

IS THE BEHAVIORAL PROGRESS MADE AT JRC SUSTAINABLE AND
GENERALIZEABLE: A FOLLOW UP STUDY OF FORMER JRC STUDENTS.

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We surveyed post-treatment outcomes of 39 former students of the Judge Rotenberg Educational Center (JRC), a residential care facility that employs a highly consistent application of behavioral treatment and educational programming. All students who were reachable and who had attended JRC for at least six months were included. The mean length of time since a student had attended JRC was 2 years and 10 months (range 0.5 - 9.8 years). We used both a subjective General Life Adjustment rating scale (performed by guardians and/or the former students themselves) and objective counts of certain Quality of Life Indicators. Using these measures, this group of students showed marked improvement over their status prior to enrolling in JRC.

Introduction

Examining post-treatment patient or student outcomes for the users of residential care facilities remains an important aspect in assessing the long-term durability of the treatment students receive while in the care of the facility, as well as the generalizability of treatment effects to natural environments. The participants in this study consisted of former students of the Judge Rotenberg Educational Center (JRC). JRC operates day and residential programs for children and adults with behavior problems, including conduct disorders, emotional problems, brain injury or psychosis, autism and developmental disabilities. This study is part of JRC's ongoing efforts to assess the effectiveness of treatment after students have left the program.

The basic underlying approach taken in all of JRC's programs is the use of behavioral psychology and its various technological applications, such as behavioral education, programmed instruction, precision teaching, behavior modification, and behavior therapy and counseling. From JRC's inception, its philosophy has always included the following principles: a willingness to accept students with the most difficult behavioral problems and a refusal to reject or expel any student because of the difficulty of his or her presenting behaviors; the use of a highly structured, consistent application of behavioral psychology to both the education and treatment of its students; elimination or minimization of the use of psychotropic medication; and the

use of a full range of effective behavioral education and treatment procedures, including supplementary aversives if needed.¹

As a result of JRC's zero-rejection admissions policy, students who attend JRC have included some of the most challenging and difficult students in the nation. A typical JRC student comes into the facility taking one or more psychotropic medications,² has been suspended and/or expelled from a variety of school settings, has extremely poor interpersonal relationships with others (including family members), and is likely on a trajectory to end up in a psychiatric hospital or prison (in fact, many students have a history of psychiatric hospitalizations prior to admission and some have been referred to JRC from a prison setting).

Participants and Method

Participants

The participants consisted of 39 former students of the Judge Rotenberg Educational Center (JRC). Out of an initial pool of 349 former students, 342 were selected to be called for data collection. The criteria for the selection of the 342 former students included: a.) they had attended JRC for at least 6 months; b.) they had been discharged from JRC; c.) they were still alive with valid contact information available; d.) they had not previously indicated a desire to not participate in previous editions of this study. All together, data was successfully collected for 39 (11.4%) of the 342 former students.

As has been the case with the previous JRC follow up studies, the sole reason for inability to contact participants was a lack of current contact information despite consistent efforts to maintain contact and obtain current contact information (e.g., repeated phone contacts, searches of information databases such as 411 or Whitepages, etc.).

The mean age of the 39 former students (i.e., at the time of this investigation) was 22.8 years (range 16.4 – 46.3 years). The mean length of stay at JRC was 3.4 years (range 0.7–15.5 years). The mean time since discharge from JRC was 2.8 years (range 0.5–9.8 years). The reporter was a parent (either by birth or adoption) in 16 (41%) of the cases and the participant him/herself in 23 (59%) of the cases. See Figure 1.

¹ Additional information is available from JRC's website at www.judgerc.org.

² During a 2008 survey, of those students admitted to JRC during the prior 5 years who were still enrolled at the time of the survey, 85% had been taking at least one psychotropic medication prior to enrolling in JRC; of those same students who were enrolled at JRC at the time of the survey, only 3% continued to receive psychotropic medication.

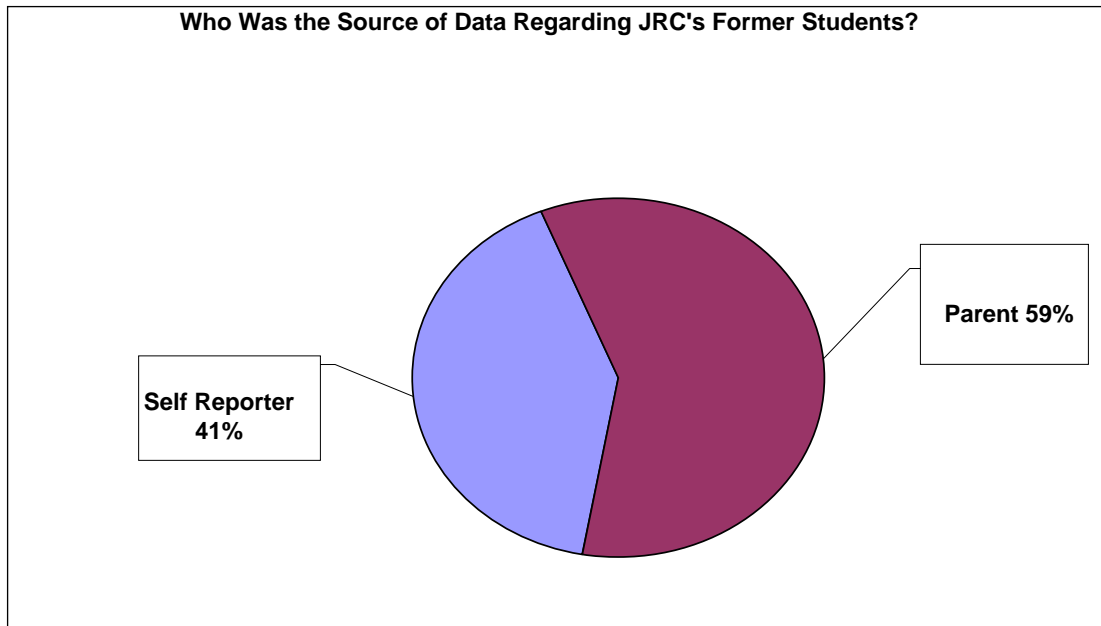


Figure 1

All 39 of the former students included in this study had received comprehensive behavioral treatment during their tenure at JRC. Figure 2 shows the type of behavioral treatment that the 39 former students had received at JRC.

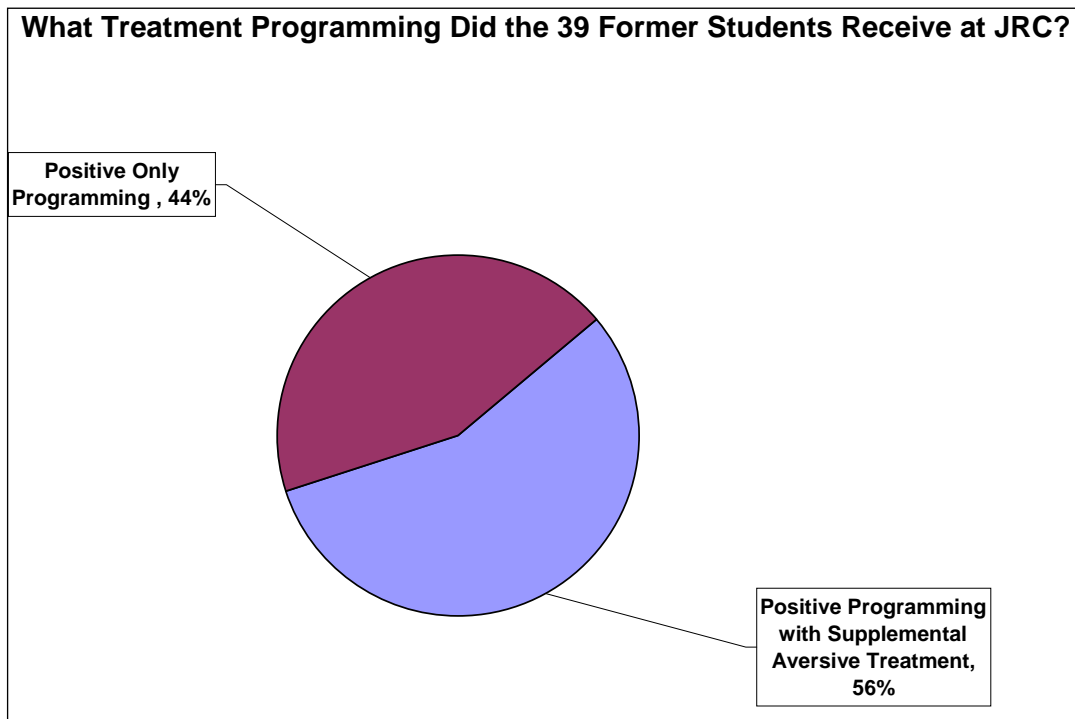


Figure 2

For 17 of these former students (44%), treatment had consisted of positive-only programming. For 22 of these former students (56%), treatment had consisted of positive programming supplemented with contingent aversives in the form of a brief skin shock generated by the Graduated Electronic Decelerator (GED) device³.

Method

Once potential participants were identified using the selection criteria described above, the legal guardian of the participant or the former student (if the student was his or her own guardian), was contacted via telephone by a JRC staff member. During a telephone interview, the respondents were asked a set of questions from a structured questionnaire, which included questions regarding current dimensions of general life functioning: psychiatric hospitalizations; psychotropic medications; legal involvement; daytime activities and employment status; educational activities; and recreational activities. Guardians were also asked to provide a general narrative and comments regarding the former students' performance and to provide a rating of their general life adjustment based upon a 5-point Likert-type scale (with 1-very poor, 2-below average/not good, 3-fair, 4-good, and 5-exceptional). These ratings were provided both for present life adjustment and for life adjustment prior to receiving treatment at JRC.

Results

From an initial total pool of 342 potential participants, 39 (11.4%) parent/guardians or former students were successfully contacted. As has been the case with the previous JRC follow up studies, the sole reason for inability to contact participants was a lack of current contact information despite consistent efforts to maintain contact and obtain current contact information (e.g., repeated phone contacts, searches of information databases such as 411 or Whitepages, etc.).

Living/Residential Situation

Where are former JRC students living? See Figure 3.

³ The GED is a remote-controlled skin-shock device which delivers brief, mild electrical stimulation to the surface of the skin. The reader is referred to www.effectivetreatment.org/remote.html for a detailed paper regarding the development and characteristics of the GED. Additionally, a case study documenting the effectiveness of positive programming supplemented with contingent aversives in the form of the GED can be found at www.effectivetreatment.org/treat.html.

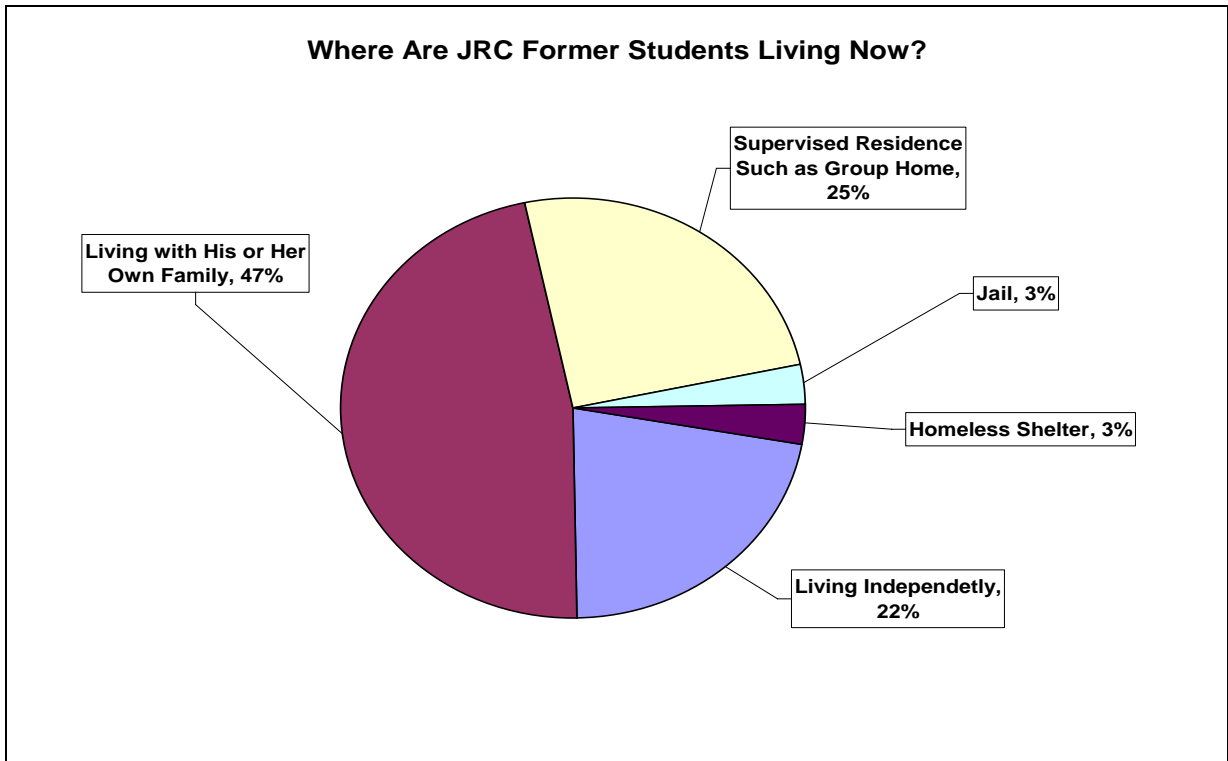


Figure 3

Eight (22%) were living independently. Seventeen (47%) were living with their family. Nine (25%) were in supervised residential situations such as group homes that either the parents or the former student considered to be less restrictive than living at JRC. One individual (3%) was in jail and one (3%) was living in a homeless shelter.

Treatment

What are the ongoing treatment needs of students after leaving JRC?

Prior to their JRC admission, all of these students were in need of treatment, as evidenced by the very fact that they had to be placed at JRC. Post-JRC only 51% of these students had required any kind of ongoing treatment. Figure 4 shows the treatment needs that the former students have had since leaving JRC.

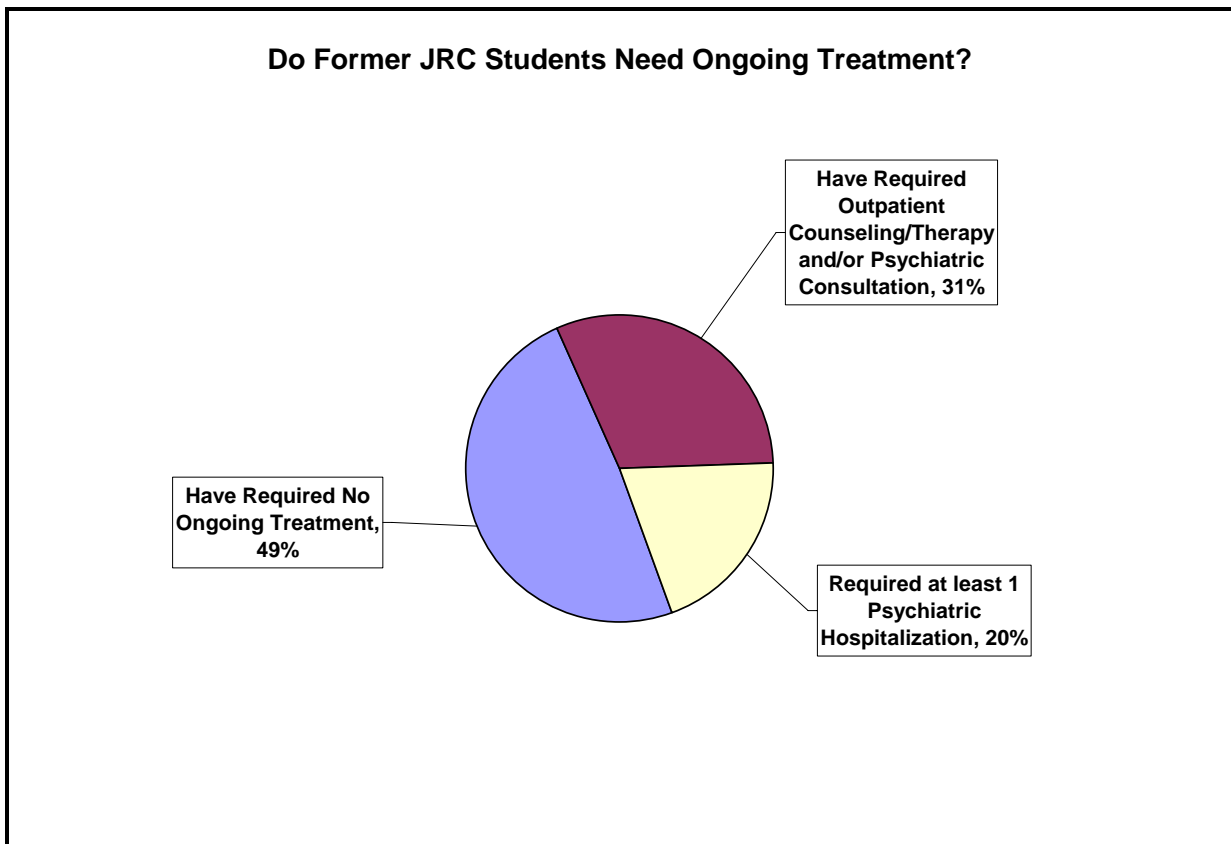


Figure 4.

Nineteen (49%) have needed no further treatment. Twelve (31%) have utilized outpatient counseling, therapy, or psychiatric consultation. Eight (20%) have required at least one psychiatric hospitalization because of their behaviors.

Psychotropic Medications

Figure 5 shows the number of students requiring psychotropic medications before and after attending JRC.

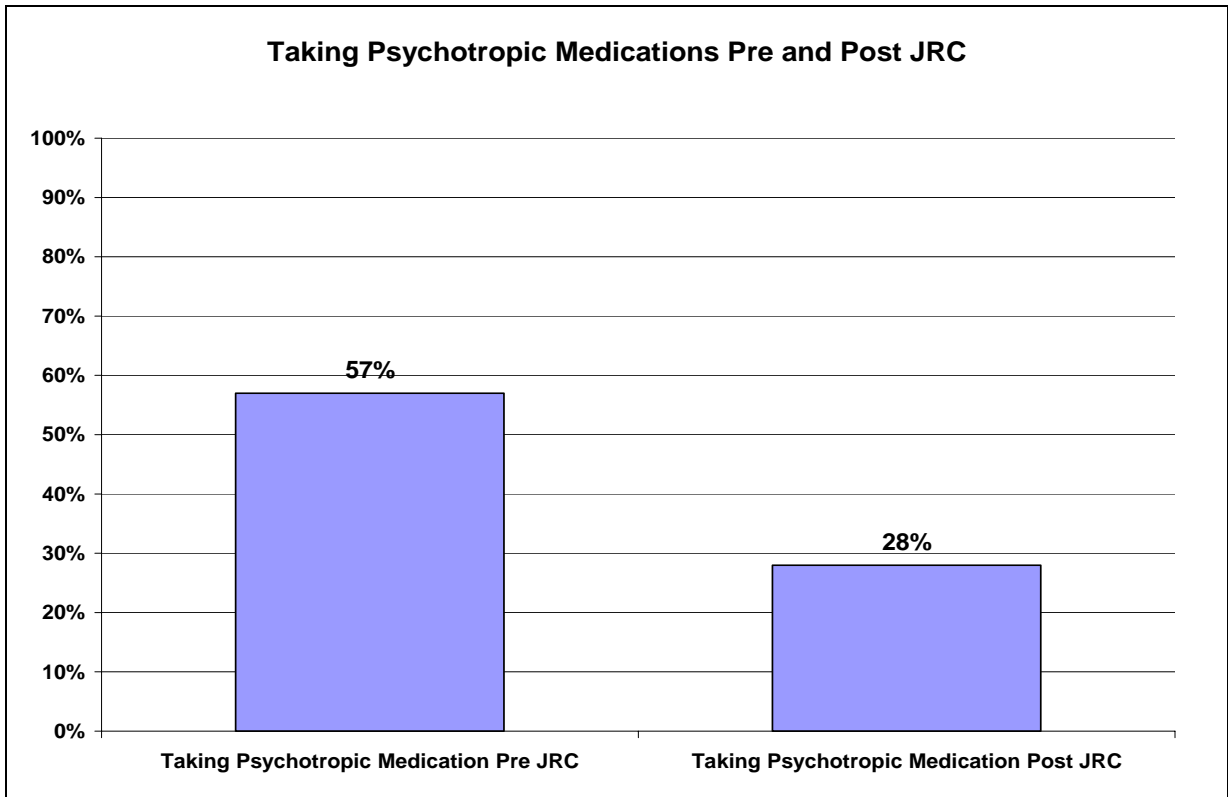


Figure 5

At the time of admission to JRC, 57% of the students were receiving psychotropic medications. At the time of follow-up, only 28% were receiving such medications.

Education

What impact does JRC’s program have on educational placements after students leave JRC? Figure 6 gives this information.

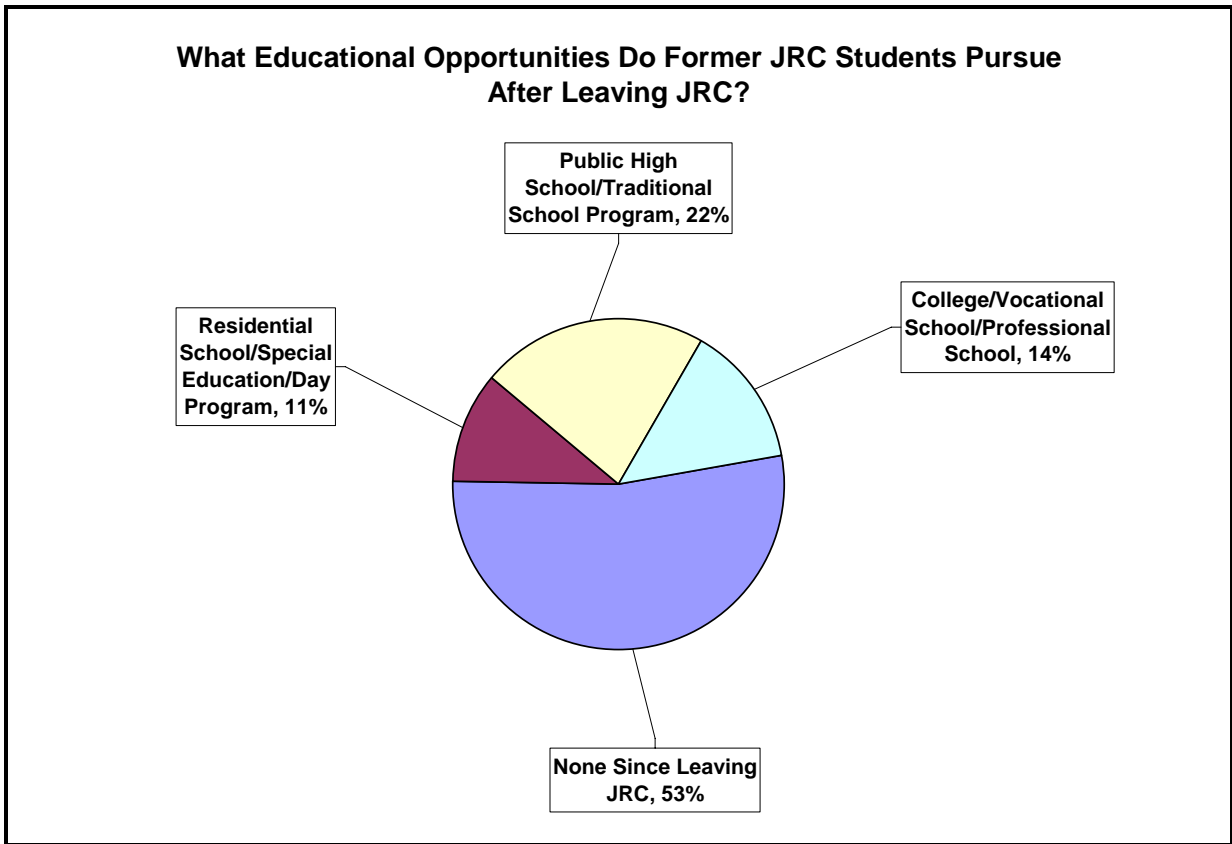


Figure 6

Thirty-six percent of the former students are now either in high school (22%) or in college, vocational or professional education (14%). Fifty three percent are not involved in post-JRC education; however, some of these students have aged out of the educational system and have not pursued further education. Eleven percent have continued to receive residential or special educational services. All of these settings would be considered less restrictive than JRC, a fact that reflects the improved behaviors of these individuals.

Employment

Figure 7 shows the employment situation of the former students.

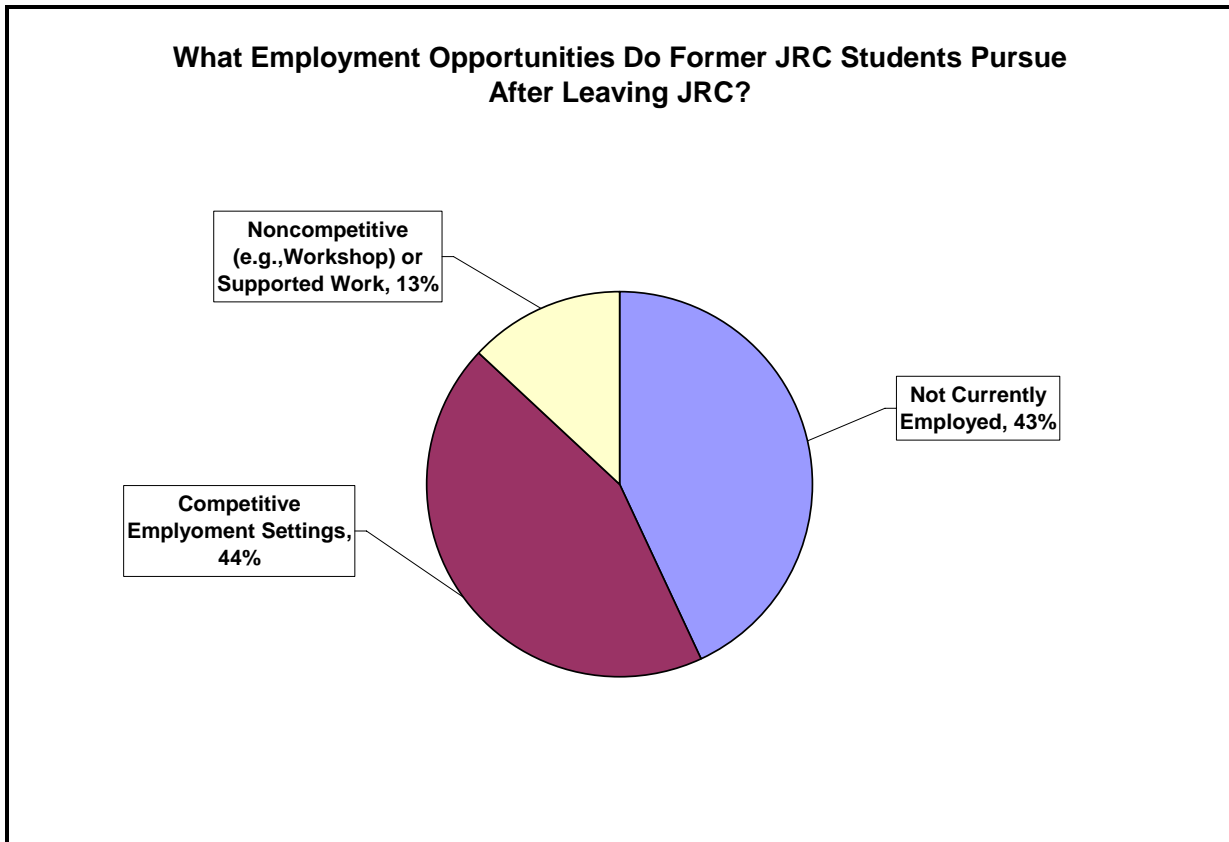


Figure 7

Forty-four percent were in competitive jobs. Thirteen percent were working in supported settings. Forty-three percent of the former students were not employed. Part of this can be explained by the age of the former student. That is, it is not necessarily reasonable to expect school-age individuals to be working. Also, many of JRC's former students have developmental or physical disabilities that might limit their employability. All of these students entered JRC demonstrating behaviors that prevented them from maintaining any gainful employment, either competitive or supported.

Recreation

The former students reported a wide range of interests and hobbies including: going to the movies, playing sports, spending time with peers, shopping, church, volunteer work, dating, going out to eat, going to the park, zoo or playground with their child, going on family vacation, visiting with their family, working out at the gym, reading, playing video games, computer/internet use, drama club/class, going to nightclubs, bible study, bike riding, wrestling, bowling and playing pool. As is discussed in the two sections below, prior to enrolling in JRC, these students' inappropriate behaviors interfered with normal functioning in most aspects of their daily life, including their

ability to engage in recreational activities. Now, however, the former students are able to engage in a wide range of recreational activities in their personal life.

Relationships

Figure 8 shows the type of relationships the former students enjoy.

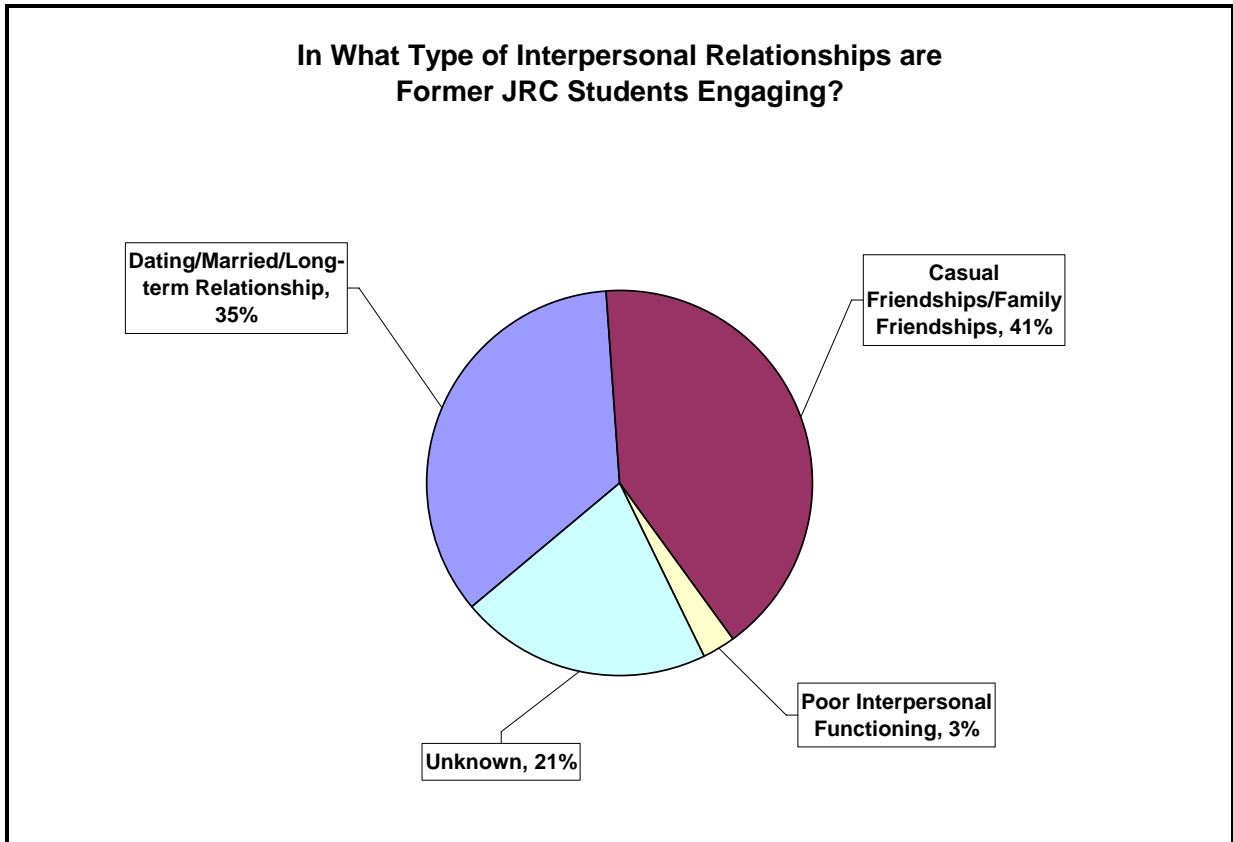


Figure 8

This area of functioning is difficult to quantify. When asked directly about meaningful relationships and dating, 35% of the former students reported that they were either married, in a long-term relationship, or consistently dating. This statistic is remarkable in that it was these very close relationships that the typical JRC student was unable to enjoy prior to enrollment at JRC due to the extreme disruptiveness of their inappropriate behaviors. An additional 41% reported some enjoyable casual friendships or family relationships. Only 3% reported a severe lack of ability to enjoy, or lack of effort to build, interpersonal relationships.

General Life Adjustment Rating

See Figure 9 for comparisons of mean before and after JRC general life adjustment (GLA) ratings (by former student or parent).

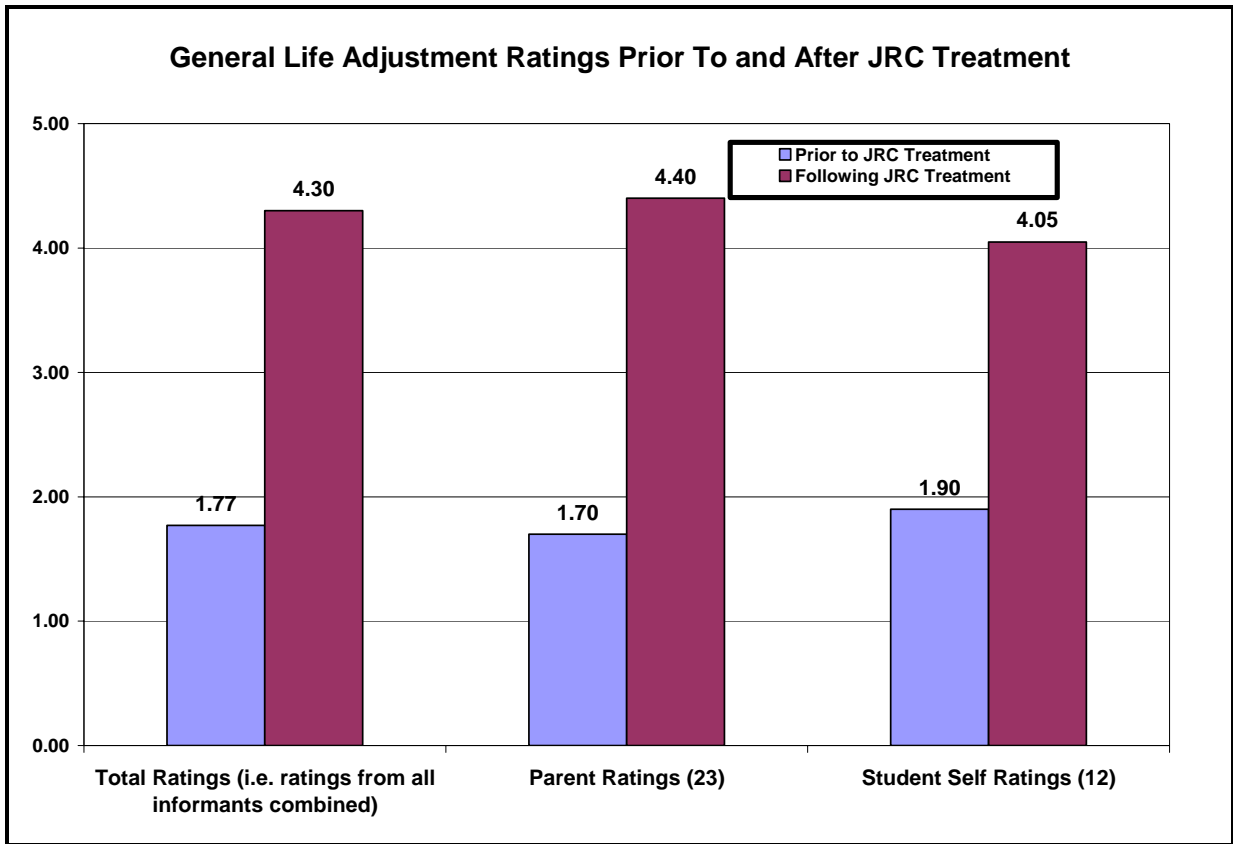


Figure 9

These subjective ratings are vulnerable to a number of reporting biases, but do reflect a genuine perception of the respondents that the participant’s overall level of functioning has continued at an improved level since discharge from JRC.

Discussion

The results of this investigation indicate that former students of JRC demonstrated marked improvement in their life adjustment and quality of life following treatment. These findings are consistent with follow-up studies from previous years.

The marked improvement is seen in the fact that the objective indicators and subjective quality of life measures taken after attending JRC were improved over those before entering JRC. Also the improved functioning measured in this way has continued for as long as 9 years, 10 months after the former students were discharged from JRC.

After leaving JRC, students from this study transitioned back home, to independent living, to another less restrictive residential program, or to a day educational/vocational program. Some of these students started full or part time jobs and some pursued further (post-secondary) education. For others, the ability to safely return home and have relatively normal family and peer relationships is an indicator of treatment success.

Limitations of the current study include an absence of formal/reliable data (beyond retrospective informant report) of the student's functioning prior to admission. Rather, prototypical admission status is often referred to in this study as a comparison for current post-treatment functioning. Further, as with previous follow-up studies conducted at JRC, there was relatively high attrition due to the inability to locate current contact information for a significant number of the initially selected participant pool. The ability to successfully contact the guardians of former students remains a significant aspect in assessing the long-term treatment effects of residential programs. Maintaining more frequent on-going contact with guardians of former students, as well as the former students themselves, may increase the ability to track the follow-up progress of more students in the future.

Suggested areas of improvement that might be considered to enhance future follow-up studies of residential care include the following additions: (1) a standardized symptom or behavioral checklist administered at pre-admission, at discharge, and at specified periods post-discharge; (2) a control group consisting of students accepted into the facility, but not attending; (3) an examination of the relationship of pre-admission variables (e.g., number of previous placements, intellectual functioning, and prior adjudication) to post-treatment outcomes; (4) an examination of the relationship of other variables (such as time since discharge, length of stay, reason for discharge, etc.) to post-treatment outcomes; and (5) further examination of ratings in terms of statistical significance as technologically quantifiable.

In conclusion, although there were several factors that limited the generalizability and significance of the findings, the results indicate that former students of the Judge Rotenberg Educational Center showed substantial overall improvement as measured by the indicators of quality of life as used in this study.