PSYCHOPATHOLOGICAL CORRELATES OF POLYVICTIMIZATION IN YOUNG OFFENDERS

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Previous research has demonstrated a significant relationship between victimization and involvement in delinquency, but few studies have focused on exploring the effects of victimization on young offenders. This study analyzed the relationship between accumulated experiences of victimization, or polyvictimization, and the presence of psychopathology in 100 Spanish offenders (81% males) aged 14 to 17 years (M = 16.08, SD = 0.99). By means of cluster analysis, three groups of polyvictim- ized and two groups of less victimized offenders were identified. After controlling for demographic and criminal character- istics, polyvictims were more likely to reach a clinical level (T 65) of externalizing behavior (odds ratio [OR] = 3.136) and general impairment (OR = 2.878) than the remaining adolescents. These results showed that assessing multiple and less common forms of victimization is an important task when evaluating adolescent offenders, as polyvictimization is highly prevalent and places young people at a high risk of psychological impairment.

Keywords: victimization; polyvictimization; psychopathology; juvenile offenders; juvenile justice.

It has been widely claimed that there is an association between juvenile delinquency and interpersonal victimization. Even though not every youth offender reported experiences of victimization (Cuevas, Finkelhor, Turner, & Ormrod, 2007), the rates found in this group are a particular cause for concern (Abram et al., 2004; Ford, Chapman, Mack, & Pearson, 2006; Ford, Elhai, Connor, & Frueh, 2010; Loeber, Kalb, & Huizinga, 2001). These rates are even more disturbing when we consider that most of these children and adolescents are exposed to multiple forms of interpersonal victimization, a phenomenon known as polyvictimization (Finkelhor, Ormrod, & Turner, 2007).

Whether due to victimization or not, more than 60% of young offenders have some type of psychiatric disorder, a figure that is significantly higher than in the general adolescent population (Croysdale, Drerup, Bewsey, & Hoffmann, 2008; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). Few studies have linked victimization and mental health in adolescents involved with the juvenile justice system (Croysdale et al., 2008; Ford, Grasso, Hawke, & Chapman, 2013), and these studies have found higher rates of mental health problems in young offender victims and polyvictims than in nonvictim juvenile offenders. Considering that adolescent offenders are under the supervision of the juvenile justice sys- tem, more research is needed to fully understand the associations between these variables in this at-risk population. Accordingly, one of the main purposes of this study is to evaluate the relationship between polyvictimization and psychopathology in young offenders in a south- western European country.

VICTIMIZATION AND JUVENILE DELINQUENCY

Research over the last decades has shown that juvenile offenders represent a highly trau- matized group, with a history of life-threatening events and direct or indirect experiences of interpersonal victimization (Ford et al., 2013; Ford, Hartman, Hawke, &

Chapman, 2008; Kilpatrick et al., 2003; Stimmel, Cruise, Ford, & Weiss, 2014). Studies of youth at detention centers have found lifetime rates of traumatic events ranging from 58% (Ford et al., 2013) to 90% (Abram et al., 2004; Ford et al., 2008). Between 28% (Ford et al., 2013; Ford et al., 2008) and 50% (Croysdale et al., 2008) of youth have reported at least one form of victim- ization. It has been established that adolescents may be exposed to victimization both before and after their criminal behavior. Several studies have shown that victimization is more likely to precede delinquency than to follow it (Cuevas et al., 2007), and in fact victimiza- tion is considered a predisposing factor for delinquent behavior in adolescents (Finkelhor & Dziuba-Leatherman, 1994; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001). However, delinquency has also been identified as a risk factor of future victimization (Loeber et al., 2001; Shaffer & Ruback, 2002), due to the risky lifestyles of adolescent offenders (Cuevas et al., 2007). Hence, victimization and delinquency are interconnected, and often mutually stimulate each other (Loeber et al., 2001).

POLYVICTIMIZATION AND PSYCHOPATHOLOGICAL SYMPTOMS IN JUVENILE OFFENDERS

The combination of victimization and delinquency has been associated with increased mental health problems. The study by Cuevas et al. (2007) with a young community sample found that adolescents who had delinquent behavior and had also been victimized had more mental health problems than those who had only suffered victimization and those who had only engaged in delinquent behavior.

In the literature concerning juvenile justice, studies usually assess the more severe expe- riences of victimization (such as child sexual abuse, neglect, and physical abuse) docu- mented in official records, without considering their cumulative impact or the relationship with other experiences. Lately, a more comprehensive perspective has begun to consider less frequently studied forms of victimization and the incidence and impact of polyvictim- ization (Finkelhor et al., 2007).

In this context, some recent studies, all conducted in the United States, have established polyvictimization rates among youth offenders and have begun to report their associations with externalizing and internalizing disorders. Ford et al. (2010) found that 35% of a national sample of 4,023 adolescents who reported criminal behavior could be identified as polyvic- tims, which is nearly 3 times higher than the estimated rates of polyvictimization recorded

from epidemiological studies of children and youth in the same country (Finkelhor, Ormrod, & Turner, 2009; Ford, Chapman, Connor, & Cruise, 2012; Ford et al., 2010). Another study by Ford et al. (2013) classified 5% of their sample of 1,959 adolescents newly admitted to juvenile detention centers in the State of Connecticut as polyvictims, and considered 19 types of potentially traumatic events, 13 of which were related to interpersonal victimization. These adolescents reported psychosocial impairment, emotional and behavioral problems, and severe posttraumatic stress disorder (PTSD; Ford et al., 2013). In a study of 496 adoles- cents admitted to two juvenile justice facilities in Maine, Croysdale and colleagues (2008) found that 39% of females and 19% of males presented multiple forms of victimization (assessing emotional, physical, and sexual abuse) and showed significantly higher rates of conduct disorder, history of suicide, and PTSD than other youth offenders.

THE PRESENT STUDY

In the last 20 years, attempts to explain juvenile offenders' initiation in crime have begun to focus on the history of abuse, neglect, and maltreatment during their childhood. Recently, research has turned to study polyvictimization throughout the lifetime, including less studied forms of victimization in these adolescents (Cuevas et al., 2007; Ford et al., 2010). The use of a wide variety of instruments and methods to define polyvictim groups makes it difficult to conduct meaningful comparisons, and few studies have considered the relation between polyvictimization and mental health in young people involved in juvenile delinquency (Croysdale et al., 2008; Ford et al., 2013). Therefore, the main purposes of the present study were to identify a subgroup of young offenders with a history of multiple victimization, or polyvictims, by means of an empirical approach such as cluster analysis, to define the char- acteristics of these adolescents in relation to nonpolyvictims and to evaluate the relationship between polyvictimization and psychopathological symptoms among young offenders in Spain. This study aims to extend the knowledge accumulated elsewhere to a country in Southern Europe using a widely used instrument, which evaluates a broad range of types of victimization (Finkelhor, Ormrod, Turner, & Hamby, 2005). In addition, in line with other authors, polyvictimization will be defined by an empirical analytical approach (Álvarez- Lister, Pereda, Abad, Guilera, & GReVIA, 2014; Ford et al., 2012; Ford et al., 2013; Ford, Wasser, & Connor, 2011; Higgins, 2004) to facilitate cross-cultural comparisons.

In doing so, two study hypotheses were tested:

Hypothesis 1: The polyvictim group would present statistically higher criminal activity and more violent crimes compared with the remaining adolescents.

Hypothesis 2: There would be significant differences between the polyvictim group and the rest of the sample with regard to psychopathological symptoms, and polyvictims would be more likely to present clinical levels of severity for internalizing, externalizing, and general distress symptoms.

MATERIALS AND METHODS

PARTICIPANTS

The sample was composed of 100 adolescents (81 males, 19 females) recruited from three detention centers (77%) and from five teams that supervise offenders with noncusto- dial sanctions (23%). Nearly 70% of the adolescents were between the ages of 16 and 17 (M = 16.08, SD = 0.99) and 55% were born abroad. For enrollment in the study, participants had to be between 14 and 17 years old, and have sufficient cognitive and language skills to understand the instructions of the questionnaires. An adapted version of the Hollingshead Index (Hollingshead, 1975) was applied to determine socioeconomic status (SES), although this index could not be calculated for 16 adolescents because of missing information. In the remaining participants, SES was classified as low in 50%, as medium-low in 23.8%, as medium in 17.9%, and medium-high in 8.3%.

Participants had a criminal record for a mean of 15.9 months (SD = 11.29) and had com- mitted a mean of four crimes (M = 4.48, SD = 3.77). Ninety-two percent of the adolescents presented at least one violent crime. Almost a third were also currently listed in the child protection system (29%). Demographic and other characteristics of the sample are shown in the last column in Table 1.

INSTRUMENTS

Sociodemographic Data

An ad hoc data sheet was created to obtain child and family sociodemographic character- istics such as educational level, parental occupations, and participant's country of origin. Information concerning criminal history was also gathered from the adolescent legal records.

Juvenile Victimization Questionnaire (JVQ)

In this study, a full self-report version of the JVQ (Finkelhor, Hamby, Ormrod, & Turner, 2005), translated by the research group with the authors' permission, was used. This version evaluates 36 different forms of victimization against children and youth during the lifetime and the past year, and also includes additional information regarding the last episode (e.g., identity of the perpetrator, use of any weapon, injuries, and police report). The 36 items are grouped into six areas of victimization: conventional crime (nine items, including assault with and without a weapon, kidnapping, and robbery, among others), caregiver victimiza- tion (four items: physical abuse, psychological or emotional abuse, neglect, and custodial interference/family abduction), peer and sibling victimization (six items, including gang or group assault, bullying, dating violence), sexual victimization (four items, including rape, sexual assault by peer, flashing/sexual exposure), witnessing and indirect victimization (nine items, including murder of family member or friend, witness to assault with a weapon, witness to parent assault of sibling or domestic violence, among others), and electronic victimization (two items: harassment and sexual solicitations by electronic means; Finkelhor, Ormrod, et al., 2005; Hamby & Finkelhor, 2001). Each form of victimization has a screener question using a yes/no response format rated as 1 or 0. The instrument has presented good reliability and validity in different contexts ($\alpha = .80$; Finkelhor, Hamby, et al., 2005).

Youth Self-Report (YSR)

The YSR (Achenbach & Rescorla, 2001) was translated by the Epidemiology and Diagnosis Unit at the Developmental Psychopathology Section of the Autonomous University of Barcelona. This self-report questionnaire may be applied to participants between 11 and 17 years, and it assesses both social competence (Part I) and emotional and

TABLE 1. Demographic and Criminal Characteristics of the Full Sample and the Five-Cluster Solution

Demographic and criminal charactaristics	Cluster 1 Less Victimized *n* = 19	Cluster 2 Moderately Victimized *n* = 18	Cluster 3 Community Violence Polyvictims *n* = 30	Cluster 4 Acquaintances and Family Polyvictims *n* = 21	Cluster 5 Highly Polyvictimized *n* = 12	Total sample *N* = 100
Dichotomous variables	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)	% (*n*)
Gender						
Male	68.4 (13)	88.9 (16)	86.7 (26)	85.7 (18)	66.7 (8)	81.0 (81)
Female	31.6 (6)	11.1 (2)	13.3 (4)	14.3 (3)	33.3 (4)	19.0 (19)
Country of origin						
Spain	52.6 (10)	22.2 (4)	40.0 (12)	47.6 (10)	75.0 (9)	45.0 (45)
Foreign country	47.4 (9)	77.8 (14)	60.0 (18)	52.4 (11)	25.0 (3)	55.0 (55)
Socioeconomic						

status[a]						
Low	58.8 (10)	54.5 (6)	52.0 (13)	42.1 (8)	41.7 (5)	50.0 (42)
Medium-low	17.6 (3)	36.4 (4)	24.0 (6)	26.3 (5)	16.7 (2)	23.8 (20)
Medium	11.8 (2)	9.1 (1)	20.0 (5)	15.8 (3)	33.3 (4)	17.9 (15)
Medium-high	11.8 (2)	0 (0)	4.0 (1)	15.8 (3)	8.3 (1)	8.3 (7)
High	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.0 (0)
Violent crime	94.7 (18)	94.4 (17)	83.3 (25)	100 (21)	91.7 (11)	92.0 (92)
Continuous variables	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*
Age	15.79 (1.08)	16.44 (0.71)	16.17 (0.96)	15.95 (1.20)	16.00 (0.85)	16.08 (0.99)
Number of crimes	2.22 (1.49)[3]	4.39 (3.35)	6.20 (4.77)[1]	4.26 (3.18)	4.17 (3.30)	4.48 (3.77)**

Note. Superscript values in the cells correspond to the cluster number that differs statistically at $p < .05$ in Scheffé post hoc comparisons.
[a]Percentages without considering missing values.
*$p < .05$. **$p < .01$. ***$p < .001$.

behavioral problems (Part II). In this study, only the second part was applied; it includes 119 items, of which 105 evaluated a broad range of behavior problems and the remainder assessed adaptive or prosocial behaviors. This instrument provides several measures, but in this study, only the scores of the broadband scales were used: a score on the internalizing syndrome, which includes the narrowband scales of anxious/depressed, withdrawn/ depressed, and somatic complaints; a score on the externalizing syndrome, including the rule-breaking behavior and aggressive behavior scales; and a total problem score, a good indicator of the level of self-perceived distress, which includes the externalizing and inter- nalizing scales and also the attention and thought problems scales. Respondents answered on a Likert-type scale of 3 points: 0 (*not true*), 1 (*somewhat or sometimes true*), and 2 (*often very true or real*) to the frequency of each situation described in the items in the last 6 months. This second part of the YSR has achieved good reliability ($\alpha = .94$) in Spanish samples (Zubeidat, Fernández-Parra, Ortega, Vallejo, & Sierra, 2009). As in other studies, clinical severity was established using a cutoff of *T* 65 on each YSR scale (Álvarez-Lister et al., 2014; Ford et al., 2011).

PROCEDURE

First, information on the research and participation requirements was given to the tutors from the three detention centers and the five teams that supervise offenders with noncusto- dial sanctions (e.g., on probation or in community service) in the north-east region of Spain. Then, tutors explained the purpose of the research to the adolescents and coordinated the schedule for conducting interviews with those who initially agreed to participate. Each interview was held in the spaces provided by the detention centers and by the five teams between May and July 2013, and it was conducted by a researcher trained in developmental victimology and violence against children (United Nations Children's Emergency Fund [UNICEF], 2012). All participants received information regarding the study and its confi- dentiality, and were reminded that their participation was voluntary and that refusal to par- ticipate would have no negative consequences. Written consent was requested individually from adolescents and their parents/guardians. Of the initial sample of juvenile offenders (*n* = 138), 37 could not participate in the study for various reasons (i.e., they retracted their initial verbal consent, lack of parent/guardian consent, or they were released) and one case

was excluded from the final database due to missing information.

This study followed the basic ethical guidelines of the Declaration of Helsinki in Seoul (World Medical Association, 2008) and the Code of Ethics of the Catalan Psychological Association (Col·legi Oficial de Psicòlegs de Catalunya [COPC], 1989). In addition, it was approved by the Institutional Review Board of the University of Barcelona (IRB00003099) prior to initiation.

DATA ANALYSIS

All statistical analyses were conducted with IBM SPSS 21. By means of cluster analysis, an empirical approach used in previous studies (e.g., Álvarez-Lister et al., 2014; Ford et al., 2013; Ford et al., 2011; Higgins, 2004) was applied to identify a subgroup of polyvictims. Following the indications of Hamby and Finkelhor (2001), and in view of the small sample size, the perspective of lifetime victimizations was used to identify as many experiences of victimization as possible. The 36 JVQ lifetime victimization items (dichotomous variable) were used to perform a hierarchical cluster analysis applying Ward's method which uses the squared Euclidean distance. Two criteria were considered to decide the best cluster solu- tion: (a) each cluster had to contain at least 10% of the sample to allow statistical compari- sons, and (b) the clusters had to differ statistically ($p <$ .05) in the mean number of lifetime victimizations in each JVQ victimization module, following the statistical procedure pro- posed by other researchers (Álvarez-Lister et al., 2014; Ford et al., 2011).

After identifying the groups of polyvictims, bivariate analyses were performed to assess the differences not only in several demographic and criminological variables but also in victimization experiences and psychopathological symptoms to partially test Hypotheses 1 and 2. One way ANOVAs with pairwise Scheffé post hoc comparisons were performed with the continuous variables (e.g., age), and the chi-square test was used with the categorical variables to test the differences between the five clusters together and for pairwise compari- sons of clusters (e.g., gender). Due to missing data, the SES was not included in further analyses.

Then, to test the influence of polyvictimization in severe psychopathological symptoms, two variables were created: a dichotomized measure of clinical severity (*T* 65) for each

broadband scale of the YSR (Álvarez-Lister et al., 2014; Ford et al., 2011) and also a poly- victimization variable which was composed by the clusters with adolescents who presented multiple forms of victimization (Ford et al., 2010). Then, Hypothesis 2 was verified through logistic regression analyses, with the clinical level (T 65) of internalizing, externalizing, and total problem scales of the YSR as a dependent variable. Three blocks were entered sequentially to test the effect of polyvictimization after controlling for demographic and criminal characteristics. The first block included demographic characteristics (gender, age, and country of origin) and the second block added criminal characteristics (such as number of crimes and the presence of a violent crime). Finally, in the third block, the polyvictimiza- tion variable was included.

RESULTS

CLUSTER SOLUTION

All adolescents in the sample reported at least one of the 36 forms of victimization at some point in their lifetime. The hierarchical cluster analysis revealed that solutions with between two and five clusters met the first selection criterion (at least 10% of the sample in each cluster). However, only the five-cluster solution met the second selection criterion (all clusters had to differ statistically in all comparisons in each victimization module) and obtained significant differences for the modules of conventional crime, $F(4, 95) = 18.128$, $p < .001$; caregiver victimization, $F(4, 95) = 6.266$, $p < .001$; peer and sibling victimization, $F(4, 95) = 23.959$, $p < .001$; sexual victimization, $F(4, 95) = 2.619$, $p = .04$; witnessing and indirect victimization, $F(4, 95) = 5.813$, $p < .001$; and electronic victimization, $F(4, 95) = 2.575$, $p = .01$.

Therefore, the five-cluster solution was chosen to test our hypothesis. Each cluster was characterized by a distinct victimization profile (Figure 1). Cluster 1 grouped adolescents with a less extensive history of victimization and was named “Less Victimized” ($M = 5.95$ lifetime victimization, $n = 19$), and Cluster 2 had a relatively moderate victimization profile and was called “Moderately Victimized” ($M = 7.11$ lifetime victimization, $n = 18$). Then, three different polyvictimization clusters were defined: Cluster 3, named “Community Violence Polyvictims” due to their high scores on conventional crime and witnessing and indirect victimization ($M = 11.33$ lifetime victimization, $n = 30$); Cluster 4, identified as “Acquaintances and Family Polyvictims” due to their high scores for caregiver maltreat- ment and peer and sibling victimization ($M = 11.52$ lifetime victimization, $n = 21$); and Cluster 5, called “Highly Polyvictimized” as this group had the highest victimization profile in almost all victimization modules ($M = 14.17$ lifetime victimization, $n = 12$).

In general, the five clusters showed similar compositions in terms of demographic variables and crime characteristics (see Table 1). Bivariate analyses were conducted to compare the clusters and showed no statistical differences regarding gender, $\chi^2(4) = 5.12$, $p = .26$; age, $F(4, 95) = 1.19$, $p = .32$; country of origin, $\chi^2(4) = 8.95$, $p = .06$; SES (84% of the sample): $\chi^2(4) = 7.57$, $p = .82$; or violent crime, $\chi^2(4) = 5.23$, $p = .27$, although the number of crimes variable (related to the criminal career) differed statistically between the groups, $F(4, 95) = 3.61$, $p = .01$.

Table 2 shows information for the whole sample and for the five clusters regarding the presence of some form of victimization in each module, the mean of victimization types, and the mean T-score for each broadband psychopathological scale. The groups did not

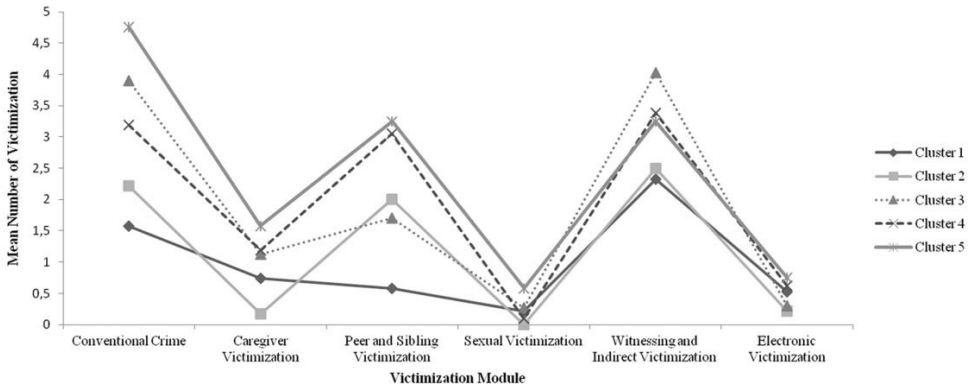

Figure 1: Mean Number of Victimizations in Each Victimization Module for the Five-Cluster Solution

differ in the rates of conventional crime, $\chi^2(4) = 9.41$, $p = .05$, and witnessing and indirect victimization, $\chi^2(4) = 6.05$, $p = .20$, because all clusters reached high rates in these victimization modules. However, the clusters differed statistically in the modules of caregiver victimization, $\chi^2(4) = 29.19$, $p < .001$; peer and sibling victimization, $\chi^2(4) = 33.26$, $p < .001$; sexual victimization, $\chi^2(4) = 21.41$, $p < .001$; and electronic victimization, $\chi^2(4) = 10.66$, $p = .01$. The three polyvictim clusters were very similar, with only a few exceptions. Notably, Cluster 5, "Highly Polyvictimized" participants, differed from all the other clus- ters in the sexual victimization module. It also differed from Cluster 3 ("Community Violence Polyvictims") in electronic victimization and from Cluster 3 and Cluster 4 ("Acquaintances and Family Polyvictims") in caregiver victimization.

In regard to psychopathological symptoms, the clusters showed statistical differences in terms of externalizing symptoms, $F(4, 95) = 6.01$, $p < .001$, and the total problem scale, $F(4, 95) = 5.43$, $p < .001$, although no differences were found for internalizing symptomatology, $F(4, 95) = 1.86$, $p = .12$. The levels of impairment were similar between the three polyvic- tim clusters, and were higher than in the nonpolyvictim groups, but only the third cluster "Community Violence Polyvictims" differed significantly from the nonpolyvictim cluster in the externalizing symptoms and the total problem scales.

POLYVICTIMIZATION AND SEVERITY OF PSYCHOPATHOLOGICAL SYMPTOMS

Because of the interest in polyvictimization and its association with mental health problems, a polyvictimization variable was created with the three polyvictim clusters to test Hypothesis 2. Three logistic regression analyses were then performed to test the effect of polyvictimization on the clinical level of each psychopathological broadband scale (T 65; see Table 3). The Hosmer–Lemeshow test did not show statistically significant differences in any of the regression models, a result that indicates a good fit of the model.

The logistic regression model for severe internalizing symptoms (left side of Table 3) showed that this variable was significant only in the first block (Nagelkerke $R^2 = .22$), which included demographic variables. Also, the only variable associated with symptomatology was being born in a foreign country: The odds ratio (OR) indicated that offenders of foreign origin were 4 times more likely to present a clinical level of internalizing symptoms.

TABLE 2: Victimization and Psychopathological Variables by the Five-Cluster Solution

Victimization and psychopathological variables	Cluster 1 Less Victimized *n* = 19	Cluster 2 Moderately Victimized *n* = 18	Cluster 3 Community Violence Polyvictims *n* = 30	Cluster 4 Acquaintances and Family Polyvictims *n* = 21	Cluster 5 Highly Polyvictimized *n* = 12	Total sample *N* = 100
Dichotomous variables	%	%	%	%	%	%
Conventional crime	84.2	100	100	95.2	100	96
Caregiver victimization	52.6[2,4]	16.7[1,3,4,5]	66.7[2,4]	95.2[1,2,3]	83.3[2]	63***
Peer and sibling victimization	47.4[2,3,4,5]	94.4[1]	93.3[1]	100[1]	100[1]	87***
Sexual victimization	15.8[5]	0[5]	16.7[5]	4.8[5]	58.3[1,2,3,4]	16***
Witnessing and indirect victimization	89.5	94.4	100	100	100	97
Electronic victimization	47.9[2]	16.7[1,4,5]	30.0[5]	41.2[2]	66.7[2,3]	40*
Continuous variables	*M*	*M*	*M*	*M*	*M*	*M*
Lifetime victimizations	5.95[3,4,5]	7.11[3,4,5]	11.33[1,2,3]	11.52[1,2]	14.17[1,2,3]	9.93***
YSR internalizing *T*-score	54.16	58.11	61.23	58.57	60.17	58.64
YSR externalizing *T*-score	60.21[3]	60.06[3]	70.27[1,2]	67.90	67.58	65.70***
YSR total *T*-score	56.63[3]	57.67[3]	65.07[1,2]	63.10	64.58	61.66***

Note. YSR = Youth Self-Report. Superscript values in the cells correspond to the cluster number that differs statistically at $p < .05$ in chi-square test for dichotomous variables and Scheffé post hoc comparisons for continuous data.
*$p < .05$. **$p < .01$. ***$p < .001$.

For the clinical level of externalizing symptoms (see Table 3, center), the logistic regres- sion model was significant only in Block 3, with the addition of polyvictimization, which explained 16% of the variance. Polyvictimization was associated with severe externalizing symptoms; polyvictim adolescent offenders were 3 times more likely to present these symptoms.

For the total problem scale (Table 3, right), the regression was not significant in the first block, but became significant in the subsequent blocks. As a result, the explanation of the variance rose to 17% in Block 3. However, only polyvictimization was significant in the model, and polyvictim offenders were almost 3 times more likely to present severe psycho- logical impairment than nonpolyvictims.

DISCUSSION

The present study examined the association between polyvictimization and psychopatho- logical symptoms among young offenders in a Southern European country and found pow- erful correlates between polyvictimization and the clinical severity of externalizing symptoms and general impairment. A comprehensive instrument to assess victimization and an empirical approach were used to define polyvictimization. As far as

we know, this is the first study to use an approach of this kind in young offenders in a European country.

The results provide evidence that juvenile offenders represent a highly victimized and polyvictimized group. All participants had experienced some form of victimization and

TABLE 3: Multivariate Correlates of Clinical Severity of Internalizing and Externalizing Symptomatology and Clinically Severe Psychosocial Impairment

	YSR severity internalizing (T 65)				YSR severity externalizing (T 65)				YSR severity total problems (T 65)			
Predictor variables	Wald F	p	OR	95% CI	Wald F	p	OR	95% CI	Wald F	p	OR	95% CI
Block 1: Demographics	Model $^2(3) = 12.395$, $p = .01$ .62 Nagelkerke $R^2 = .22$				Model $^2(3) = 4.167$, $p = .24$ Nagelkerke $R^2 = .055$				Model $^2(3) = 1.761$, $p =$ Nagelkerke $R^2 = .024$			
Block 2: Demographic and delinquency characteristics	Change $^2(2)= 3.764$, $p = .15$ R^2 change = .001				Change $^2(2) = 2.389$, $p = .30$ R^2 change = .030				Change $^2(2) = 6.763$, $p = .03$ R^2 change = .089			
Block 3: Demographics, delinquency characteristics, and polyvictimization	Change $^2(1)= 0.208$, $p = .65$ R^2 change = .004				Change $^2(1) = 6.332$, $p = .01$ R^2 change = .077				Change $^2(1) = 4.412$, $p =$ .04 R^2 change = .055			
Male gender	1.167	.28	3.370	[0.372, 30.546]	0.929	.34	0.542	[0.156, 1.883]	0.608	.44	0.597	[0.163, 2.183]
Age	1.482	.22	0.702	[0.397, 1.241]	0.51	.82	0.948	[0.598, 1.503]	1.971	.16	0.703	[0.430, 1.150]
Foreign origin	5.707	.02	**4.305**	[1.300, 14.263]	1.410	.24	0.571	[0.227, 1.439]	1.981	.16	2.042	[0.756, 5.518]
Violent crime	0.920	.34	0.421	[0.072, 2.469]	0.792	.37	0.423	[0.064, 2.811]	0.035	.85	0.852	[0.158, 4.603]
Number of crimes	0.992	.32	1.085	[0.924, 1.275]	0.074	.79	1.020	[0.884, 1.177]	3.213	.07	1.140	[0.988, 1.315]
Polyvictimization	0.206	.65	1.292	[0.428, 3.898]	6.089	.01	**3.136**	[1.265, 7.773]	4.108	.04	**2.878**	[1.035, 8.002]

Note. In bold, ORs whose confidence intervals did not include the value of 1. YSR = Youth Self-Report; OR = odds ratio; CI = confidence interval.

presented a higher prevalence than adolescents from community samples in studies conducted with the same instrument in the United States (2-17 years: 80%; Finkelhor et al., 2009), Canada (15-17 years: 87.3%; Cyr et al., 2013), and other European countries such as the United Kingdom (11-17 years: 83.7%; Radford, Corral, Bradley, & Fisher, 2013) and Spain (15-17 years: 87.5%; Pereda, Guilera, & Abad, 2014). However, the results obtained were very similar to those of studies with samples of young offenders, which evaluated victimiza- tion and other potentially traumatic experiences (Abram et al., 2004; Ford et al., 2008). What is more, our adolescent offenders had been exposed on average to 10 different types of victim- izations throughout their life, a higher rate than in community samples, in which between three and six forms of victimization are usually reported (Cyr et al., 2013; Pereda et al., 2014; Radford et al., 2013). Studies with juvenile offender samples using other instruments that assess fewer types of victimization (between seven and 13 different types), but also including other potentially traumatic events, have found a mean of three different traumatic events (Ford et al., 2013; Stimmel et al., 2014; Wasserman & McReynolds, 2011).

POLYVICTIMIZATION IN JUVENILE OFFENDERS

With regard to polyvictimization, cluster analysis identified five subgroups with different profiles of victimization and defined three of them as polyvictims. These polyvictim groups were victimized in different contexts (on average, in four of the six domains evaluated) and, again on average, endorsed almost 12 of the 36 victimizations evaluated. The latter figure is very close to the JVQ lifetime polyvictimization cutoff point for the top 10% of the sample used by some researchers, who establish polyvictimization in community samples at more than 11 (Turner, Finkelhor, & Ormrod, 2010b), 12 (Radford et al., 2013), or 13 different types of victimization (Finkelhor et al., 2009). However, it should be noted that polyvictims accounted for nearly two thirds of our sample (63%), more than 6 times above the cutoff point of 10%. Similarly, using latent class analysis, Ford et al. (2010) also found three groups of polyvictims with adolescents from community populations who reported serious delinquent behavior, but they corresponded to one third of the sample. Another study considered 1,715 high-risk adolescents from diverse public service systems (e.g., child welfare system, juvenile justice, mental health, alcohol/drug services) and found that nearly 20% presented multiple maltreatment profiles (Hazen, Connelly, Roesch, Hough, & Landsverk, 2008).

Compared with juvenile justice samples, the results of this study also show a higher prevalence of polyvictimization in Spanish adolescent offenders. Croysdale et al. (2008) found that about 20% of a sample in the United States reported multiple forms of victimiza- tion, even though the study evaluated only three types of victimization. In comparison, using an empirical methodology, Ford et al. (2013) classified 5% of their sample as polyvic- tims. On average, however, this group presented approximately five of the 11 types of vic- timization evaluated and also displayed other traumatic events, so it is possible that the authors grouped together only the extremely victimized cases.

To test the first hypothesis of this study, the three polyvictim clusters were compared separately with the groups with less extensive histories of victimization. The findings suggested that the five groups were similar in terms of demographic variables (age, sex, origin, and SES), although a tendency toward a higher proportion of girls and native-born and mid- to high-socioeconomic-level youths was observed in the "Highly Polyvictimized" cluster in

line with other studies, which have found differences in age (Finkelhor et al., 2009; Pereda et al., 2014; Radford et al., 2013), gender (Ford et al., 2013), race (Ford et al., 2013; Turner, Finkelhor, & Ormrod, 2006), and SES (Turner et al., 2006). With regard to criminal charac- teristics, the only difference observed between the clusters was in criminal activity. The "Community Violence Polyvictims" cluster stood out for the high number of crimes in their official records, but they presented the lowest rate of violent crime. These results provide partial support for the first hypothesis, and were unexpected in the light of the lifestyle- routine activity (Cohen & Felson, 1979) and cycle of violence (Widom, 1989) theories because, as other studies have shown (e.g., Ford et al., 2010), one would have predicted that young offenders with the highest number of criminal acts and violence would also be the most victimized adolescents. However, research has also found modest victimization pro- files in groups with violent delinquent behavior (Cuevas et al., 2007); therefore, further studies are needed to clarify the association between these variables.

PSYCHOPATHOLOGICAL CORRELATES

The present results support the notion that exposure to multiple experiences of victimiza- tion is associated with problems of psychological adjustment in young offenders. Differences were found in the externalizing and total problem scales between the clusters, although only the Community Violence Polyvictims group differed significantly from nonpolyvictims. Adolescents in the polyvictimization clusters were not only more likely than nonpolyvic- tims to present clinical severity criteria for externalizing symptoms and general impairment but also had a 3 times higher-than-average risk of displaying these psychopathology symp- toms. However, as no differences in internalizing symptomatology were found—meaning that polyvictimization was not statistically associated with the clinical severity of internal- izing problems—the study results partially confirm the second hypothesis.

The results obtained here with Spanish adolescent offenders are consistent with previous international research conducted with high-risk youth regarding the correlates of polyvic- timization and severe externalizing disorders such as aggressive behavior (Croysdale et al., 2008; Ford et al., 2013; Hazen et al., 2008). But the lack of association between internaliz- ing problems and polyvictimization is puzzling. Research with community and high-risk adolescents has frequently reported this association (Croysdale et al., 2008; Ford et al., 2010; Ford et al., 2013; Hazen et al., 2008; Kilpatrick et al., 2003; Turner et al., 2006). Investigations with community samples have also found that internalizing symptoms such as depression have a mediating role between victimization and delinquent behavior (Manasse & Ganem, 2009). Interestingly, the only variable that was significant for predict- ing internalizing problems was foreign origin. Probably, the processes of cultural adaptation required for these immigrant adolescents may cause psychological stress, mainly anxiety and depression (Wittig, Lindert, Merbach, & Brähler, 2008), due to the feelings of inade- quacy and inferiority created by their situation (Valiente, Sandín, Chorot, Santed, & Gonzalez de Rivera, 1996).

LIMITATIONS

These analyses are limited by the cross-sectional nature of this study, and no causal ordering can be clearly established. Also a number of limitations related to the composition of the study sample should be noted, because they affect the representativeness and

generalizability of the results. Young imprisoned offenders were overrepresented in relation to the juvenile justice population in this region of Spain, where there are far more adoles- cents with noncustodial measures (Justice Department of Catalonia, 2014). Attempts were made to represent the whole of the juvenile justice population, but the assessment of ado- lescents in noncustodial care presents certain difficulties (e.g., participants had to come to the juvenile justice facilities to perform the interview) and also depends on the commitment to the study of the professionals responsible for recruiting possible participants. Furthermore, females accounted for only a small minority of our sample; while this represents a faithful reflection of the true situation in the justice system, it made it difficult to make gender com- parisons and therefore the results may not reflect the characteristics and psychopathological sequelae of the female offenders. Likewise, the sample was drawn from a single region of Spain, and it may not be possible to generalize the results to young offenders nationwide. Finally, the exclusion criteria specified that adolescents with unstable psychological states should not be considered in the study, and this may have affected the results found regarding psychopathology. Replication of our findings in other samples of adolescent offenders would help to shed more light on the particular demographic profile of polyvictims, espe- cially on the possibility of a unique female polyvictim pattern, and the correlates and impact of polyvictimization.

RESEARCH IMPLICATIONS

This research has generated evidence about a population that has received limited schol- arly attention as juvenile offenders. From a methodological perspective, this research has made advances in two ways: first, using an internationally applied instrument that measures a wide range of types of victimization and allows meaningful cross-cultural comparison; and second, employing an empirical approach to identify polyvictims. Despite these efforts, further research is needed to find the best way to define polyvictimization and thus identify polyvictims. Polyvictimization has typically been defined through different discrete approaches (cutoff points), a procedure that has generated a high degree of variability between studies and may have made accurate identification of the polyvictims impossible. Second, due to the complexity of the relationship between polyvictimization and mental health problems, future studies in this area should not only assess confounding variables (i.e., other traumatic events, coping) but also explore different patterns of victimization in polyvictims. It would also be interesting to evaluate the psychopathological symptoms by disorders (e.g., anxiety, depression, PTSD) rather than by groups of internalizing/external- izing symptoms to obtain accurate information on the relationship between polyvictimiza- tion and the development of different mental health problems.

CLINICAL AND POLICY IMPLICATIONS

The results highlight the need to encourage professionals working in juvenile justice to evaluate multiple types of victimization and to detect the frequent cases of polyvictimiza- tion. At present, polyvictim offenders are not identified as such, even though they have a more aggressive profile than other offenders (Ford et al., 2012); assessing polyvictimization and its correlates may well represent a valid alternative approach for the treatment of young offenders with severe behavior problems. In addition, we stress the need for tailored approaches adapted to the polyvictims' patterns of victimization and their psychological

needs. It is important to incorporate empirically supported interventions with demonstrated effectiveness in reducing anger and emotional dysregulation in traumatized young offend- ers (see Ford et al., 2012, for a review), such as Trauma Affect Regulation: Guide for Education and Therapy (TARGET; Ford & Russo, 2006) program or the Trauma and Grief Components Therapy for Adolescents (TGCT-A; Layne, Saltzman, Pynoos, & Steinberg, 2002) in the Spanish context. Polyvictim offenders present more externalizing symptoms than other offenders; their more aggressive and disruptive behavior can lead to problems inside juvenile justice facilities (DeLisi et al., 2010), future recidivism (Mersky, Topitzes, & Reynolds, 2012), and even exposure to future victimization (Turner, Finkelhor, & Ormrod, 2010a). Each of these problematic situations involves high psychological, social, and even economic costs. In this respect, appropriate intervention during the participant's contact with the juvenile justice system might help to break the vicious circle of victimiza- tion, mental health problems, and offending.

CONCLUSION

In conclusion, this study provides evidence of high levels of victimization and polyvictim- ization among Spanish young offenders and highlights the severity of the associated psycho- pathological symptoms. The results show that polyvictims were 3 times as likely to present clinically severe levels of externalizing problems and general impairment, but further research is needed in relation to internalizing adjustment symptoms. The use of self-reports has helped to change the perspective of the aggressors themselves, by asking them to con- sider their own experiences of victimization, and may well elicit information that does not appear in official reports. Finally, the comprehensive assessment measure and the empirical approach used allow future cross-cultural comparisons with samples of young offenders.

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