Restorative justice programmes emerged in the 1980s, offering alternative methods for dealing with crime (Elliott & Gordon, 2005; McGarrell, 2001). This kind of justice is guided by the principle that crime harms both individuals and relationships (Braithwaite, 2002). This paradigm therefore engaged offenders in dialogue, relationship building, and moral communication to a greater degree than traditional court proceedings (Kuo et al., 2010). According to Umbreit and Armour (2011), within the field of formal restorative justice practice, victim-offender mediation is the most common and widespread form in juvenile and criminal justice systems around the world. This type of intervention consists of a guided face-to-face meeting between a crime victim or victims and the offender or offenders, following premediation preparation of each party (Umbreit et al., 2001). Consequently, the Spanish Law of Criminal Liability of Minors 5/2000 (LORPM) following these principles includes measures related to restorative justice (Braithwaite, 1989, 2002; Umbreit, 2001). This law encourages the use of a mediation procedure between victim and offender (VOM), which is part of the extrajudicial resolution of the conflict, carried out by the Youth Offending Team of the Juvenile Court.

Numerous studies evaluating restorative justice programmes have reported promising results. For example, some studies have shown that approximately 80% to 90% of participants, including both victims and offenders, expressed their satisfaction with programmes that adopted the concept of restorative justice across locations, cultures, and types of crimes (Umbreit & Bradshaw, 2006).

ARTICLE INFO

Article history:
Received 28 January 2020
Accepted 13 October 2020
Available online 27 November 2020

Keywords:
Victim-offender mediation
Community service
Recidivism
Risk level
Youth Level of Service
Case Management Inventory (YLS/CMI)
Restorative justice

ABSTRACT

Victim-offender mediation has been considered a highly valued educational measure in the field of restorative justice, but which is its real impact on youth recidivism from an evidence-based perspective? The aim of this study was to examine the effect of this type of intervention on Spanish juvenile offenders assigned two educational interventions (N = 104): victim-offender mediation (VOM) and community service (CS). Youth offenders were aged between 14-18 years (M = 16.04), and their risk level was assessed by the YLS/CMI Inventory. A 24-month follow-up period was taken into account to evaluate recidivism. Results showed that the type of intervention applied to minors did not have a significant differential effect on subsequent recidivism rates. However, risk level proved to be a determining variable for predicting recidivism. Therefore, it is an adequate matching with minors’ real situation and not the educational measure per se which influences recidivism.

Desentrañando el impacto de la conciliación víctima-infractor en la reincidencia juvenil

Resumen

La conciliación víctima-infractor ha sido siempre considerada como una medida educativa muy valorada en el ámbito de la justicia restaurativa, pero ¿cuál es su impacto real en la reincidencia de los jóvenes desde una perspectiva basada en la evidencia? El objetivo de este estudio fue analizar el impacto de este tipo de medida educativa en una muestra de menores infractores de nacionalidad española, los cuales fueron asignados a dos tipos de medidas educativas (N = 104): la conciliación víctima-infractor y las prestaciones en beneficio de la comunidad. Los menores infractores tenían edades comprendidas entre los 14 y los 18 años (M = 16.04) y su nivel de riesgo fue evaluado por el Inventario YLS/CMI. Se tuvo en cuenta un período de seguimiento de 24 meses para evaluar la reincidencia. Los resultados mostraron que el tipo de intervención aplicada al menor no tenía un efecto diferencial significativo en las tasas de reincidencia posteriores. Sin embargo, el nivel de riesgo resultó ser una variable determinante para predecir la reincidencia. Por lo tanto, es la adecuación a la situación real del menor y no la medida educativa per se la que influye en la reincidencia.
In specific terms, one interesting result consists of the analyses of the impact of VOM in juvenile reoffending. Participants in restorative justice programmes were significantly less likely to reoffend than those participating in mediation (Coates and Gehm, 1985) matched 73 adult and juvenile victim-offender mediation participants with comparable offenders going through the court system. They found that those participating in mediation spent less time incarcerated than offenders who attended court, and those who were incarcerated were more often sent to lower-level correctional facilities. Likewise, offenders who participated in victim-offender mediation assumed responsibility for the crime they have committed (Umbreit & Armour, 2011). Furthermore, those participating in victim-offender mediation generally believed the process was fair and that their opinions were satisfactorily taken into account. These results demonstrate better outcomes than traditional court procedures (Coates & Gehm, 1985).

The purpose of this study is therefore to analyse what effect victim-offender mediation has on future recidivism compared to other similar educational measure (community service) in a Spanish sample of youth offenders. To do this, various variables such as gender, age, and risk of recidivism were taken into account, over a follow-up period of 2 years. The hypotheses were as follows: (i) the use of victim-offender mediation (versus the use of community service) was expected to be related to a lower rate of recidivism, and (ii) the possible effect of the type of intervention on recidivism would be mediated by the risk level in a minor’s life.

Method

Participants

The total sample consisted of 104 minor offenders who had been charged with an offence or crime in the Juvenile Court of a Spanish province, and who had been assigned educational measures involving victim-offender mediation and community service during the period from 2008 to 2010. Youths’ ages ranged from 14.03 to 18.04 years, with a mean of 16.04 years (SD = 1.14). Of the total sample, 73 were males (70.2%) and 31 were females (29.8%). The majority of the participants were Spanish (78.8%), followed by minors from Latin American countries (9.6%), Eastern European countries (6.7%), and Arab countries (4.8%). All the minors were classified in two groups: victim-offender mediation (VOM) and community service (CS).

In the group with CS measure there was a significantly larger sample of males (88%) than females (12%), while gender ratio was more balanced in the VOM group (53.7% males and 46.3% females). Significant differences between the two groups were observed for the gender variable, χ²(1, 104) = 14.59, p < .001. There were no differences for the age variable between the two groups, t(101) = -.45, p = .655.

In the VOM group, 61 offenders were assigned to victim-offender mediation compared to the CS group (N = 43). In the VOM group, 36 offenders were assigned to victim-offender mediation compared to the CS group (N = 37). The VOM group included 40% of them who had had at least one prior conviction (21.6% of the total sample). The remainder of the sample consisted of 15% who had no prior convictions (8.7% of the total sample). The average number of prior convictions was 1.97 (SD = 1.58). The VOM group included 48% of them who had had at least one prior conviction (25.8% of the total sample). The remainder of the sample consisted of 12% who had no prior convictions (6.7% of the total sample). The average number of prior convictions was 1.97 (SD = 1.58).

Instrument

The Youth Level of Service/Case Management Inventory (YLS/CMI) by Hoge & Andrews (2006), which was translated into Spanish by Garrido et al. (2006), is an instrument for evaluating the risk of a youth reoffending and several studies have shown the predictive accuracy of the YLS/CMI in relation to recidivism (Cuervo et al.; 2017; Villanueva et al., 2014). Different data of minors related to their family life, previous judicial records, school evolution, etc., as well as the personal interview, were taken into account by the technical team in the Juvenile Court to complete the inventory.

The inventory is composed of 42 items grouped into eight risk factors. Each factor may be present (1) or absent (0) in a minor. These factors are the following ones: 1) prior and current offences and dispositions (“three or more prior 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”). Total general risk score is obtained by adding up the youth’s scores on all the items and provides a level of 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). Depending on the total score obtained by the minor in the Inventory, the Youth Offending Team is responsible for proposing the most appropriate educational measure.

In addition, in this inventory we can also find “protective factors”. These are present in a minor when an explicit condition protects him or her in any of the eight risk areas mentioned above. The maximum score that can be obtained is seven since it is possible to evaluate it in all areas except for prior and current offenses.
Previous studies have shown that this inventory presents adequate psychometric conditions, for example Cronbach’s alpha scores ranging from .87 (Cuervo & Villanueva, 2013) to .91 (Cuervo et al., 2017). In the present work, Cronbach’s alpha score was .85.

**Procedure**

When a minor offender is assessed by the Youth Offending Team of the Juvenile Court, they establish a risk level of recidivism. Based on this risk, an educational measure is proposed that is also related to the type of crime committed by the minor. First, the VOM sample was obtained for the period for 2008 to 2010, and then the CS sample was selected as it was also a voluntary participation measure but was not grounded in the restorative paradigm. If the minor was willing to compensate the damage and the victim agreed to participate in the mediation, the minor offender was assigned to the mediation group (VOM). On the contrary, if the minor or the victim did not accept the preconditions, the minor offender was assigned to the community service group (CS).

**Results**

First, descriptive data for the study is shown in Table 1. There were significant differences between the two groups of victim-offender mediation (VOM) and community service (CS), for the rate of recidivism (dichotomous and quantitatively), and the total risk score of recidivism. Minors in the CS group presented higher rates of recidivism (dichotomous and quantitatively), and the total risk score of recidivism. Minors in the VOM group.

Finally, the “criminal recidivism” variable refers to charges filed after the date of the first assessment of a minor by the Youth Offending Team, which were considered as a baseline measure. The number of new criminal records was recorded over a period of 24 months.

**Data Analysis**

The outcome variables for youth recidivism were measured in two different ways: dichotomously (reoffender/non-reoffender), using logistic regression, and quantitatively (number of subsequent charges), using negative binomial regression. In the first case, when the variable analysed was presence or absence of recidivism, logistic regression method was used as it has been shown that it is the appropriate method (Flores et al., 2017). In the second case, the response variable was the number of subsequent offences; therefore, the analysis was carried out using binomial negative regression (Weerman & Hoeve, 2012).

**Table 1. Descriptive Data according to the Educational Measure**

<table>
<thead>
<tr>
<th>VOM</th>
<th>CS</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of recidivism</td>
<td>Recidivist 14.8% (n = 8) 36% (n = 18)</td>
<td>Non-recidivist 85.2% (n = 46) 64% (n = 32)</td>
</tr>
<tr>
<td>Mean of recidivism</td>
<td>0.26 (n = 54) 0.72 (n = 50)</td>
<td>Total risk score (YLS/CMI) 4.20 10.72</td>
</tr>
</tbody>
</table>

Note. N = 104 log likelihood = -78.002; AIC = 166.003; BIC = 179.177.

This measure offered the opportunity to repair damage by voluntarily working for the benefit of the public or institutions. Assignment to these two dispositions depended on youths’ situation and personal characteristics, assessed in overall terms by the Youth Offending Team.

**Table 2. Binary Logistic Regression with Dichotomous Recidivism**

**Model 1: Recidivism and the Type of Educational Intervention**

<table>
<thead>
<tr>
<th>B</th>
<th>SE</th>
<th>Exp (B)</th>
<th>p</th>
<th>LL</th>
<th>UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (1)</td>
<td>0.76</td>
<td>0.25</td>
<td>2.15</td>
<td>.256</td>
<td>0.30</td>
</tr>
<tr>
<td>VOM</td>
<td>-0.76</td>
<td>0.68</td>
<td>0.47</td>
<td>.002</td>
<td>-1.93</td>
</tr>
<tr>
<td>Age</td>
<td>-1.09</td>
<td>0.56</td>
<td>0.33</td>
<td>.049</td>
<td>0.01</td>
</tr>
<tr>
<td>Constant</td>
<td>10.84</td>
<td>3.77</td>
<td>5117.05</td>
<td>.004</td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 104; log likelihood = 99.66; Nagelkerke R² = .22; % of correct classification = 77.7. *p < .05, **p < .001.

**Model 2: Recidivism and Risk Factors**

<table>
<thead>
<tr>
<th>B</th>
<th>SE</th>
<th>Exp (B)</th>
<th>p</th>
<th>LL</th>
<th>UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (1)</td>
<td>0.62</td>
<td>0.66</td>
<td>1.85</td>
<td>0.346</td>
<td>0.68</td>
</tr>
<tr>
<td>Age</td>
<td>-0.72</td>
<td>0.26</td>
<td>0.49</td>
<td>.005</td>
<td>-0.27</td>
</tr>
<tr>
<td>VOM</td>
<td>0.16</td>
<td>0.05</td>
<td>1.17</td>
<td>.000</td>
<td>0.17</td>
</tr>
<tr>
<td>Constant</td>
<td>8.45</td>
<td>3.92</td>
<td>4461.79</td>
<td>.031</td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 104; log likelihood = 177.498; BI = 188.037. *p < .05.

**Model 3: Recidivism and Interaction Between the Type of Educational Intervention and Risk factors**

<table>
<thead>
<tr>
<th>B</th>
<th>SE</th>
<th>Exp (B)</th>
<th>p</th>
<th>LL</th>
<th>UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (1)</td>
<td>0.76</td>
<td>0.25</td>
<td>2.15</td>
<td>.256</td>
<td>0.52</td>
</tr>
<tr>
<td>Age</td>
<td>-0.81</td>
<td>0.25</td>
<td>0.44</td>
<td>.001</td>
<td>0.31</td>
</tr>
<tr>
<td>Total risk x VOM</td>
<td>0.13</td>
<td>0.70</td>
<td>1.14</td>
<td>.062</td>
<td>1.01</td>
</tr>
<tr>
<td>Constant</td>
<td>10.38</td>
<td>3.80</td>
<td>32250.71</td>
<td>.006</td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 104; log likelihood = 177.561. *p < .05.

**Table 3. Negative Binomial Regression with Quantitatively Recidivism**

**Model 1: Recidivism and the Type of Educational Intervention**

<table>
<thead>
<tr>
<th>B</th>
<th>SE</th>
<th>Exp (B)</th>
<th>p</th>
<th>LL</th>
<th>UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>9.39</td>
<td>2.76</td>
<td>11.61</td>
<td>.001</td>
<td>3.99</td>
</tr>
<tr>
<td>Gender</td>
<td>0.64</td>
<td>0.51</td>
<td>1.58</td>
<td>.209</td>
<td>-0.35</td>
</tr>
<tr>
<td>Age</td>
<td>0.66</td>
<td>0.18</td>
<td>13.51</td>
<td>.000</td>
<td>1.01</td>
</tr>
</tbody>
</table>

Note. N = 104 log likelihood = -84.749; AIC = 177.498; BI = 188.037. *p < .05, † p < .10, ** p < .05.

**Model 2: Recidivism and Risk Factors**

<table>
<thead>
<tr>
<th>B</th>
<th>SE</th>
<th>Exp (B)</th>
<th>p</th>
<th>LL</th>
<th>UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>6.89</td>
<td>2.92</td>
<td>5.55</td>
<td>.018</td>
<td>1.16</td>
</tr>
<tr>
<td>Gender</td>
<td>0.64</td>
<td>0.49</td>
<td>1.73</td>
<td>.188</td>
<td>-0.31</td>
</tr>
<tr>
<td>Age</td>
<td>-0.59</td>
<td>0.19</td>
<td>9.90</td>
<td>.002</td>
<td>-0.95</td>
</tr>
</tbody>
</table>

Note. N = 104 log likelihood = -79.511; AIC = 167.022; BI = 177.561. *p < .05.

**Model 3: Recidivism and Interaction Between the Type of Educational Intervention and Risk factors**

<table>
<thead>
<tr>
<th>B</th>
<th>SE</th>
<th>Exp (B)</th>
<th>p</th>
<th>LL</th>
<th>UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>7.34</td>
<td>3.02</td>
<td>5.89</td>
<td>.015</td>
<td>1.41</td>
</tr>
<tr>
<td>Gender</td>
<td>1.02</td>
<td>0.55</td>
<td>3.46</td>
<td>.063</td>
<td>-0.05</td>
</tr>
<tr>
<td>Age</td>
<td>-0.65</td>
<td>0.19</td>
<td>11.08</td>
<td>.001</td>
<td>-1.03</td>
</tr>
<tr>
<td>Total risk x VOM</td>
<td>-0.04</td>
<td>0.02</td>
<td>2.95</td>
<td>.073</td>
<td>-0.90</td>
</tr>
</tbody>
</table>

Note. N = 104 log likelihood = -78.002; AIC = 166.003; BI = 179.177. *p < .05, † p < .10, ‡ p < .05.

First, descriptive data for the study is shown in Table 1. There were significant differences between the two groups of victim-offender mediation (VOM) and community service (CS), for the rate of recidivism (dichotomous and quantitatively), and the total risk score of recidivism. Minors in the CS group presented higher rates of recidivism and higher levels of risk compared to minors belonging to the VOM group.

Second, as seen in Table 2, a binary logistic regression was performed with the dependent variable of dichotomous recidivism and the independent variables of gender, age, type of intervention and total risk. In the first regression model, age and the type of educational
intervention were the variables that contributed to the explanation of the variance of the final model, accounting for 23% of the variance. This result showed that being younger and having undertaken the CS educational measure increases the risk of recidivism. In the second block, which includes the total risk score and demographic variables, both risk score and age were the most significant predictor variables. This means that the younger the minor and the higher the risk level, the greater the likelihood of recidivism. Taken together, the model accounted for 36% of the variance in the prediction of recidivism. Finally, in the third model, age was the only significant variable for predicting the existence of juvenile records ($R^2 = .22$), i.e., the younger the offender, the more likely they are to reoffend. The interaction between type of intervention and risk was marginally significant.

Finally, a negative binomial regression with the dependent variable of number of subsequent charges and the independent variables used in the previous regression model was performed (see Table 3). In the first step, when assessing the type of educational intervention, age appears as the principal predictor of recidivism, and the type of intervention was shown as a variable that predicted recidivism in a marginally significant way. In the second model, age and total risk were the most important variables in predicting recidivism. This means that being young and having a high level of risk makes recidivism more likely to occur. In the third model, age was the only variable predicting recidivism. The interaction between VOM and total risk only marginally predicted recidivism.

**Discussion**

The objective of this study was to analyse the impact of the educational measure VOM versus CS measure on youth recidivism. The first hypothesis stated that the educational measure victim-offender mediation would be more effective than other similar measures such as community service. This hypothesis was not fully supported by the results. Although VOM was significantly related to the prediction of reoffending when the recidivism variable was analysed in a dichotomous form ($p = .049$), it was only marginally significant when it was evaluated continuously ($p = .073$). This variable therefore did not show a strong and consistent predictive power over recidivism. These results do not support previous studies, which found clear advantages for extrajudicial measures compared to other formal court procedures (Rodríguez, 2007; Schwab et al., 2012; Umbreit, 2001). On the other hand, the results from this study support previous research with Spanish youth offenders, which found no significant differences between VOM and some judicial measures (Jara et al., 2016; Villanueva et al., 2014). Extrajudicial solutions such as VOM are just as beneficial as measures involving more direct judicial involvement, such as community service. The face-to-face component of VOM and dialogue with the victim about the consequences do not seem to tip the scales in VOM's favour.

The most significant aspect here seems not to be the educational measure per se, but adequate matching with a minor’s real situation. In accordance with the risk principle that the level of educational intervention should correspond to the level of risk of recidivism of each minor (Andrews & Dowden, 2006), it can be said that both variables are intrinsically linked. In other words, the Juvenile Court’s Youth Offending Team proposes an educational measure and endeavors to match it with the youth's criminogenic needs or risk level. In this close relationship, the risk level variable therefore seems to be the major factor involved.

Accordingly, the second hypothesis stated that the possible effect of the type of intervention on recidivism would be mediated by the level of risk in a minor’s life. This hypothesis was partly supported by the results obtained. Although the significance was always marginal, an interaction between the variables VOM and risk level could be observed, showing that low risk levels in the VOM group would be associated with lower levels of recidivism. The primacy of the risk level variable is therefore apparent once again when predicting recidivism (Wilson & Hoge, 2013).

These results suggest practical implications for professionals working with juvenile offenders. They present some evidence-based perspective, showing that the educational measure assigned to the minors is not the main factor, but instead the way this measure perfectly suits their risk level and life circumstances. The juvenile justice system in Spain is committed to the non-application of direct proportionality between crimes and consequences (a principal difference with the adult criminal justice system). In other words, two minors committing the same criminal act may be recommended two different educational measures depending on their life circumstances, as assessed by the Youth Offending Team. Another practical implication may be inferred about the application of VOM procedures. The interactive effects found in regressions (total risk x VOM), although marginally significant, show how the effect of VOM is mediated by the risk level in a minor’s life. As the risk level increases, the effect of VOM on recidivism is diminished. Therefore, low-risk offenders may benefit more from VOM than high-risk offenders.

Finally, the study had some limitations. Since mediation requires a motivational factor on the part of both, minor offenders and victims, this bias could be considered as an influential variable. Although some recent studies have shown that declines in recidivism are not solely due to this bias (more motivated youth, with a proactive attitude against reparation processes either face-to-face or indirect) (Jonas-van Dijk et al., 2019), in future studies it would be interesting to include a non-voluntary group undergoing an educational measure not grounded in the restorative justice paradigm. This would show the possible influence of the motivation variable in the recidivism process. Likewise, another important variable that may be considered in the overall picture of VOM is the type of victim the minor faces in these reparation processes: are they individuals, or companies and factories? The same reparation and relationship building processes do not appear to be involved in VOMs with big firms and factories, and this means that they tend to yield a lower success probability rate (García-Gomis et al., 2016). Finally, the results will be strengthened and some of the marginal effects clarified if more participants could be involved in the study. Moreover, due to the fact that the starting groups were not homogeneous regarding the level of risk, it would be essential to take this variable into account in future studies.

Despite these limitations, the present study helps to disentangle the real impact of VOM procedures in the Spanish juvenile justice system and highlights the need for future research to take outstanding variables into account in order to clarify the landscape, which is far from being conclusive. The role of risk level in minors’ life and their motivation to contribute to the reparation processes involved therefore need in-depth analysis.

**Conflict of Interest**

The authors of this article declare no conflict of interest.

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