Title: Double vulnerability: adolescents with intellectual disability in residential child care

Authors: Águila-Otero, A.[1]; Lázaro-Visa, S.[2]; Del Valle, J. F.[1]; Bravo, A.[1]

[1] University of Oviedo, department of Psychology. Pza Feijoo s/n, Oviedo, Asturias, 33001, Spain

[2] University of Cantabria, department of Education. Avda. de los Castros, s/n 3900, Spain

E-mail address: albaaguila@gmail.com

Acknowledgements: This research was supported by the Ministry of Economy and Competitiveness (MINECO) of Spain through the National Plan of I+D+i (PSI2015-65229-R and PSI2012-33185). The author Alba Águila-Otero holds a post-doctoral contract from the Severo Ochoa Program for Training in Research and Teaching in Principality of Asturias (BP16061).

Author note: The source of research fundings is specified in the acknowledgements. There is no restriction on free access for this publication. There is no conflict of interest for any of the authors. The first author Águila-Otero coordinated this work, from the recollecting data and data analysis to the writing, review and editing the manuscript (original draft, manuscript and revision). Second author, Lázaro-Visa participated in part of the recollection data, as well as wrote part of the introduction. The lasts authors, Del Valle and Bravo, are the main researchers of the research projects (project administration and funding acquisition), and participated in the conceptualization of this article, as well as revision of the manuscript, from the original draft to the final version.

Double vulnerability: adolescents with intellectual disability in residential child care

Background: Adolescents with intellectual disability in residential child care are a highly vulnerable population. The main goal of this study is to explore the characteristics of youth with intellectual disability in Therapeutic Residential Care in Spain and to identify the key variables associated with their referral to these services. Method: The total sample consisted of 473 youth in residential child care in Spain (37.2% girls and 63.8% boys), aged between 12-17 years (*M* = 15.32; DT = 1.44), divided in three different groups for comparison. An *ad hoc* questionnaire and the *Youth Self-Report* were used to collect information about personal characteristics and mental health. Results: Participants with intellectual disability in therapeutic residential care presented a higher frequency of externalizing problems and risk behaviors than adolescents with disability in general residential programs. However, it was lower than that of their peers without disability in therapeutic programs. Conclusions: Adolescents with intellectual disability in therapeutic residential care present with specific needs that should be considered before referral to these facilities in order to adapt the interventions provided.

Intellectual Disability; Adolescents; Residential Child Care; Therapeutic Residential Care; Mental Health Problems; Risk behaviours

Introduction

Over the last 30 years, the characteristics of the population in residential care have changed considerably, with a significant increase in the number of complex profiles (Del Valle & Bravo, 2013). One key feature of this new profile is the high prevalence of

intellectual disability. Adolescents with intellectual disability pose a major challenge for the protection system, given their very specific needs as a vulnerable group.

Despite the significant amount of young people with intellectual disability in out-of-home care (Dowling et al., 2012; Flynn & McGregor, 2017), there is a considerable paucity of research aimed at analyzing the characteristics of those in residential care, understanding what happens during their fostering process, (Lightfoot et al., 2011), and knowing the conditions met by those referred to therapeutic residential care.

Adolescents with intellectual disabilities in the child welfare system

Several studies from different countries reveal that youths with intellectual disability in the welfare system range between 10% and 19% of the total population (Águila-Otero et al., 2018; Hill, 2012; Lightfoot et al., 2011; Sainero et al., 2013). This high representation is in line with documented figures of maltreatment and other adverse experiences in this group, which are significantly higher than among their peers without intellectual disability (Algood et al., 2011; Euser et al., 2016; Maclean et al., 2017; Veervoort-Schel et al., 2018). Children and youth with intellectual disability in residential care are more likely to have experienced physical or emotional neglect and sexual abuse than their peers without intellectual disability (Águila-Otero et al., 2018; Sainero et al., 2013). Similarly, a high number of risk factors in the family context is common among youth with intellectual disability (Águila-Otero et al., 2018; Sainero et al., 2013), as it is the case in general population with intellectual disability. This is particularly the situation among youth with severe intellectual disability or mental health issues, who are more likely to have experienced multiple psychosocial stressors (Weiss et al., 2016).

Data regarding other aspects of the child welfare care process, such as length of stay in residential care or placement changes are less clear. Some studies find no differences between children with and without disabilities with regards to the length of time spent in residential care (Sainero et al., 2013), while others report stays of up to two years longer for those with intellectual disability (Hill, 2012). Likewise, results regarding the number of breaks in residential placements vary between studies. In some cases, such disruptions are found to be more common in children and adolescents with intellectual disability (Chmelka et al., 2011; Hill, 2012; Sainero et al., 2013), whereas other studies fail to find such differences (Águila-Otero et al., 2018).

Mental health and risk behaviors in young people with intellectual disabilities in residential care

Different studies have documented the relationship between intellectual disability and mental health issues in young people from the general population, with up to 40% meeting diagnostic criteria for mental health disorders (Buckley et al., 2020; Ludi et al., 2012; Peltopuro et al., 2020). Research reports an increased likelihood of aggressive behavior, as well as attention and social problems among youth with intellectual disability (Dekker et al., 2002; Embregts et al., 2010; Myrbakk & von Tetzchnner, 2008; Soltau et al., 2015), particularly if there are neurogenetic disorders associated (Glasson et al., 2020). Nevertheless, Weiss et al. (2016) have reported no significant relationship between severe intellectual disability and psychiatric diagnosis in the general population.

Despite this, there is a lack of research on the mental health and risk behaviors of youth with intellectual disability in protective services. Firstly, it is known that a great amount of youth in the child welfare system, particularly in out-of-home placements, present with multiple mental health and substance use problems (González-García et al.,

2017; Heneghan et al., 2013; Jozefiak et al., 2016; Moreno-Manso et al., 2020). Moreover, when examining the relationship between intellectual disability and mental health in the population within the welfare system, intellectual disability and emotional and behavioral disorders are often found to overlap (Simmel et al. 2016). In residential care, results indicate that the group with intellectual disability displays clinical problems more frequently than their peers without intellectual disability in different areas: depression, attention challenges, thinking problems, social issues, higher attendance to therapeutic services, especially psychiatric interventions (Águila-Otero et al., 2018; Sainero et al., 2013). They also present higher rates of prescription of psychotropic medications (Chmelka et al., 2011). This is of particular interest since the population in residential care is more often in mental health care than the general population (DosReis et al., 2001). Some authors point out that the behavioral issues more often presented by children with intellectual disability may reflect different trajectories in terms of history of maltreatment, family history, and placements (Simmel et al., 2016). In particular, parental mental health problems have shown to be a major predictor of maladaptive behavior in youth with intellectual disability (Weiss et al., 2016), with parents presenting with behavioral problems displaying specific difficulties such as fewer competencies and more social isolation (Embregts et al., 2010).

The vulnerability of youth with intellectual disability is also manifested in the form of suicidal behaviors and ideation. In their review, Ludi et al. (2012) revealed a correlation between various psychiatric disorders (including depressive disorders, post-traumatic stress disorder, and oppositional defiant disorder) and suicide attempt or suicidal ideation in patients with intellectual disability. Among the stressors associated with suicidal ideation or behavior in intellectual disability are family loss, adoption, or out of home placement (Walters et al., 1995). On the other hand, research indicates that

intellectual disability is a protective factor for alcohol and illicit drug use (Carroll Chapman & Wu, 2012; Robertson et al., 2020), although a significant proportion of youth with moderate intellectual disability have used tobacco, alcohol, cannabis, and other drugs (Robertson et al., 2020).

Therapeutic Residential Care: specialized facilities for the most challenging needs in the child welfare system

The complexity of the profiles served in recent years by the child welfare system has prompted the diversification of residential care programs in all countries, including the development of new models such as Therapeutic Residential Care (TRC), in order to respond to the specific needs of adolescents with emotional and behavioral problems (Ainsworth & Hansen 2015). TRC entails a constructed, multi-dimensional living environment designed to provide treatment, education, socialization, support, and protection to children and youth with identified mental health or behavioral needs in partnership with their families and in collaboration with a full spectrum of community-based helping resources (Whittaker et al., 2015). The youths fostered in these programs present with a high rate of severe behavioral problems and other psychological disorders (McLean, 2018). The number one reason for referring adolescents to these programs is the difficulties experienced by professionals in non-specialized programs to control the behavioral problems and manage the emotional difficulties. Additionally, their behavior might represent a significant danger for the group they live with as well as for themselves (Galán, 2013; Martín et al., 2017). Although research in Spain in this regard is scarce, data reveals that approximately 11% of minors in TRC had intellectual disability (Águila-Otero et al., 2020), while this percentage appears to grow worldwide (McLean, 2018). The profile that results from the combination of both conditions can be

particularly grievous, hindering the effectiveness of interventions (Águila-Otero et al., 2020; Sainero et al., 2013).

Given the significant percentage of minors with intellectual disability in residential care, in addition to the scant research examining the characteristics and needs of this group in the protection system, this study aims to 1) describe the profile and needs of adolescents with intellectual disability in therapeutic residential care in Spain, 2) explore the reasons of referral to therapeutic programs.

Method

Participants

A total sample of 473 young people (171 females or 36.2%; and 302 males or 63.8%) aged between 12 and 17 years (M = 15.32; SD = 1.44) participated in this study. Participants lived in 96 child protection homes, in 12 different Spanish regions (called autonomous communities in Spain): Galicia, Asturias, Cantabria, Basque Country, Aragon, Castile and Leon, Madrid, Catalonia, Castile-La Mancha, Extremadura, Murcia and Tenerife (out of a total of 17 autonomous communities in the whole country).

The sample was extracted from two different research projects. The first one was focused on analyzing the profile and needs of young people in TRC, as well as the interventions conducted with them (PSI2015-65229-R). This project was presented to all the therapeutic residential facilities in the participant regions and directors decided whether they would participate, achieving a final sample of 36 therapeutic centers (37.5% of them located in urban areas and 62,5% in rural areas). The second project was focused on the mental health problems of children and adolescents in general residential care (GRC) (PSI2012-33185). In this project, all residential care facilities from the participant regions were included in the study, with a total of 60 general

residential care centers (79.9% urban, 20,1% rural). Both studies were funded by the Spanish Ministry of Economy and Competitiveness. The inclusion criteria for this study were: 1) being between 12 and 17 years of age and 2) living in residential care due to a protective measure. Cases of Unaccompanied Migrant Children were excluded given their specific characteristics.

The study is based on a group of young people with an official diagnosis of intellectual disability residing in therapeutic homes (n = 40). This diagnosis is based on the legal definition of disability: "a situation that results from the interaction between a person with predictably permanent deficiencies and any kind of barrier limiting or hindering their full and effective participation in the society, on equal conditions with others" (RD 1/2013); in this case focused on the mental deficiencies and difficulties. One group made up of youth with intellectual disability in general residential care homes (n = 144) residing in 60 facilities (study 1) was selected. The comparison group consisted of youth without intellectual disability residing in 36 therapeutic homes (n = 289) (study 2). Table 1 shows the sociodemographic characteristics of the three groups. Significant differences were found in the mean age of youth with disabilities across the different residential programs, being lower for the GRC group [t (184) = 2.62, p = .011, d = .414]. No significant differences were found in the remaining sociodemographic variables between any of the groups.

(Insert Table 1 about here)

Procedure

The study meets all the ethical criteria of the 1964 Declaration of Helsinki and has been approved by the Ethics Committee from University of la Laguna. A protocol guaranteeing data and confidentiality was followed in all research projects.

Prior to data collection, the legal guardians of the minors (families of origin or responsible authorities) were asked to grant permission for participation. Subsequently, the information regarding the profiles was collected using a file review conducted by the research team. The clinical or educational team of the therapeutic programs completed the clinical intervention questionnaire. Finally, the study was presented to all youth in the residential care facilities, explaining the objectives, instruments, and procedure. Young people who agreed to participated in the study signed an informed consent before completing the *Youth Self Report*. The research team was present during the completion to help participants when necessary.

Instruments

An *ad hoc* questionnaire was developed to collect information on the participants' profiles. The questionnaire included the following variables: (1) information related to the protection process (reasons for admission, type of child maltreatment, time in residential care, type and number of breakdowns); (2) family risk factors; (3) risk behaviors before and/or during their stay in the residential facility (suicide behavior, drug use, violent behavior, runaway experiences, etc.); (4) general information on medical and mental health status (type of disabilities, physical illness, type of mental health treatment). In order to analyze the clinical intervention developed in therapeutic residential care, another *ad hoc* questionnaire was created to collect information on the type and place of the treatment provided inside and/or outside the facility.

To assess mental health issues, the *Youth Self-Report* (YSR; Achenbach & Rescorla, 2001) was used. The Youth Self Report consists of 112 items that provide scores on 8 specific clinical subscales (anxiety-depression, withdrawal-depression, somatic complaints, attention problems, thought problems, social problems, aggressive behavior, and rule-breaking behavior) and three broadband scales (internalizing, externalizing,

and total). It is a widely-used research tool, with a Cronbach Alpha coefficient of 0.90 and test-retest reliability of 0.85 for the broadband scales and Cronbach Alpha coefficient of 0.79 and test-retest reliability of 0.7 for the syndrome scales (Achenbach et al., 2008).

Data analysis

Bivariate analyses were used for the comparison between groups of young people in both studies. The *Chi-squared* test was used for nominal variables, while *Student's t* test was used for quantitative variables. The level of significance was set at $p < 0.05$. All analyses were performed using SPSS v24.0 statistical software.

Results

First study: young people with intellectual disability referred to therapeutic residential care

Regarding family history, few differences were detected between children with intellectual disability in GRC (general residential care programs) and those in TRC (therapeutic residential care). One significant difference was that more participants belonging to the GRC group had one or both parents with intellectual disability.

In terms of child welfare interventions, some significant differences were detected between the groups with intellectual disability, with child-to-parent violence being more common as a reason for admission into TRC group. Similarly, emotional abuse and neglect were more common in this group. Likewise, some type of breakdown, especially adoption was more frequent among minors in the therapeutic residential care group.

(Insert Table 2 about here)

As of medical history, youth in the TRC group had a significantly higher prevalence of major or chronic physical illness. Nonetheless, members of the therapeutic homes were in mental health treatment more often than those of the general residential care homes; a pattern that was repeated for all types of treatment, as illustrated in Table 3. Specifically, psychotropic medication prescription was analyzed in the entire sample, with significant differences detected between groups. The prescription of psychotropic medication was significantly more prevalent in the TRC group, especially psychostimulants, antidepressants, anti-anxiety drugs, and antipsychotics.

Results on medical histories indicate that youth in therapeutic residential care had a significantly higher prevalence of major or chronic physical illness. However, the group in TRC presented with significantly higher attendance to mental health treatment than the group in CRG; a pattern repeated across all types of treatment, as shown in Table 3. Similarly, significant differences were detected between groups in psychotropic medication, with higher prescription in the TRC group, particularly of psychostimulants, antidepressants, anxiolytics, and antipsychotics.

Regarding risk behaviors, the group in therapeutic homes presented with significantly more suicidal behaviors, with suicide attempts reaching a prevalence of up to 35% versus 1.4% in the general residential care. In addition, there was another category of suicidal behaviors, such as threats and ideations, which reached 7.5% in the TRC sample and 4.9% in the GRC group, with no significant differences between the two samples. Furthermore, the group in TRC presented greater drug use [χ^2 (1, N = 183) = 22.392, $p \leq .001$] as shown in Table 3.

(Insert Table 3 about here)

Finally, Table 4 reports the results of the intergroup comparison with regards to mental health needs. The most common problems in the GRC group were social problems, followed by attentional problems; whereas in the TRC group, the most frequent were the attentional problems, followed by social issues, disruptive behavior and aggressive behavior. No significant differences were found between groups in mental health.

(Insert Table 4 about here)

Second study: young people with and without intellectual disability in TRC

Within the therapeutic programs, no significant differences were found regarding family of origin and ethnicity between the groups of youth with and without intellectual disability. Table 5 reveals that with regards to family background, significant differences were observed in two variables. Firstly, the frequency of intellectual disability among one or both parents was significantly higher among youth with intellectual disability [χ^2 (1, N = 325) = 5.298, p = .021]. Secondly, youth with intellectual disability had been significantly less exposed to gender violence within the family [χ^2 (1, N = 325) = 5.821, p = .016].

(Insert Table 5 about here)

As of the reasons for admission to protection, significant differences were only found for out of parental control, which was more common among the group without intellectual disability. Likewise, differences were found in the type of maltreatment suffered, with more physical neglect in the group with intellectual disability, as shown in Table 6. Along the same lines, most of the minors in both groups had suffered some experience of breakdown, although specifically the group without intellectual disability had experienced significantly more Family Foster Care breakdowns. In addition, the

intellectual disability group spent more time in therapeutic residential care, both over their lifetime and in their current center.

(Insert Table 6 about here)

With regards to risk behaviors, more information of each adolescent was available for the sample admitted to TRC, as indicated in Table 7. Both groups displayed a similar frequency of risk behaviors, with significant differences found only regarding the use of psychostimulant drugs, which was more common in the group without disabilities [χ^2 (1, N = 329) = 4.071, p = .044].

(Insert Table 7 about here)

When it comes to self-reported mental health needs, differences were found on disruptive [χ^2 (1, N = 304) = 8.845, p = .003] and externalizing behavior [χ^2 (1, N = 304) = 5.163, p = .023] scales, in both cases with higher frequencies in the group without intellectual disability.

Finally, Table 8 shows the comparison between youth with intellectual disability and their peers without intellectual disability in the clinical interventions received during their stay in therapeutic residential care. Although clinical intervention was very common in both groups, the group with intellectual disability received psychiatric treatment more frequently [χ^2 (1, N = 265) = 5.394, p = .020] and were prescribed some kind of psychotropic medication more often [χ^2 (1, N = 266) = 7.768, p = .005]. Differences were also found concerning the type of psychotropic drugs prescribed, with adolescents with intellectual disability being prescribed psychostimulants [χ^2 (1, N = 266) = 30.325, $p \leq .001$], antipsychotics [χ^2 (1, N = 266) = 12.811, $p \leq .001$], and antiepileptics [χ^2 (1, N = 266) = 9.751, p = .002] more often.

(Insert Table 8 about here)

Discussion

The results of this study offer an initial examination of the needs of a particularly vulnerable group as it is young people with disabilities in therapeutic residential care. The first approach sought to detect which characteristics or factors were associated with referral of youth with intellectual disability to a therapeutic program, comparing the sample with a subgroup of youth with intellectual disability in general residential care. Next, the target population was compared with a group of peers without intellectual disability in therapeutic homes, to ascertain the possible differentiating characteristics between both groups.

Characteristics of minors with intellectual disability in residential care

When comparing the social and family situation of youths with intellectual disability in GRC versus therapeutic programs, scarcely any differences were detected. However, differences did emerge regarding experiences of lack of protection, with those who were referred to specialized programs (TRC) having suffered more abuse and emotional neglect. More cases of child-to-parent violence were also identified in this group, as well as more adoption breakup processes. In contrast, this group showed more risk behaviors, with greater drug use and more suicide attempts compared to the group with intellectual disability in therapeutic homes.

Numerous studies have shown the negative effects of adverse experiences in childhood and adolescence on mental health, both in the general population (Cuevas et al., 2009) and in population with intellectual disability (Santoro et al., 2018; Smit et al., 2019; Soylu et al., 2013). Along these lines, the higher frequency of maltreatment and breakdown experiences might be related to the problematic behavior of the group referred to TRC, mirrored in the higher incidence of risk behaviors. These results are in

line with earlier research indicating that youths referred to therapeutic programs are characterized by exhibiting violent and aggressive behaviors, having a history of running away, drug use, suicidal behavior, and emotional and/or behavioral problems, among others (Águila-Otero et al., 2020; Davidson et al., 2011; Robst et al., 2013).

This study compared emotional and behavioral issues between adolescents in both residential programs and detected no significant differences according to the *Youth Self Report*. Our findings with regards to the population with intellectual disability in residential care are similar to those previously reported (Águila-Otero et al., 2018; Sainero et al., 2013; Trout et al., 2009). Nonetheless, one noteworthy finding is the difference in the main issues prevailing among the population in both residential programs. While 40% of youth in general residential care fell within the 'clinical range' for internalizing problems; this percentage fell to 26% in the therapeutic programs, where externalizing problems stood out (45% vs. 28% in GRC). These results are consistent with the risk behaviors previously indicated, which points to a more complex behavioral profile in young people with intellectual disability referred to TRC. It would seem, therefore, that the maladaptive and risk behaviors (such as substance use problems and running away) are the basis for referral to therapeutic homes in most cases, instead of the clinical issues. Staff in residential care should receive specific mental health training (Del Valle et al., 2011) to understand the behavioral symptomatology of children and adolescents in these facilities, giving them useful tools for the proper management of behavioral problems and the establishment of solid attachment bonds.

Some earlier research has demonstrated that having intellectual disability is associated with a higher likelihood of referral to mental health services for children and young people in care (Águila-Otero et al., 2018; Sainero et al., 2013). Based on these

results, a high frequency of treatment attendance was found in both groups in our study, although it was much more common among participants in therapeutic residential care. These results may be due, firstly, to the nature of the programs in which they are hosted, which is eminently therapeutic and therefore aimed at the educational and therapeutic management of mental health problems (Whittaker et al., 2015; Whittaker et al., 2017). Secondly, it may be due to the more conspicuous nature of externalizing problems among young people in TRC, which requires therapeutic interventions that facilitate group cohabitation.

Chronic physical illnesses were frequent in both groups with disabilities. As Simpson et al. (2020) point out, it is common for this population to display comorbid problems in addition to intellectual disability. In this study, physical illnesses were more frequent in adolescents in GRC, supporting the aforementioned idea that referral to therapeutic programs may be driven more by behavioral problems than by general health issues or by the severity of the issues associated with their disability.

Consequently, the most distinctive factors turned out to be a higher rate of emotional abuse and neglect, as well as a more unstable protection processes, combined with a more complex behavioral profile in the group of youth with intellectual disability in TRC relative to their peers in GRC. Nevertheless, no greater mental health needs were observed in the group in therapeutic homes versus youth in general residential care, with similar results on the *Youth Self Report*.

Comparison of youth in TRC with and without intellectual disability

When comparing young people with intellectual disability in TRC with their peers without intellectual disability in the same type of program, hardly any sociodemographic differences were detected. Nonetheless, certain differences were

observed in the protection process, highlighting the higher incidence of physical neglect and lower frequency of foster care breakdowns in the group with intellectual disability. Some authors have pointed out that the prevalence of maltreatment in children and adolescents with disabilities may be associated with family stress, less social support, and lack of resources to meet these specific needs (Algood et al., 2011; Berástegui & Gómez-Bengoechea, 2006). However, youth with intellectual disability spent more time in residential child care, both in their current placement and throughout their journey in protection, as found in previous studies addressing residential care programs (Águila-Otero et al., 2018; Chmelka et al., 2011; Welch et al., 2015). Considering the high frequency of breakdowns in both groups, the improvement of adoption support programs is necessary. As Paniagua et al. (2019) suggested, violent behaviors are a key factor in adoption breakdowns. Consequently, providing adoptive families with more information about intellectual disability and the health problems related with them is essential, as well as tools and techniques to prevent and manage behavioral problems when adolescence arrives.

With regards to risk behaviors, only differences in the use of psychostimulant drugs were found, being greater among those without intellectual disability. Schijven et al. (2019) analyzed drug use and reasons for use in individuals with intellectual disability in residential care, finding that cannabis and hard drug use was primarily social in nature and correlated with more problematic use, whereas problematic alcohol use was related to coping strategies, conformity, and positive consequences of alcohol as motives for use. As previously mentioned, risk behaviors are characteristic of cases referred to residential programs, irrespective of whether they are comorbid with intellectual disability (Águila-Otero et al., 2020, Davidson et al., 2011; Robst et al., 2013). In this regard, it is essential that staff receive training in child and adolescent

psychopathology to enable them to manage the numerous risk behaviors these youth might display.

When comparing results of the *Youth Self Report*, some divergence was detected between youth with and without intellectual disability in therapeutic homes. Of particular note, the group with intellectual disability was at a lower level of the clinical range on the scale of disruptive behavior and externalizing problems than the group of peers without intellectual disability. That is, despite presenting with what is essentially a behavioral problem, it was less severe than in the group of peers without intellectual disability. Our results are consistent with the findings of Brinke et al. (2021), who analyzed emotional regulation challenges in adolescents with externalizing problems in the Netherlands, comparing youth with and without intellectual disability. These authors found that adolescents with moderate intellectual disability and externalizing behaviors reported fewer difficulties (cognitive and behavioral) and fewer emotional regulation issues than adolescents with externalizing problems and average intelligence. These findings suggest that youth with intellectual disability present with fewer emotional problems or greater difficulty in reporting them through self-report. Behavioral problems were common in adolescents with and without intellectual disability in therapeutic homes, but the intervention inside the facilities should take into consideration the high comorbidity of mental health problems in children and adolescents with intellectual disability (Munir, 2016). Myrbakk and von Tetzchner (2008) suggest that the treatment of psychiatric comorbid disorders in people with intellectual disability may be a significant element in the management of behavioral problems in this population. Therefore, it is necessary to adapt the interventions provided inside therapeutic facilities to consider the highly complex mental health needs of youth with intellectual disability, going beyond behavioral control and restrictions.

Accordingly, the use of screening questionnaires in residential care has been previously suggested (Landsverk et al., 2006), but the implementation of instruments for the early detection of emotional and behavioral problems adapted to children and adolescents with intellectual disability is also necessary in residential care.

Regarding the clinical intervention during their stay in the center, adolescents with intellectual disability received more psychiatric treatment (91% vs. 73% of youngsters without intellectual disability), as well as psychopharmacological treatment (88.2% vs. 64.2% of adolescents without intellectual disability). As of the latter, specific differences were detected, with psychostimulant, antipsychotic, and antiepileptic medication being prescribed more frequently among adolescents with intellectual disability. This pattern is consistent with findings from earlier studies for both the groups with disability (Scheifes et al., 2013; Stolker et al., 2002) and without disability (Desjardins et al., 2017; Leslie et al., 2011). The scientific evidence of the efficacy of these pharmaceutical interventions is very limited (Ji & Findling, 2016). Specifically, Terrant et al. (2018) point out that there is a lack of empirical evidence of the efficacy of psychostimulants for the treatment of attention deficit and hyperactivity disorder in people with intellectual disability. These results suggest that psychotropic medication is being used to control behavioral symptoms in both populations, particularly in adolescents with intellectual disability. Therefore, these treatments should only be used in the context of a multidisciplinary approach with comprehensive and regular monitoring of side effects and clinical improvement (Ji & Findling, 2016). Numerous authors have highlighted the need to reduce psychotropic medication prescription for people with intellectual disability in order to improve behavioral issues (de Kuijper et al., 2014) and to enhance their quality of life (Koch et al., 2015), which implies the need of an appropriate monitoring and evaluation of these prescriptions (Kleijwegt et al.,

2019). Given the high rate of drug prescription in therapeutic residential care, especially in the group with intellectual disability, the TRC staff should receive specific training in psychopharmacology to be aware of the side effects and signs of improvement, as well as to be able to participate in tapering prescription plans with professionals, as also suggested by Kuijper and van der Putten (2017). Nouwens et al. (2017) found that people with intellectual disability received highly heterogeneous interventions and underscored the need to establish clear and proper criteria for referral to effective treatments, based on each person's profile and needs. Another possibility is the implementation of specific training programs to reduce disruptive and violent behaviors win residential facilities (Visser et al. 2020).

Limitations

This research has several limitations that must be taken into account. The first is the small sample size of the reference group – only 40 adolescents with intellectual disability in therapeutic programs. Despite the comparison groups being bigger, the target population is a small group. Larger samples would be required in future research in order to confirm our findings. Secondly, the data on participants' profile was extracted from child protection official records. Across Spain, no homogenous data collection system exists, resulting in some data being unavailable or incomplete, which could lead to an underestimation of the data on some variables. Thirdly, the cross-sectional nature of the study does not enable causal relationships to be established between the variables analyzed, limiting the interpretation of the data. Finally, while we consider the use of self-report to be of great utility in research with people with intellectual disability, it must be pointed out that the instruments used in this study were not specifically adapted for this population.

Conclusions

The results of both studies highlight that youth with intellectual disability referred to TRC programs are characterized mainly by externalizing problems. This can be appreciated in rates of drug use and in the *Youth Self Report* scores, albeit the greater frequency of suicidal behavior compared to adolescents in general residential care is also noteworthy and worrisome. Despite this, the youth with intellectual disability display behavioral issues less often than their peers without intellectual disability in therapeutic residential care. Nevertheless, the risk behaviors reported by youth with intellectual disability reflect a profile that is as complex as that of the comparison group, with victimization experiences being also high, particularly of abuse and neglect. Whereas interventions in TRC reveal slight differences between the intellectual disability and groups without intellectual disability, greater prescription of psychoactive medication is detected for youth with intellectual disability. This study is an initial research on youth with intellectual disability in therapeutic residential care, but further and specific research considering more mediator factors and using instruments adapted to people with intellectual disability is clearly necessary.

The results of this study highlight the importance of properly assessing cases with intellectual disability who display behavioral problems in residential care, prior to making a referral to therapeutic programs, where adolescents display a very complex behavioral profile, to ensure referral to the most appropriate resource based on the needs of each youth. Staff training in mental health is necessary for both general and therapeutic residential care programs, as well as providing professionals with more information about intellectual disability and the clinical manifestation of mental health problems in people with intellectual disability, for a better intervention with this population.

References

Achenbach, T. M., & Rescorla, L. (2001). *Manual for the ASEBA school-age forms and profiles*. Research Center for Children Youths, & Families.

Achenbach, T. M., Becker, A., Dopfner, M., Heiervang, E., Roessner, V., Steinhausen, H. C., & Rothenberger, A. (2008). Multicultural assessment of child and adolescent psychopathology with ASEBA and SDQ instruments: Research findings, applications, and future directions. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *49*(3), 251–275. http://www.doi.org/10.1111/j.1469-7610.2007.01867

Águila-Otero, A., González-García, C., Bravo, A., Lázaro-Visa, S., & Del Valle, J. F. (2018). Children and young people with intellectual disability in residential childcare: Prevalence of mental health disorders and therapeutic interventions. *International Journal of Social Welfare, 27*, 337-347. http://doi.org/10.1111/ijsw.12351.

Águila-Otero, A., Bravo, A., Santos, I., & Del Valle, J. F. (2020). Addressing the most damaged adolescents in the child protection system: An analysis of the profiles of young people in therapeutic residential care. *Children and Youth Services Review, 112,* 104923. http://www.doi.org/10.1016/j.chiabu.2020.104484.

Ainsworth, F., & Hansen, P. (2015). Therapeutic Residential Care: Different Population, Different Purpose, Different Costs. *Children Australia*, *40*(4), 342-347. http://doi.org/10.1017/cha.2015.47

Algood, C. L., Hong, J. S., Gourdine, R. M., & Williams, A. B. (2011). Maltreatment of children with developmental disabilities: An ecological systems analysis.

Children and Youth Services Review, 33(7), 1142-1148, https://doi.org/10.1016/j.childyouth.2011.02.003.

Berástegui, A., & Gómez-Bengoechea, B. (2006). Los menores con discapacidad como víctimas de maltrato infantil: una revisión [Children with disabilities as child abuse victims: a review]. *Intervención Psicosocial*, *15*(3), 293-306.

Bravo A., & Del Valle, J. F. (2013). Crisis and revision of residential care. Its role in child welfare system. *Papeles del psicólogo, 30*(1). 42-52.

Brinke, L. W., Schuiringa, H. D., & Matthys, W. (2021). Emotion regulation and angry modo among adolescents with externalizing problems and intellectual disabilities. *Research in Developmental Disabilities*, *109,* 103833. http://doi.org/10.1016/j.ridd.2020.103833.

Buckley, N., Glasson, E. J., Chen, W., Epstein, A., Leonard, H., Skoss, R., Jacoby, P., Blackmore, A. M., Srinivasjois, R., Bourke, J., Sanders, R. J., & Downs, J. (2020). Prevalence estimates of mental health problems in children and adolescents with intellectual disability: A systematic review and meta-analysis. *Australian & New Zeland Journal of Psychiatry, 54*(10), 970-984. http://doi.org/10.1177/0004867420924101.

Carroll Chapman, S. L. & Wu, L. (2012). Substance Abuse among Individuals with Intellectual Disabilities. *Research in Developmental Disabilities*, *33*(4), 1147-1156, https://doi.org/10.1016/j.ridd.2012.02.009.

Chmelka, M. B., Trout, A. L., Mason, W. A., & Wright, T. (2011). Children with and without disabilities in residential care: risk at program entry, departure and six-month follow-up. *Emotional and Behavioural Difficulties, 16*(4), 383-399, https://doi.org/10.1080/13632752.2011.616346.

Cuevas, C. A., Finkelhor, D., Ormrod, R., & Turner, H. (2009). Psychiatric Diagnosis as a Risk Marker for Victimization in a National Sample of Children. *Journal of Interpersonal Violence*, *24*(4), 636-652. http://doi.org/10.1177/0886260508317197.

Davidson, C., Dumigan, L., Ferguson, C., & Nugent, P. (2011). Effective Therapeutic Approaches within Specialist Residential Childcare Settings. *Child Care in Practice, 17*(1), 17–35. http://doi.org/10.1080/13575279.2011.528968.

De Kuijper, G., Evenhuis, H., Minderaa, R. B., & Hoekstra, P. J. (2014). Effects of controlled discontinuation of long-term used antipsychotics for behavioural symptoms in individuals with intellectual disability. *Journal of Intellectual Disability Research*, *58*(1): 71-83. http://doi.org/10.1111/j.1365-2788.2012.01631.x.

De Kuijper, G., & van der Putten, A. A. J. (2017). Knowledge and expectations of direct support professionals towards effects of psychotropic drug use in people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, *30*(1), 1-9. http://doi.org/10.1111/jar.12357.

Dekker, M. C., Koot, H. M., van der Ende, J., & Verhulst, F. C. (2002). Emotional and behavioral problems in children and adolescents with and without intellectual disability. *Journal of Child Psychology and Psychiatry*, *43*(8), 1087-1098.

Del Valle, J. F., & Bravo, A. (2013). Current trends, figures and challenges in out of home child care: An international comparativa análisis. *Psychosocial Intervention, 22,* 251-257. http://www.doi.org/10.5093/in2013a28.

Del Valle, J. F., Sainero, A. M., & Bravo, A. (2011). *Salud mental de Menores en Acogimiento Residencial. Guía para la prevención e intervención en hogares y*

centros de protección de la Comunidad Autónoma de Extremadura. [Mental Health of Minors in Residential Care. Guide for prevention and intervention in residential homes and protection centers in the Autonomous Community of Extremadura]. Junta de Extremadura.

Desjardins, J., Lafortune, D., & Cyr, F. (2017). Psychopharmacotherapy in children placed in group homes and residential centres in Canada: Psychopathological portrait of children receiving psychotropic medications and educators' perception of treatment. *Children and Youth Services Review*, *81*, 197–206. http://doi.org/10.1016/j.childyouth.2017.08.001

DosReis, S., Zito, J. M., Safer, D. J., & Soeken; K. L. (2001). Mental Health Services for Youths in Foster Care and Disabled Youths. *American Journal of Public Health*, *91*(7), 1094–1099. http://doi.org/10.2105/AJPH.91.7.1094.

Dowling, S., Kelly, B., & Winter, K. (2012). *Disabled children and Young People who are Looked After: A Literature Review*. Queen's University of Belfast

Embregts, P. J., du Bois, M. G., & Graef, N. (2010). Behavior problems in children with mild intellectual disabilities: An initial step towards prevention. *Research in Developmental Disabilities, 31*(6), 1398–1403. http://doi.org/10.1016/j.ridd.2010.06.020.

Euser, S., Alink, L. R., Tharner, A., van Ijzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2016). The Prevalence of Child Sexual Abuse in Out-of-home Care: Increased Risk for Children with a Mild Intellectual Disability. *Journal of Applied Research in Intellectual Disabilities*, *29*(1), 83–92. http://doi.org/10.1111/jar.12160.

Flynn, S., & McGregor, C. (2017). Disabled Children and Child Protection: Learning from Literature through a Non-Tragedy Lens. *Child Care in Practice*, *23*(3), 258–274. http://doi.org/10.1080/13575279.2016.1259157.

Galán, A. (2013). Recursos residenciales para menores seriamente disruptivos: aportaciones técnicas a un debate social e institucional. [Residential treatment for severely disruptive minors: technical contributions to a social and institutional debate]. *Papeles del psicólogo, 34*(1), 22-31.

González-García, C., Bravo, A., Arruabarrena, I., Martín, E., Santos, I., & Del Valle, J. F. (2017). Emotional and behavioral problems of children in residential care: Screening detection and referrals to mental health services. *Children and Youth Services Review, 73*, 100–106. http://doi.org/10.1016/j.childyouth.2016.12.011.

Glasson, E. J., Buckley, N., Chen, W., Leonard, H., Epstein, A., Skoss, R., Jacoby, P., Blackmore, A. M., Bourke, J., &. Downs, J. (2020). Systematic Review and Meta-analysis: Mental Health in Children With Neurogenetic Disorders Associated With Intellectual Disability. *Journal of the American Academy of Child & Adolescents Psychiatry, 59*(9), 1036-1048. http://doi.org/10.1016/j.jaac.2020.01.006.

Heneghan, A., Stein, R. E., Hulburt, M.S., Zhang, J., Rolls-Reutz, J., Fisher, E., Landsverk, J., & Horwitz, S. M. (2013). Mental health problems in teens investigated by U.S. child welfare agencies. *Journal of Adolescent Health, 52*, 634-640, https://doi.org/10.1016/j.jadohealth.2012.10.269.

Hill, K. M. (2012). Permanency and placement planning for older youth with disabilities in out-of-home placement. *Children and Youth Services*, *34*(8), 1418–1424. http://doi.org/10.1016/j.childyouth.2012.03.012

Ji, N. Y., & Findling, R. L. (2016). Pharmacotherapy for mental health problems in people with intellectual disability. *Current Opinion in Psychiatry*, *29*(2), 103-125. http://doi.org/10.1097/YCO.0000000000000233.

Jozefiak, T., Kayed, N. S., Rimehaug, T., Wormdal, A. K., Brubakk, A. M., & Wichstrøm, L. (2016). Prevalence and comorbidity of mental disorders among adolescents living in residential youth care. *European Child & Adolescent Psychiatry*, *25*(1), 33–47. http://doi.org/10.1007/s00787-015-0700-x

Kleijwegt, B., Pruijssers, A., de Jong-Bakker, L., de Haan, L., van Os-Medendorp, H., & van Meijel. B. (2019). Support staff's perceptions of discontinuing antipsychotics in people with intellectual disabilities in residential care: A mixed-method study. *Journal of Applied Research in Intellectual Disabilities, 34*(4), 861-870. http://doi.org/10.1111/jar.12577.

Koch, A. D., Vogel, A., Becker, T., Salize, H. J., Voss, E., Werner, A., Arnold, K., & Schützwohl, M. (2015). Proxy and self-reported Quality of Life in adults with intellectual disabilities: Impact of psychiatric medication and unmet needs. *Research in Developmental Disabilities, 45-46*, 136-146. http://doi.org/10.1016/j.ridd.2015.07.022.

Landsverk, J. A., Burns, B. J., Stambaugh, L. F., & Reutz, J. A. R. (2006). *Mental Health Care for Children and Adolescents in Foster Care: Review of Research Literature.* Casey Family Programs

Leslie, L. K., Raghavan, R., Hurley, M., Zhang, J., Landsverk, J., & Aarons, G. (2011). Investigating geographic variation in use of psychotropic medications among youth in child welfare. *Child Abuse & Neglect*, *35,* 333−342. http://doi.org/10.1016/j.chiabu.2011.01.012.

Lightfoot, E., Hill, K., & LaLiberte, T. (2011). Prevalence of children with disabilities in the child welfare system and out of home placement: An examination of administrative records. *Children and Youth Services Review*, *33*(11), 2069–2075. http://doi.org/10.1016/j.childyouth.2011.02.019

Ludi, E., Ballard, E. D., Greenbaum, R., Pao, M., Bridge, J., Reynolds, W., & Horowitz, L. (2012). Suicide Risk in Youth with Intellectual Disability: The Challenges of Screening. *Journal of Developmental Behavioral Pediatrics, 33*(5), 431–440. http://doi.org/10.1097/DBP.0b013e3182599295.

Maclean, M. J., Scoot, S., Bower, C., Leonard, H., Standley, F. J., & O'Donnell, M. (2017). Maltreatment Risk Among Children With Disabilities. *Pediatrics*, *139*(4), e20161817. http://doi.org/10.1542/peds.2016-1817.

Martín, E., González-García, C., Del Valle, J. F., & Bravo, A. (2017). Therapeutic residential care in Spain. Population treated and therapeutic coverage. *Child & Family Social Work, 23*(1), 1-7. http://www.doi.org/10.1111/cfs.12374.

McLean, S. (2018). *Therapeutic residential care: An update on current issues in Australia. Paper No. 49.* Child Family Community Australia

Moreno-Manso, J. M., García-Baamonde, M. E., Guerrero-Barona, E., Godoy-Merino, M. J., Bueso-Izquierdo, N., & Guerrero-Molina, M. (2020). Emotional, Behavioural and Executive Functioning Problems in Children in Residential Care. *International Journal of Environmental Research and Public Health*, *17*(10), 3596. http://doi.org/10.3390/ijerph17103596.

Munir, K. M. (2016). The co-ocurrence of mental disorders in children and adolescents with intellectual disability/intellectual developmental disorder.

Current Opinion Psychiatry, 29(2), 95-102. http://www.doi.org/YCO.0000000000000236.

Myrbakk, E., & von Tetzchner, S. (2008). Psychiatric disorders and behavior problems in people with intellectual disability. *Research in Developmental Disabilities, 29*(4), 316-332, https://doi.org/10.1016/j.ridd.2007.06.002.

Nouwens, P. J. G., Smulders, N. B. M., Embregts, P. J. C. M., & van Nieuwenhuizen, C. (2017). Meeting the support needs of persons with mild intellectual disability or borderline intellectual functioning: still a long way to go. *Journal of Intellectual Disability Research*, *61*(12), 1104-1116. http://doi.org/10.1111/jir.12427.

Paniagua, C., Palacios, J., & Jiménez-Morago, J. M. (2019). Adoption breakdown and adolescence. *Child & Family Social Work,* 1-7. http://doi.org/10.1111/cfs.12631

Peltopuro, M., Vesala, H. T., Ahonen, T., & Närhi, V. M. (2020). Borderline intellectual functioning: an increased risk of severe psychiatric problems and inability to work. *Journal of Intellectual Disability Research*, *64*(12), 923-933. http://doi.org/10.1111/jir.12783.

Robertson, J., Emerson, E. Baines, S. & Hatton, C. (2020). Self-reported smoking, alcohol and drug use among adolescents and young adults with and without mild to moderate intellectual disability. *Journal of Intellectual & Developmental Disability*, *45*(1), 35-45. http://doi.org/10.3109/13668250.2018.1440773.

Robst, J., Armstrong, M., Dollard, N., & Rohrer, L. (2013). Arrests among youth after out-of-home mental health treatment: Comparisons across community and residential treatment settings. *Criminal Behaviour and Mental Health*, *23*(3), 162-176. http://doi.org/0.1002/cbm.1871

Sainero, A., Del Valle, J.F., López, M., & Bravo, A. (2013). Exploring the specific needs of an understudied group: Children with intellectual disability in residential child care. *Children and Youth Services Review, 35*(9), 1393–1399. http://www.doi.org/10.1016/j.childyouth.2013.04.026.

Santoro, A. F., Shear, S. M., & Harber, A. (2018). Childhood adversity, health and quality of life in adults with intellectual and developmental disabilities. *Journal of Intellectual Disability Research, 62*(10), 854-863. http://doi.org/10.1111/jir.12540.

Scheifes, A., de Jong, D., Stolker, J. J., Nijman, H. L., Egberts, T. C., & Heerdink, E. R. (2013). Prevalence and characteristics of psychotropic drug use in institutionalized children and adolescents with mild intellectual disability. *Research in Developmental Disabilities*, *34*(10), 3159-3167, https://doi.org/10.1016/j.ridd.2013.06.009.

Schijven E. P., Didden, R., Otten, R., & Poelen, E. A. P. (2019). Substance use among individuals with mild intellectual disability or borderline intellectual functioning in residential care: Examining the relationship between drinking motives and substance use. *Journal of Applied Research in Intellectual Dsiabilities, 32*(4), 871-878. http://doi.org/10.1111/jar.12578.

Simmel, C., Merritt, D., Kim, S., & Mi-Sung Kim, H. (2016). Developmental Disabilities in Children Involved with Child Welfare: Correlates of referrals for service provision. *Journal of Public Child Welfare*, *10*, 197–214. http://doi.org/10.1080/15548732.2016.1139521.

Simpson, N., Mizen, L., & Cooper, S. A. (2020). Intellectual Disabilities. *Medicine*, *48*(11), 732-736. http://doi.org/j.mpmed.2020.08.010.

Smit, M. J., Scheffers, M., Emck, C., van Busschbach, J. T., & Beek P. J. (2019). Clinical characteristics of individuals with intellectual disability who have experienced sexual abuse. An overview of the literature. *Research in Developmental Disabilities*, *95,* 103513. http://doi.org/10.1016/j.ridd.2019.103513.

Soltau, B., Biedermann, J., Hennicke, K., & Fydrich, T. (2015). Mental health needs and availability of mental health care for children and adolescents with intellectual disability in Berlin. *Journal of Intellectual Disability Research*, *59*(11), 983-994, https://doi.org/10.1111/jir.12185.

Soylu, N., Alpaslan, A. H., Ayaz, M., Esenyel, S., & Oruç, M. (2013). Psychiatric disorders and characteristics of abuse in sexually abused children and adolescents with and without intellectual disabilities. *Research in Developmental Disabilities, 34*(12), 4334-4342, https://doi.org/10.1016/j.ridd.2013.09.010.

Stolker, J. J., Koedoot, P. J., Heerdink, E. R., Leufkens, H. G. M., & Nolen, W. A. (2002). Psychotropic Drug Use in Intellectually Disabled Group-Home Residents with Behavioural Problems. *Pharmacopsychiatry*, *35*(1), 19-23. http://doi.org/10.1055/s-2002-19838.

Terrant, N., Roy, M., & Deb, S. (2018). The effectiveness of methylphenidate in the management of Attention Deficit Hyperactivity Disorder (ADHD) in people with intellectual disabilities: A systematic review. *Research in Developmental Disabilities*, *83,* 127-323. http://doi.org/10.1016/j.ridd.2018.08.017.

Trout, A. L., Casey, K., Chmelka, M. B., DeSalvo, C., Reid, R., & Epstein, M. H. (2009). Overlooked: Children with Disabilities in Residential Care. *Child Welfare*, *88*(2), 111-136.

Veervoort-Schel, J., Mercera, G., Wissink, I., Mink, E., van der Helm, P., Lindauer, R., & Moonen, X. (2018). Adverse Childhood Experiences in Children with Intellectual Disabilities: An Exploratory Case-File Study in Dutch Residential Care. *International Journal of Environmental Research and Public Health*, *15*, 2136. http://doi.org/10.3390/ijerph15102136.

Visser, K. M., Jansen, L. M. C., Popman, A., Vermeiren, R. R. J. M., & Kasius, M. C. (2020). Addressing Aggression in the Residential Setting for Juveniles with Mild Intellectual Disability through Training in Non-Violent Resistance. *Child & Youth Care Forum*, *50*, 333-349. http://doi.org/0.1007/s10566-020-09576-z.

Walters, A.S., Barrett, R. P., Knapp, L. G., & Borden, C. (1995). Suicidal behavior in children and adolescents with mental retardation. *Research in Developmental Disabilities. 16*(2), 85–96.

Weiss, J. A., Ting, V., & Perry, A. (2016). Psychosocial correlates of psychiatric diagnoses and maladaptive behaviour in youth with severe developmental disability. *Journal of Intellectual Disability Research, 60*(6), 583-593, https://doi.org/10.1111/jir.12278.

Welch, V., Jones, C., Stalker, K., & Stewart, A. (2015). Permanence for disabled children and young people through foster care and adoption: A selective review of international literature. *Children and Youth Services Review*, *53*, 137–146. http://doi.org/10.1016/j.childyouth.2015.03.017.

Whittaker, J. K., Del Valle, J. F., & Holmes, L. (2015). *Therapeutic Residential Care for Children and Youth: Developing Evidence-based International Practice.* Jessica Kingsley.

Whittaker, J. K., Holmes, L., Del Valle, J. F., Ainsworth, F., Andreassen, T., Anglin, J., Bellonci, C., Berridge, D., Bravo, A., Canali, C., Courtney, M., Currey, L., Daly, D., Gilligan, R., Grietens, H., Harder, A., Holden, M., James, S., & Zeira, A. (2017). Therapeutic residential care for children and youth: A consensus statement of the International work group on therapeutic residential care. *Residential Treatment for Children & Youth, 33*(2), 89–106. http://www.doi.org/10.1080/0886571X.2016.1215755.

Table 1.
Sociodemographic information

Variables	WITH INTELLECTUAL DISABILITY		WITHOUT INTELLECTUAL DISABILITY
	GRC (*n* = 144) *n* (%) or *M* (SD)	TRC (*n* = 40) *n* (%) or *M* (SD)	TRC (*n* = 289) *n* (%) or *M* (SD)
Sex			
Male	89 (61.8)	29 (72.5)	184 (63.7)
Female	55 (38.2)	11 (27.5)	105 (36.3)
Age	14.75 (1.71)	15.43 (1.36)	15.58 (1.21)
Immigrant Family	11 (7.6)	7 (17.5)	72 (24.9)
Roma children	25 (17.4)	6 (15)	34 (11.8)
Level of disability			
Mild	5 (3.5)	2 (5)	
Moderate	82 (56.9)	26 (65)	
Severe	25 (17.4)	7 (17.5)	
Profound	16 (11.1)	0	

Table 2.
Family background and child welfare intervention

Variable	GRC (n = 144) n (%) or M (SD)	TRC (n = 40) n (%) or M (SD)	p	Cramer's Phi
Family background				
Criminal behavior	24 (16.7)	11 (27.5)	.122	-.114
Poverty	57 (39.6)	22 (55)	.081	-.128
Gender violence	31 (21.5)	9 (22.5)	.895	-.010
Intellectual disability	57 (39.6)	8 (20)	**.022**	.169
Mental health problems	66 (45.8)	20 (50)	.640	-.034
Drug abuse	46 (31.9)	15 (37.5)	.509	-.049
Suicide behavior	17 (11.8)	1 (2.5)	.080	.129
Nº Risk factors	2.07 (1.48)	2.30 (1.54)	.092	.154
Reasons for admission				
Abuse or neglect	101 (75.9)	34 (85)	.225	-.023
Impossibility to meet parental obligations	32 (23.9)	6 (15)	.233	.090
Abandonment	10 (7.5)	3 (7.3)	.994	-.001
Out of parental control	50 (37.3)	20 (50)	.151	-.109
Child-to-parent violence	3 (2.2)	14 (35)	**≥ .001**	-.464
Type of abuse/neglect				
Physical abuse	31 (23.3)	12 (30)	.391	-0.65
Emotional abuse	37 (27.8)	21 (52.5)	**.004**	-.220
Physical neglect	76 (57.1)	26 (65)	.376	-.067
Emotional neglect	56 (42.1)	26 (65)	**.011**	-.193
Sexual abuse	10 (10.4)	4 (10)	.924	.007
Breakdown*	16 (12.7)	12 (30)		
Family Foster Care	3 (7.5)	15 (11.9)	.435	.061
Adoption	1 (0.8)	4 (10)	**.003**	-.230
Time spent in residential care				
In total	63.93 (48.39)	49.85 (35.72)	.401	-.437

Note. More than one category per case is possible.

Table 3.
Risk behaviors, physical and mental health information

Variable	GRC (n = 144) n (%)	TRC (n = 40) n (%)	p	Cramer's Phi
Physical illness	60 (42.3)	9 (22.5)	**.023**	.169
Mental health treatment	98 (69)	33 (97.1)	**.001**	-.254
Psychological	64 (44.8)	32 (94.1)	**≥ .001**	-.390
Psychiatric	64 (45.1)	31 (91.2)	**≥ .001**	-.365
Psychopharmacological	67 (46.9)	30 (88.2)	**≥ .001**	-.328
Type of psychotropic drug				
Psychostimulant	23 (16)	20 (55.8)	**≥ .001**	-.394
Antidepressant	6 (4.2)	7 (20.6)	**.001**	-.248
Anxiolytic	3 (2.1)	4 (11.8)	**.009**	-.196
Antipsychotic	50 (34.7)	27 (79.4)	**≥ .001**	-.355
Antiepileptic	25 (36)	11 (32.4)	**.050**	-.147
Hypnotic	1 (0.7)	2 (5.9)	**.035**	-.158
Another psychotropic drug	0	2 (6.7)	**.003**	-.219
Suicide attempt	2 (1.4)	14 (35)	**≥ .001**	-.492
Drug use	13 (9.1)	16 (40)	**≥ .001**	-.350
Alcohol consumption	3 (2.1)	5 (12.5)	**.004**	-.210
Cannabis	11 (7.7)	15 (37.5)	**≥ .001**	-.353
Cocaine	1 (0.7)	3 (7.5)	**.009**	-.192
Others	0	1 (2.5)	.058	-.140

Note. More than one category per case is possible.

Table 4.
Mental health problems

Variable	GRC (*n* = 144) *n* (%)	TRC (*n* = 40) *n* (%)
Anxiety-depression	16 (16.8)	7 (18.4)
Withdrawal-depression	10 (10.5)	4 (10.5)
Somatic complaints	15 (15.8)	3 (7.9)
Social problems	25 (26.3)	8 (21.1)
Thought problems	14 (14.7)	6 (15.8)
Attentional problems	18 (18.9)	13 (34.2)
Disruptive behavior	12 (12.6)	8 (21.1)
Aggressive behavior	18 (18.9)	8 (21.1)
Internalizing	37 (38.9)	10 (26.3)
Externalizing	27 (28.4)	17 (44.7)
Total	34 (35.8)	17 (44.7)
Clinical range in any scale	48 (50.5)	21 (55.3)

Note. Clinical range in any scale means clinician in internalizing, externalizing, and/or total scale.

Table 5.
Family background in TRG group

Variable	With Intellectual Disability (n = 40) n (%) or M (SD)	Without Intellectual Disability (n = 289) n (%) or M (SD)
Family background		
Mental health disorder	20 (50)	126 (44.2)
Intellectual disability*	8 (20)	24 (8.4)
Drug abuse	15 (37.5)	99 (39.8)
Suicidal behavior	1 (2.5)	14 (5.6)
Criminal behavior	11 (27.5)	69 (24.2)
Poverty	22 (55)	128 (44.9)
Gender violence*	9 (22.5)	121 (42.5)
Mean risk factors	2.30 (1.54)	2.22 (1.07)

Note. * $p < .05$, ** $p < .01$, *** $p \leq .001$. More than one category per case is possible.

Table 6.
Child welfare intervention in TRC group

Variable	With Intellectual Disability (n = 40) n (%) or M (SD)	Without Intellectual Disability (n = 289) n (%) or M (SD)	p	Cramer's Phi or Cohen's d
Reason for admission				
Child abuse or neglect	34 (85)	219 (76.3)	.218	.068
Out of parental control	20 (50)	196 (68.3)	**.022**	-.127
Child-to-parent violence	14 (35)	68 (23.7)	.122	.085
Impossibility to meet parental obligations	7 (17.5)	33 (11.5)	.278	.060
Abandonment	3 (7.5)	35 (12.2)	.385	-.048
Child abuse or neglect				
Physical abuse	12 (30)	84 (29.3)	.924	.005
Emotional abuse	21 (52.5)	124 (43.2)	.268	.061
Physical neglect	26 (65)	119 (41.5)	**.005**	.155
Emotional neglect	26 (65)	152 (53)	.152	.079
Security needs neglect	13 (32.5)	90 (31.4)	.884	.008
Scholar neglect	13 (32.5)	98 (34.1)	.837	-.011
Sexual abuse	4 (10)	10 (3.5)	.057	.105
Break-down experiences	33 (82.5)	221 (76.5)	.394	-.047
Residential child care break-down	30 (75)	191 (66.1)	.261	.062
Foster care break-down	3 (7.5)	65 (22.5)	**.028**	-.121
Adoption break-down	4 (10)	29 (10)	.995	.000
Family reunification break-down	6 (15)	53 (18.3)	.606	-.028
Number of break-downs	1.58 (1.20)	1.58 (1.32)	.977	.000
Previous RC	35 (87.5)	250 (86.5)	.862	.010
Nº of RC facilities	1.93 (1.51)	1.69 (1.48)	.640	-.161
Time in RC				
Total RC	49.85 (35.72)	31.48 (32.16)	**.001**	-.563
Current facility	14.15 (10.71)	9.12 (9.75)	**.003**	-.550

Note. * $p < .05$, ** $p < .01$, *** $p \leq .001$. More than one category per case is possible.

Table 7.
Risk behaviors during the stay in the RC facility

Variable	With Intellectual Disability (n = 40) n (%) or M (SD)	Without Intellectual Disability (n = 289) n (%) or M (SD)
Suicide attempt	11 (27.5)	65 (22.5)
Other suicide behavior	2 (5)	20 (6.9)
Drug use	25 (62.5)	204 (70.6)
Alcohol consumption	29 (72.5)	187 (64.7)
Cannabis	24 (60)	193 (66.8)
Cocaine	4 (10)	44 (15.2)
Psychotropic drugs	0	8 (2.8)
Psychostimulants drugs*	0	27 (9.3)
Inhalants	1 (2.5)	12 (4.2)
Another drug	2 (5)	12 (4.2)
Violent behavior	37 (92.5)	246 (85.1)
Runaway	28 (70)	215 (74.4)
Criminal behavior	12 (30)	123 (42.6)
Sexual risk behavior	12 (30)	77 (26.6)

Note. * $p < .05$, ** $p < .01$, *** $p \leq .001$. More than one category per case is possible.

Table 8.
Mental health problems and clinical intervention in TRC

Variable	With Intellectual Disability (*n* = 40) *n* (%)	Without Intellectual Disability (*n* = 289) *n* (%)
Youth Self Report scales	*n* = 38	*n* = 266
Anxiety-depression	7 (18.4)	43 (16.2)
Withdrawal-depression	4 (10.5)	29 (10.9)
Somatic complaints	3 (7.9)	28 (10.5)
Social problems	8 (21.1)	47 (17.7)
Thought problems	6 (15.8)	32 (12)
Attentional problems	13 (34.2)	56 (21.1)
Disruptive behavior**	8 (21.1)	124 (46.6)
Aggressive behavior	8 (21.1)	76 (28.6)
Internalizing	10 (26.3)	82 (30.8)
Externalizing*	17 (44.7)	170 (63.9)
Total	17 (44.7)	128 (48.1)
Any scale	21 (55.3)	184 (69.2)
Intervention inside and outside the facility	*n* = 34	*n* = 232
Mental health treatment	33 (97.1)	204 (87.9)
Psychological	32 (94.1)	192 (82.8)
Psychiatric*	31 (91.2)	168 (72.7)
Psychopharmacological**	30 (88.2)	149 (64.2)
Type of psychotropic drug		
Psychostimulant***	20 (58.8)	39 (16.8)
Antidepressant	7 (20.6)	57 (24.6)
Anxiolytic	4 (11.8)	32 (13.8)
Antipsychotic***	27 (79.4)	108 (46.6)
Antiepileptic***	11 (32.4)	28 (12.1)
Hypnotic	2 (5.9)	20 (8.6)
Another psychotropic drug	2 (5.9)	2 (1.3)

Note. * $p < .05$, ** $p < .01$, *** $p \leq .001$. More than one category per case is possible.