

Type of intervention on youth re-offending

Impact of type of intervention on youth re-offending: Are gender and risk level involved?

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Abstract. The objective of this study was to analyse the impact of the type of intervention on youth re-offending. Moreover, the possible influence that the offender's gender and level of risk could have on this relation was also explored. Juvenile offenders pertaining to four different types of educational interventions participated in the study (N = 210): victim-offender mediation (VOM) as a diversion procedure, and case closure, reprimand and community service as dispositions. Aged between 14-18 years, they were assessed by means of the YLS/CMI Inventory. Recidivism rates were evaluated as the number of new records in a follow-up period of 24 months. Results of this study showed that type of intervention (diversion versus dispositions) had no apparent effect on youth recidivism. Furthermore, an important aspect to consider in youth assessment was the different impact that risk level had on boys' and girls' recidivism.

Keywords: VOM, dispositions, gender, risk level, YLS/CMI.

Introduction

Restorative Justice is guided by the principle that crime harms both individuals and relationships (Braithwaite, 2002). Therefore, this paradigm presents a unique opportunity to rebuild relationships and reach an agreement between victim and offender through a collaborative process (Rodríguez, 2007). Furthermore, the emotional and educational components involved in these restorative processes may act as a protector factor to reoffending. In this context, the Spanish Law of Criminal Liability of Minors 5/2000 (LORPM) includes measures linked to the philosophy of Restorative Justice (Braithwaite, 1989, 2002; Umbreit, 2001). This law allows for the possibility of the Youth Offending Team of the Juvenile Court to implement an extrajudicial resolution, such as Victim-offender Mediation (VOM). Specifically, this type of intervention consists in a guided face-to-face meeting between a crime victim/s and the offender/s, following pre-mediation preparation of each party (Umbreit, Coates & Vos, 2001).

Most of the studies have assessed the impact of this extrajudicial measure (diversion) versus dispositions by measuring the victim's and/or the offender's degree of satisfaction (Beven, Hall, Froyland, Steels & Goulding, 2005; Umbreit, 1994; Yanay & Borowski, 2013), but an increasing number are now also taking the minors' rates of recidivism into account (Acosta, de Bustillo, Martín, Aragón & Betancort, 2012; Capdevila, Ferrer & Luque, 2005; Niemeyer & Shichor, 1996; Rodríguez, 2007; Smith & Weatherburn, 2012). This work belongs to this second group of studies.

Methodological issues such as the absence of suitable control groups or divergent measures of re-offending seem to be the reason for the different results obtained regarding the effectiveness

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of VOM. Some studies have failed to find statistically significant differences (Roy, 1993; Smith & Weatherburn, 2012; Umbreit & Coates, 1993), whilst in others the association between variables was significant (Latimer, Downden & Muise, 2005; Nugent, Umbreit, Winnamaki & Paddock, 2001; Rodríguez, 2007; Umbreit et al., 2001; Wilson & Hoge, 2013a). Meta-analysis studies including control or comparison groups or conducted using only VOM procedures continue to find a positive impact of diversion versus dispositions (Latimer et al., 2005; Nugent et al., 2001). Findings showed that those who participated in these procedures recidivated 30%-32% less than non-participating juveniles (Nugent et al., 2001; Nugent, Williams & Umbreit, 2004).

It appears that there are several important variables moderating the effect of the type of intervention upon recidivism, such as the offender's gender and level of risk of recidivism (Rodríguez, 2007; Wilson & Hoge, 2013; Schwalbe, Gearing, MacKenzie, Brewer & Ibrahim, 2012). In relation to the offenders' gender, current research on crime prevention has focused mainly on the male population (Rutter, Giller & Hagel, 2000). Moreover, when the variable offender's gender has been included it has been regarded as a control variable (Lancôt & Le Blanc, 2008) and not as a risk predictor (Andrews & Hoge, 2010; Garrido, López, Silva, López & Molina, 2006). General results about gender and crime show that crime activity is mainly masculine (Fagan et al., 2007; Capdevila et al., 2005; Rechea, 2008; Rechea & Fernández, 2001) and that girls perpetrate different types of crimes, present an earlier desistance and more protective factors (Fernández, Bartolomé, Rechea & Megías, 2009; Serrano-Tárrega, 2009; Rutter et al., 2000).

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If we turn to look at specific studies regarding gender and type of intervention, significant interaction effects between the two variables can be found. Several studies agree on defending the idea that the effect of VOM on recidivism is mediated by gender (Rodríguez, 2007; de Beus & Rodríguez, 2007; Hayes & Daly, 2004). Specifically, the impact of VOM procedures on girls is greater than on boys.

Besides youth offender's gender, the level of risk of recidivism is thought to be another variable that must be taken into account in the effectiveness of diversion and disposition procedures (Schwalbe et al., 2012; Wilson & Hoge, 2013b). This risk assessment is essential if we are to respect the risk principle (Andrews & Bonta, 2010). This risk principle asserts that the level of offender treatment should correspond to each offender's individual level of risk of recidivism. In their meta-analysis of the effectiveness of diversion procedures versus traditional measures, Wilson & Hoge (2013a) found that although greater reductions in recidivism were seen in the first case, their degree of effectiveness was moderated by the juvenile's level of risk. Unfortunately, few studies report the level of risk of the sample, and so the authors created a risk variable using the information available about the youth. In this study, an objective procedure such as the YLS/CMI (Youth Level of Service/Case Management Inventory), (Hoge & Andrews, 2006), is used to assess the level of risk of recidivism.

The findings reported here will advance research in this area in several ways. First, the impact of VOM measures on recidivism (diversion) will be analysed by examining three comparison groups of similar dispositions in terms of the type (community-based) and the level of risk of re-offending (low-moderate). More specifically, these disposition measures would be reprimand, case closure and community service. In addition, the variables level of risk of re-offending as

well as the youth's gender have also been included, since their effect on the type of intervention has been highlighted in several studies (Schwalbe et al., 2012; Wilson & Hoge, 2013a; Rodríguez, 2007; Hayes & Daly, 2004). Moreover, the level of risk of re-offending is easily evaluated by means of an objective procedure, and there is a follow-up period of two years, since it has been shown that most re-offending takes place within that time (Bravo, Sierra & del Valle, 2009; Capdevila et al., 2005; Mulder, Brand, Bullens & van Marle, 2011).

Therefore, the aim of the article is to explore the level of effectiveness of VOM, as reflected by recidivism, in comparison to other similar procedures. Furthermore, this level of effectiveness is analysed in terms of the offender's gender and level of risk of re-offending, over a follow-up period of 24 months. Thus, the hypotheses are as follows: the implementation of dispositions, a high risk level and being a male offender are expected to be related to a higher rate of recidivism. Besides these main effects, interaction effects among variables would also be expected.

Method

Participants

All the youths who had been charged with an offence or crime in the Juvenile Court of a Spanish province between January 2008 and February 2010 were included in the study (N = 210). The youths' ages ranged from 14 to 18.07 years, with a mean of 16.06 years (SD = 1.16). Of the total number, 151 were boys (71.9%) and the distribution of the different nationalities was as follows: 75.7% Spanish, 9.5% Latin American, 8.1% Romanian and 6.7%

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from Arab countries. The distribution of the four groups was the following: 54 subjects participated in VOM, 54 subjects in the Case closure group, 52 subjects in the Reprimand group, and 50 subjects in the Community service (CS) group. The overall percentage of youths who re-offended two years after applying these measures was 5%.

In the group that participated in VOM, there were significantly more girls ($Chi^2(3, 210) = 15.42, p = .001$), and more crimes against persons ($Chi^2(6, 210) = 18.90, p = .004$) than in the other measures. The measurements of the level of risk of re-offending, on the other hand, ranged between low (0-8 points on the YLS/CMI Inventory), for VOM ($M = 4.2, SD = 4.1$), case closure ($M = 2.9, SD = 2.8$) and reprimand ($M = 4.9, SD = 6.1$), and moderate (9-22 points on the Inventory) for CS ($M = 10.8, SD = 6.5$). As can be observed, the measure with the highest level of risk of recidivism was CS ($F(3, 209) = 23.65, p = .000$).

Instrument

The YLS/CMI Inventory by Hoge & Andrews (2006), which was translated into Spanish by Garrido et al. (2006) as the *Inventario de Gestión e Intervención para Jóvenes* (IGI-J), is an instrument for evaluating the risk of a youth re-offending. To complete the inventory, information must be collected from different sources, such as an interview with the family and the youth, previous charges, social services, educational institutions, and so forth.

This inventory consists of 42 items grouped into eight risk factors. In each factor, the evaluator marks the risk items that can be applied to the youth (1 = presence; 0 = absence), each variable factor having between three and seven items. The factors included in the questionnaire are the following: 1) Prior and current offences and dispositions; (*“Three or more prior*

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convictions"); 2) Family circumstances/parenting (*"Inconsistent parenting"*); 3) Education/employment (*"Disruptive classroom behaviour"*); 4) Peer relations (*"Some delinquent friends"*); 5) Substance abuse (*"Chronic alcohol use"*); 6) Leisure/recreation (*"No personal interests"*); 7) Personality/behaviour (*"Poor frustration tolerance"*); and 8) Attitudes, values and beliefs (*"Defies authority"*). Hence, summing up the youth's scores on all the items provides us with a level of the risk for recidivism, which can be classified in different ranges: Low (0-8 points), Moderate (9-22), High (23-32), and Very High (33-42 points). According to the overall score obtained on the Inventory, the Youth Offending Team will decide on what kind of disposition should be adopted with the juvenile. The Spanish version of the inventory has shown adequate psychometric properties in previous studies ($\alpha = .87$) (Cuervo & Villanueva, 2013).

Procedure

When a youth is charged with committing a crime or offence, he or she is assessed by the Youth Offending Team of the Juvenile Court. The YLS/CMI Inventory is answered and the specific score thus obtained reflects the risk of recidivism for each offender; this information can then be used to propose a particular type of measure or educational intervention.

The juveniles were assigned to different groups by the Youth Offending Team as follows. If the youth was considered to be willing to repair the damage done to the victim and the victim agreed to take part in the mediation, he or she was assigned to the group of those participating in VOM. If the youth was not willing to repair the damage done to the victim, the latter did not agree to participate or, should it be the case, the Youth Offending Team considered the crime to be serious, and the number of previous charges against the youth was high, then he or she was

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assigned to the comparison group (reprimand, case closure or CS). Reprimand consisted mainly in an individual warning made to the youth by the juvenile judge; Case closure implied the total closure of the charges, and Community Service was the opportunity to repair damage by working for the benefit of the public or the institutions. The assignment to these three dispositions depended on the youth situation and personal characteristics, but in all the cases no criteria for VOM were accomplished.

A youth is considered to be a re-offender if he or she – after being assessed by the Youth Offending Team and having completed the YLS/CMI Inventory, which was taken as the baseline – is charged with another offence within the two-year follow-up period. Specifically, the number of new criminal records was recorded over a period of 24 months.

Data Analysis

To address the aims of the study, survival analysis with Cox regression was considered (Kleinbaum & Klein, 2005). This method calculates survival probabilities, which show how likely it is that an offender will remain offence-free during the follow-up period. Results from Cox regressions indicate how the relative risk (or hazard rate) of the dependent variable (number of cases of re-offending) is associated with the independent variables. The method used was forward stepwise (Wald), considering maximum partial likelihood.

Results

In the first regression model, the variable type of intervention was entered. The omnibus test showed that recidivism across time could be explained significantly by this variable. The initial

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log likelihood ratio was 836.05, being reduced to 821.30 when type of intervention was entered ($Chi^2 (3, 210) = 14.74; p = .002$). Table 1 presents the contribution of the four groups to recidivism, the reference group being Case closure. As can be seen in the table, significant differences were found between CS and the reference group (Case closure). That is, the relative ratio of recidivism across the follow-up period is 2.7 times higher in CS than in Case closure.

TABLE 1

When the variable offender's gender was added to the analysis (boy = 1 and girl = 0), the log likelihood ratio was again reduced to 815.36 ($Chi^2 (4, 210) = 20.68; p = .000$). In this model (Table 2), the higher rate of recidivism was maintained for the CS group (2.46 times more than Case closure), but also the relative ratio of recidivism in boys was 2.36 times higher than in girls. However, interaction effects between variables (being assigned to a specific group as a boy or girl) did not yield significant effects.

TABLE 2

Finally, the variable risk level of recidivism, as assessed by the YLS/CMI Inventory, was added to the analysis. In this case, the log likelihood ratio was decreased to 792.23 ($Chi^2 (1, 210) = 4.75; p = .02$). Table 3 shows the contribution of risk level to relative ratio of recidivism: as the risk level increases, the number of cases of re-offending also increases.

TABLE 3

Besides the main effects, it was also possible to observe interaction effects between variables in this analysis. Specifically, the interaction “Risk level*Gender” was significant, taking into account that the B coefficient was negative (see Table 3). Figure 1 contains predicted probabilities of recidivism for both groups (girls and boys), based on risk level of recidivism as assessed by the YLS/CMI. Findings show that girl offenders with a low level of risk have higher probabilities of recidivating than boys. As the risk level increases, specifically at the 15-point risk level, the recidivism of juveniles in both groups appears to converge. However, from that point onwards, boys were more likely to recidivate than girls.

FIGURE 1

Discussion

This study was conducted to assess the impact of VOM, in terms of youth reoffending, in comparison to other dispositions and depending on the youth’s gender and level of risk of re-offending. The first hypothesis argued that the implementation of dispositions, a high risk level and being a male offender were expected to be related to a higher rate of recidivism. This hypothesis was partly supported by the results. First, the implementation of dispositions vs. diversion was not related to higher rates of youth re-offending. Instead, the only significant difference appeared between two different dispositions, CS and Case closure, the former being the group with the highest number of instances of re-offending. These results provide support to previous studies that found no clear advantage of diversion measures over other formal court

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procedures (Schwalbe et al., 2012; Umbreit & Coates, 1993). It appears that the Juvenile Court's Youth Offending Team tries to match the needs and characteristics of low-moderate risk youths, as far as possible within the range of community-based measures. That is, the principle of applying the minimum necessary intervention, tailored to match the youth's needs, is adhered to. In this sense, the type of intervention did not seem to make any difference to recidivism, but a proper match between the youth's risk and educational measure did.

Second, results obtained after adding the offender's gender to the regression model support its well-known relation to recidivism, boys presenting a higher number of cases of re-offending (de Beus & Rodríguez, 2007; Rodríguez, 2007; Hayes & Daly, 2004). However, no interaction effects between gender and type of intervention in recidivism could be found. These results are not consistent with the findings of Rodríguez (2007) and Hayes & Daly (2004). However, it is worth pointing out that in these two studies, youth offenders participating in VOM were mainly boys (60-84%), and committed crimes against property (62-74%), whereas in our study, offenders in the VOM group were mainly girls (28.1%) who committed crimes against persons (48.6%).

Third, it was found that the increase in the level of risk of recidivism, as assessed by the YLS/CMI Inventory, was linked to a greater real rate of recidivism in the minor. These results are in agreement with previous research that supports both this relation and the predictive capacity of the Inventory on recidivism (Andrews, Guzzo, Raynor, Rowe, Rettinger, Brews & Wormith, 2012; Cuervo & Villanueva, 2013; Rennie & Dolan, 2010; Shepherd, Luebbbers, Ogloff, Fullam & Dolan, 2014).

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Besides the main effects of the variables that were analysed, interaction effects were also expected to be present, indicating that the effect of the type of intervention on recidivism was mediated by the offender's gender and risk level. However, the only significant interaction effect on recidivism was found for risk level*gender. As stated previously, girl offenders with a low risk level presented a higher likelihood of recidivism than boys. As the risk level increased, specifically at the 15-point risk level, recidivism in both groups seemed to converge. However, from that point onwards, boys were more likely to recidivate than girls. These results show the different impact that risk level has on boys' and girls' recidivism, supporting previous studies that identified different pathways into the juvenile justice system for female and male offenders (Fernández et al., 2009; Rutter et al., 2000).

Moreover, these results suggest practical implications when assessing recidivism through the YLS/CMI Inventory. The moderate range of risk level in this Inventory is too wide (from 9-22 points) and includes the highest percentage of youths from the Juvenile Court (Cuervo & Villanueva, 2013; Andrews, Kiessling, Robinson & Mickus, 1986), sometimes bringing together very different profiles of youth offenders. This fact and the critical risk level of 15 points for boys, found in this study, may indicate the advisability of dividing the moderate range into two.

Although this study has provided additional insight on recidivism, attention should be paid to several limitations of the study. One of the major limitations is the self-selection bias that is produced, not only in the group of voluntary participants involved in VOM, but also by the professional criteria applied by the Youth Offending Team when proposing a case for VOM. These aspects are, however, a problem that is inherent in the principles of Restorative Justice.

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Random assignation, the procedure recommended to solve these biases, raises other problems of an ethical nature that will need to be tackled by professionals. Likewise, we are aware of the need to incorporate different groups of measures, such as the victims' or the offenders' level of satisfaction or agreement with the restitution as dependent variables (Latimer et al., 2005; Soria, Armadans, Viñas, y Manzano, 2008). In spite of the limitations discussed above, the results of this study showed that the type of intervention (diversion versus dispositions) had no apparent effect on youth recidivism. Moreover, an important aspect to consider in youth offending assessment was the different impacts that the risk level has on boys' and girls' recidivism.

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TABLES

Table 1. Coefficients in the equation.

	B	SE	Wald	df	Sig.	Exp(B)	95.0% CI for Exp(B)	
							Lower	Upper
Type of measure			15.749	3	.001			
Type of measure (VOM)	.000	.408	.000	1	1.000	1.000	.449	2.226
Type of measure (Reprimand)	.038	.408	.009	1	.926	1.038	.467	2.311
Type of measure (CS)	.993	.342	8.456	1	.004	2.700	1.382	5.274

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Table 2. Coefficients in the equation.

	B	SE	Wald	df	Sig.	Exp(B)	95.0% CI for Exp(B)	
							Lower	Upper
Type of measure			11.305	3	.010			
Type of measure (VOM)	.149	.412	.131	1	.718	1.161	.518	2.601
Type of measure (Reprimand)	.045	.408	.012	1	.913	1.046	.470	2.327
Type of measure (CS)	.903	.343	6.938	1	.008	2.467	1.260	4.829
Gender	.862	.388	4.928	1	.026	2.367	1.106	5.065

Type of intervention on youth re-offending

Table 3. Coefficients in the equation.

	B	SE	Wald	df	Sig.	Exp(B)	95.0% CI for	
							Lower	Upper
Type of measure			1.342	3	.719			
Type of measure (VOM)	-.012	.417	.001	1	.977	.988	.436	2.240
Type of measure (Reprimand)	-.251	.428	.344	1	.558	.778	.336	1.800
Type of measure (CS)	.154	.393	.154	1	.695	1.167	.540	2.521
Gender	1.736	.680	6.515	1	.011	5.676	1.496	21.532
Risk_Level	.177	.045	15.370	1	.000	1.193	1.092	1.304
Risk_Level*Gender	-.106	.047	5.031	1	.025	.900	.820	.987

FIGURE

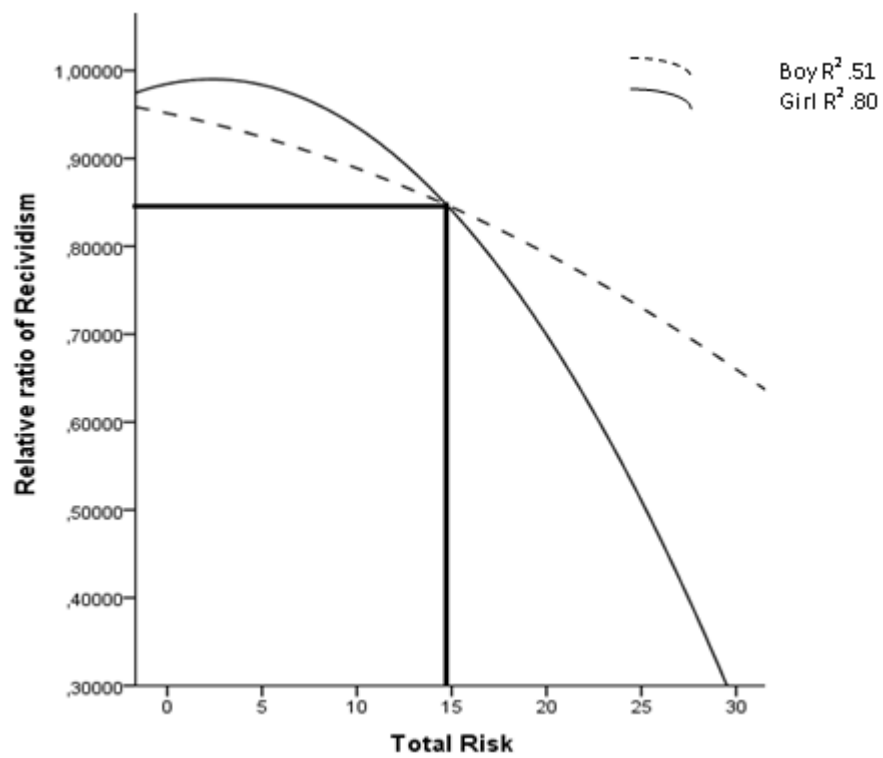


Figure 1. Interaction effects (Risk level*Gender).