness and strength. Admittedly, the lack of a control group limits the study's scientific rigor. On the other hand, the study was conducted in the way that many parenting groups in clinical practice are conducted, with minimal screening, taking almost all parents with varying levels of commitment to improvement, thereby increasing generalizability. Further, the clinician/therapists in the study were graduate students who tended to have minimal experience with parenting groups, yet the parents completing the program realized statistically significant gains. In addition, participants were all self-selected, which may have possibly skewed their self-reported assessments of child, couple and family functioning in the positive direction. Finally, the small "n" size of our sample size can limit statistical power, although our results had moderate effect sizes indicating significant change.

Conclusion

This study suggests that the Love, Limits, and Latitude (LLL) parenting group program is feasible, acceptable and has preliminary efficacy in reducing child misbehavior and increasing family functioning and couple functioning among low-income, primarily minority families attending a primary care clinic. As a result, this integrated care intervention shows promise for engaging and retaining these difficult-to-reach families in a setting where multiple treatment needs (including both physical and psychosocial) can be addressed in an efficient manner.

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Table 1

Session Content for Love, Limits and Latitude (LLL) Parent Psychoeducational Group

Construct Taught	Session #	Session Content:
Love	Session 1	Love through Play
	Session 2	Love through Attention and Praise
	Session 3	Love through Conversation
	Session 4	Love through Routines
Limits	Session 5	Values Help Connect and Set Limits
	Session 6	Limits through Effective Commands
	Session 7	Limits through Rewards
	Session 8	Limits through Consequences
	Session 9	Limits through Time-out
Latitude	Session 10	Latitude through Understanding Self
	Session 11	Latitude through Being Flexible When Your Children Are Inflexible
	Session 12	The Art of Parenting: Putting It All Together

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Table 2

Results of FAD, RDAS and Y-OQ

					95% Confidence In	95% Confidence Interval of the Difference			
	Pre-Test	st	Post-Test	st	Lower	Upper	t	Sig.	p
	Mean	SD	Mean	SD					
Subscale/Scale:									
Family Assessment Device									
General Functioning	29.03	6.25	14.49	3.67	1.61	7.51	3.14	.004	.54
Problem Solving	14.49	3.67	11.77	2.30	1.31	4.12	3.93	.0001	.67
Communication	22.94	3.72	19.85	3.44	1.32	4.86	3.55	.001	.62
Roles	29.06	4.93	26.10	4.11	.618	5.32	2.58	.015*	.47
Affective Responsiveness	13.76	3.85	12.68	3.52	48	2.66	1.41	.169	.25
Affective Involvement	16.70	3.88	16.18	4.21	-1.16	2.19	.62	.536	.11
Behavior Control	20.00	5.21	18.30	4.75	22	3.61	1.81	.080	.32
RDAS									
Total Score	44.00	13.00	50.83	7.94	-10.41	-3.27	-3.91	.001 *	.74
$\delta 0$ -X									
Intrapersonal Distress	21.34	11.13	13.49	10.19	3.30	12.40	3.51	.001	.60
Somatic Symptoms	7.10	5.86	4.62	3.79	.540	4.40	2.60	.015*	.45
Interpersonal Relations	10.86	8.32	4.89	6.38	2.25	9.70	3.26	.003	.57
Social Problems	6.74	5.97	3.00	3.33	1.42	6.07	3.27	.002 *	.56
Behavioral Dysfunction	16.34	9.12	12.80	7.10	37	7.46	1.84	.075	.32
Critical Items	8.17	6.15	5.03	3.86	.64	5.64	2.55	.015*	4 .
Total Y-OQ Score	72.39	41.72	45.00	30.08	9.51	45.34	3.12	.004	.55

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* indicates statistically significant results < .05.