Targeting Antisocial Attitudes in Community Supervision Using the EPICS Model: An Examination of Change Scores on the Criminal Sentiment Scale

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AT THE PRESENT time, more than 50 meta-analyses of the correctional treatment literature have been undertaken (see McGuire, 2013). The results have been replicated with remarkable consistency, and the core findings are collectively referred to as the principles of effective intervention in reducing offender recidivism (see Andrews & Bonta, 2010, for a detailed review). Until recently, these concepts have not been widely applied in community supervision settings, despite the fact that probation is one of the most widely used sanctions in the criminal justice system. In fact, early reviews of the literature on the effectiveness of community supervision have found that there is little evidence to support the contention that it produces greater reductions in offender recidivism than other alternative sanctions (Bonta et al., 2008; Bonta et al., 2011). To illustrate, Bonta et al. (2008) conducted a meta-analysis of 15 studies and reported that probation was associated with only a 2 percent reduction in general recidivism, and had no impact on violent recidivism. Similar findings have been reported from the research on the effectiveness of parole (Solomon, 2006; Solomon, Kachnowski, & Bhati, 2005) as well as other empirical studies examining supervision or surveillance of offenders in the community (Sherman et al., 1997; MacKenzie, 2006; Petersilia, 1998; Petersilia & Turner, 1993). As a consequence, Bonta et al. (2008) concluded that traditional community supervision often focuses on compliance monitoring and law enforcement aspects of supervision.

In response to this research, several recent initiatives have been undertaken to apply the principles of effective intervention in parole and probation settings (Bonta et al., 2011; Bourgon, Gutierrez, & Ashton, 2012; Latessa, Smith, Schweitzer, & Labrecque, 2012; Robinson et al., 2012; Smith, Schweitzer, Labrecque, & Latessa, 2012; Taxman, Yancey, & Bilanin, 2006; Trotter, 1996; 2006). Specifically, these models of intervention have attempted to apply the principles of risk, need, and responsivity (RNR) within the context of individual case management meetings between probation/parole officers and offenders. The Strategic Training in Community Supervision (STICS) model was developed by the Canadian Department of Public Safety, and represented the first attempt to apply an RNR framework to a model of community supervision. Research on use of the STICS model has been very promising. For example, researchers found that after training officers in the model, they had a 12 percent higher retention rate at six months when compared to officers that were not trained (Bonta et al., 2011). Additionally, recidivism rates were 15 percent lower for offenders who were supervised by an officer using the STICS model in comparison with offenders who were supervised by untrained officers after a two-year follow-up period (Bonta et al., 2011).

A similar model was developed at the University of Cincinnati called Effective Practices in Community Supervision (EPICS). The goal of the EPICS model is similar to the goal of STICS in that it emphasizes the importance of targeting higher-risk offenders, teaches officers how to target criminogenic needs using a structured manner, and teaches officers how to adhere to a cognitive-behavioral approach during meetings. Furthermore, this model trains community supervision officers on several core correctional practices related to service delivery with offender populations and includes a structured approach to coaching and fidelity monitoring. A series of recent investigations have found that training in the EPICS model makes officers more likely to consistently use core correctional practices in their interactions with clients compared to officers that are not trained in the model (Labrecque, Schweitzer, & Smith, 2013b; Latessa et al., 2012; Smith et al., 2012). In addition, offenders supervised by EPICS-trained officers have also been shown to have lower recidivism rates than offenders supervised by untrained officers (Latessa et al., 2012).

One of the primary purposes of EPICS sessions is identifying and changing the antisocial attitudes of higher-risk offenders during individual contact sessions. Strong empirical evidence links antisocial attitudes or beliefs—or procriminal sentiments—to criminal behavior (Andrews & Bonta, 2010; Gendreau, 1996; Gendreau, Goggin, Chantelouppe, & Andrews, 1992; Gendreau, Little, & Goggin, 1996; Hubbard & Pratt, 2002; Leschied, Chiodo, Nowicki, & Rodger, 2008; Simourd &
practitioners to first identify and then modify antisocial attitudes and other criminogenic needs with the goal of reducing recidivism among known offender populations. One such instrument is the Criminal Sentiments Scale-Modified (CSS-M; Simourd, 1997). The CSS-M is a specific self-report measure of antisocial attitudes, values, and beliefs related to criminal behavior that has been used with a number of different offender populations (Andrews & Wormith, 1984; Simourd, 1997). Research suggests that this instrument possesses adequate psychometric properties, as well as construct and predictive validity for the populations on which they have been tested (Shields & Simourd, 1991; Simourd, 1997; Simourd & Olver, 2002; Simourd & Van De Ven, 1999; Witte, Di Placido, Gu, & Wong, 2006). Since antisocial attitudes have been found to be strong predictors of recidivism for both adolescents and adults, many practitioners have begun utilizing the CSS-M questionnaire as an assessment for treatment planning purposes. Many agencies also administer the instrument pre- and post-treatment to assess individual client progress in treatment as well as overall programmatic performance in reducing risk to re-offend through addressing antisocial attitudes. This study uses the CSS-M questionnaire to measure changes in antisocial attitudes and values over time as a result of participating in EPICS sessions with community supervision officers.

Method

Participants

The participants in this study came from one of four regional juvenile and adult probation or parole departments in one large Midwestern state. The caseloads of 37 probation and parole officers were involved in this study. Officers were randomly assigned to one of two groups by a site coordinator: (1) a trained group (i.e., trained in the EPICS model) and (2) an untrained group (i.e., untrained in the EPICS model). The sample consisted of selected offenders supervised by the probation and parole officers in the study (n = 238). Only probationers and parolees who were at moderate- or high-risk for recidivism and fluent in English were eligible to participate in the study. Sex offenders and individuals diagnosed with a severe mental illness were excluded in the study due to their status as special populations.

Data Collection

Data was collected on an ongoing basis by University of Cincinnati Corrections Institute (UCCI) staff (i.e., officer and offender demographics, offender views and feedback, and other offender case information). Sites also provided access to pertinent offender files and officer information.

Measures

EPICS Officer Training. All of the probation and parole officers assigned to the trained group attended a three-day training on the EPICS model. University of Cincinnati Corrections Institute (UCCI) staff facilitated the training. The primary objective of the training was to provide officers with a sound understanding of the model and its implementation in offender-officer contact sessions. The format of the training included visual presentations, demonstrations of skills, workbook and participation exercises, and several opportunities for officers to practice skills. Following the initial training, officers and supervisors participated in 24 coaching sessions (approximately one per month). Coaching sessions were led by UCCI staff and were designed to refresh officers on the EPICS model.

Criminal Sentiments Scale-Modified (CSS-M). The CSS-M is a modified version of the original Criminal Sentiments Scale (CSS; Andrews & Wormith, 1984). The CSS-M is a 41-item offender-completed questionnaire that requires offenders to rate their agreement with general statements on a 3-point Likert scale (i.e., agree, uncertain, or disagree). Statements can be prosocial or antisocial depending on the content and wording. Each endorsement of an antisocial statement (or rejection of a prosocial one) yields 2 points, whereas each rejection of an antisocial statement (or acceptance of a prosocial one) yields 0 points. Undecided responses receive a score of 1. Given the scoring scheme, higher scores are indicative of higher levels of antisocial attitudes than lower scores. Offenders receive an overall score as well as ratings on three dimensions. The first sub-scale, Attitudes towards the Law, Courts, and Police (LCP, 25 items) evaluates respect for the law and the criminal justice system. The second sub-scale, Tolerance for Law Violations (TLV, 10 items), explores rationalizations for criminal behavior. The third sub-scale, Identification with Criminal Others (ICO, 6 items), assesses offenders’ opinions of law violators.

As part of the research design, probation and parole officers had participating offenders...
complete a CSS-M during the first contact session (pretest) and then again during the final contact session (posttest) so that any change in criminal attitudes could be measured. There were a total of 359 CSS-M assessments turned in for analysis (238 pretests and 121 posttests).

Change in Score. The change in CSS-M score was dichotomized where a positive change indicated a reduction in criminal sentiment (lower score at post-test than at pre-test) and a negative change indicated a similar or increased criminal sentiment (same or higher score at post-test than at pre-test).

Recidivism. Recidivism is operationalized here in the following two ways: (1) any technical violations of community supervision (0 = no and 1 = yes), and (2) any arrest for a new crime (0 = no and 1 = yes). Technical violations include, but are not limited to, failing to refrain from the use or possession of drugs or alcohol, failing to report as instructed, or failing to complete treatment as ordered by the court. The average time of follow-up was 329 days.

Analysis

The analyses of this study proceed in the following four steps. First, descriptive statistics compare the officers and offenders in the trained group with those in the untrained group on a number of theoretically relevant variables. Second, the CSS-M pre-test scores of the offenders in the trained group are compared to the offenders in the untrained group. Third, bivariate relationships between CSS-M pre-test scores and recidivism are examined. Finally, chi-square analyses examine the effect of offender group assignment on the direction of CSS-M change in score from pre-test to post-test.

Results

Table 1 shows the frequencies and percentages of the 37 participating probation and parole officers by gender, race, and years of service. Generally speaking, the officers in the study were predominately white and approximately half were male. While the officers in the trained group had slightly more years of service (10.8 years) compared to the untrained officers (10.2 years), the difference was not significant.

Table 1 also displays the frequencies and percentages of the 238 participating offenders by gender, race, marital status, age, and number of prior arrests. The majority of the offenders were not married and just about half of the sample is white. The offenders in both groups are approximately 31 years old with 11 prior arrests. The only significant difference between the two groups is that the offenders supervised by trained officers were significantly more likely to be male (χ² = 5.2, df = 1, p = .022). However, despite this gender difference, the majority of both offender groups are males (88.3 percent of the trained group and 77.1 percent of the untrained group).

Table 2 shows that there were no statistically significant differences between the CSS-M pre-test scale scores of the trained (n = 120) and untrained group (n = 118). This finding indicates that both groups of offenders were similar in the amount of criminal sentiments at the start of the study. This increases the probability that any changes in criminal attitudes at post-test were due to the treatment condition (i.e., EPICS or control) and reduces the likelihood that the changes are a result of pre-existing group differences in levels of criminal attitude.

To investigate if there was a statistically significant association between CSS-M pre-test scale scores and recidivism, Pearson correlations were computed. Table 3 shows that the Identification with Criminal Others (ICO) scale is significantly related (p < .01) to both technical violations (r = .20) and any arrest for a new crime (r = .18). This means that offenders who identified more with criminal others were more likely to recidivate compared to offenders who identified less with criminal others. The total CSS-M score and the other two domains of Attitudes towards the Law (LCP) and Tolerance for Law Violations (TLV) were not statistically related to either measure of recidivism. However, it should be noted that the direction of the relationships between these measures and recidivism was positive, which suggests that higher scores on all three scales indicate a higher probability for recidivism.

### Table 1.
**Demographic Characteristics of Participants by Officer Training Status**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Trained</th>
<th></th>
<th>Untrained</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Officers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8.0</td>
<td>47.1</td>
<td>10.0</td>
<td>50.0</td>
</tr>
<tr>
<td>White</td>
<td>16.0</td>
<td>94.1</td>
<td>17.0</td>
<td>85.0</td>
</tr>
<tr>
<td>Mean years of service</td>
<td>10.8</td>
<td>5.1</td>
<td>10.2</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>n = 120</td>
<td></td>
<td>n = 118</td>
<td></td>
</tr>
<tr>
<td>Offenders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male*</td>
<td>106.0</td>
<td>88.3</td>
<td>91.0</td>
<td>77.1</td>
</tr>
<tr>
<td>White</td>
<td>58.0</td>
<td>48.3</td>
<td>62.0</td>
<td>51.7</td>
</tr>
<tr>
<td>Married+</td>
<td>12.0</td>
<td>10.1</td>
<td>17.0</td>
<td>14.4</td>
</tr>
<tr>
<td>Mean age (SD)</td>
<td>31.0</td>
<td>9.1</td>
<td>31.9</td>
<td>10.3</td>
</tr>
<tr>
<td>Mean prior arrests (SD)</td>
<td>10.2</td>
<td>8.0</td>
<td>11.6</td>
<td>10.6</td>
</tr>
</tbody>
</table>

Note: *p ≤ .05; n = 237; †n = 232.

### Table 2.
**Comparison of CSS-M Pre-Test Scores by Group Type (n = 238)**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Trained</th>
<th></th>
<th>Untrained</th>
<th></th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>t</td>
</tr>
<tr>
<td>LCP</td>
<td>15.4</td>
<td>7.8</td>
<td>16.4</td>
<td>8.2</td>
<td>.96</td>
</tr>
<tr>
<td>TLV</td>
<td>5.7</td>
<td>3.6</td>
<td>5.8</td>
<td>3.7</td>
<td>.16</td>
</tr>
<tr>
<td>ICO</td>
<td>4.1</td>
<td>2.0</td>
<td>4.0</td>
<td>1.9</td>
<td>-.59</td>
</tr>
<tr>
<td>Total</td>
<td>25.3</td>
<td>11.3</td>
<td>25.8</td>
<td>12.1</td>
<td>.37</td>
</tr>
</tbody>
</table>
To investigate whether offenders supervised by EPICS-trained officers differ from offenders supervised by non-trained officers on the direction of their post-test CSS-M assessment scores, a chi-square statistic was conducted. Table 4 shows the Pearson chi-square results and indicates that offenders were significantly different on Identification with Criminal Others (χ² = 3.68, df = 1, p = .055) and Tolerance for Law Violators (χ² = 2.92, df = 1, p = .087). Offenders supervised by trained officers were more likely to have positive (reduced) scores at post-test on the ICO and TLV scales. Phi, which indicates the strength of association between the two sets of variables, is .18 for the ICO scale and .16 for the TLV scale.

Discussion

The extant research on the predictors of criminal behavior indicates that antisocial attitudes and beliefs is a valid and reliable predictor of recidivism (Andrews & Bonta, 2010; Gendreau, 1996; Gendreau, Goggin, Chanteloupe, & Andrews, 1992; Gendreau et al., 1996; Hubbard & Pratt, 2002; Leschied et al., 2008; Simourd & Andrews, 1994). This study sought to determine if the CSS-M, an assessment designed to measure antisocial attitudes and beliefs, is a valid predictor of technical violations and rearrest in a sample of probationers and parolees. This study also sought to determine if officer training in the EPICS model was associated with decreases in the levels of offender antisocial thinking and attitudes as evidenced by fluctuations in CSS-M scores.

The results of this study provide some tentative support for the effectiveness of the CSS-M in predicting offender outcomes (Shields & Simourd, 1991; Simourd, 1997; Simourd & Olver, 2002; Simourd & Van De Ven, 1999; Witte et al., 2006). One of the main findings of this study is that the identification with Criminal Others (ICO) subscale of the CSS-M was statistically associated with both technical violations (r = .20) and rearrest (r = .18). Although the other two domains of Attitudes towards the Law, Courts, and Police (LCP) and Tolerance for Law Violations (TLV) and the total CSS-M score were not found to be statistically associated, all three non-significant measures were in the hypothesized direction. The statistical non-equivalence is likely a result of the small sample size and limited number of assessments examined. Nevertheless, this study involved a strong methodological design, with probation and parole officers randomly assigned to treatment conditions (i.e., either trained or untrained in the EPICS model). It should also be noted that the two groups of officers were similar to each other in the theoretically relevant variables examined, which adds to the internal validity of the study and suggests that the differences found are a result of the treatment condition and not any pre-existing officer characteristics. Taken together, these findings lend support for the CSS-M as an effective tool for identifying those offenders more likely to recidivate.

This study provides additional support for the effectiveness of RNR approaches to supervising offenders related to positive outcomes (Bonta et al., 2011; Bourgon et al., 2012; Labrecque, Schweitzer, & Smith, 2013a, 2013b; Latessa et al., 2012; Robinson et al., 2012; Smith et al., 2012; Taxman et al., 2006; Trotter, 1996, 2006). To the authors’ knowledge, it is the first study to explore the influence of a community supervision model (i.e., EPICS) on the intermediate measure of antisocial attitude (as evidenced by the scores on the CSS-M assessment). The findings of the study suggest that those offenders that are supervised by EPICS-trained officers were more likely to have positive (reduced) scores on the two CSS-M domains of Identification with Criminal Others (ICO) and Tolerance for Law Violators (TLV) at post-test compared to offenders supervised by untrained officers. Although the total CSS-M score and the domain of Attitudes towards the Law, Courts, and Police (LCP) were not found to be statistically associated, both were in the hypothesized direction. This supports the EPICS model as effective as a means to reduce the antisocial thinking patterns of offenders supervised by officers trained in the model.

The results from this study are certainly encouraging. However, there are a few limitations that should be understood before proceeding with any potential policy changes.

### Table 3.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Technical Violation</th>
<th>Arrest New Crime</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCP</td>
<td>r 0.02 [-.11, .13]</td>
<td>r 0.06 [-.07, .19]</td>
</tr>
<tr>
<td>TLV</td>
<td>r 0.10 [-.03, .22]</td>
<td>r 0.00 [-.13, .13]</td>
</tr>
<tr>
<td>ICO</td>
<td>r 0.20 [.08, .32]</td>
<td>r 0.18 [0.05, .30]</td>
</tr>
<tr>
<td>Total Score</td>
<td>r 0.07 [-.06, .20]</td>
<td>r 0.08 [-.05, .21]</td>
</tr>
</tbody>
</table>

Note: r = Pearson product moment correlation; CI = confidence interval.

### Table 4.

<table>
<thead>
<tr>
<th>Change in Score</th>
<th>Trained</th>
<th>Untrained</th>
<th>χ²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCP</td>
<td></td>
<td></td>
<td>0.05</td>
<td>.826</td>
</tr>
<tr>
<td>Positive</td>
<td>25</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>33</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLV</td>
<td></td>
<td></td>
<td>2.92</td>
<td>.087</td>
</tr>
<tr>
<td>Positive</td>
<td>31</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>27</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICO</td>
<td></td>
<td></td>
<td>3.68</td>
<td>.055</td>
</tr>
<tr>
<td>Positive</td>
<td>30</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>28</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td></td>
<td></td>
<td>0.46</td>
<td>.498</td>
</tr>
<tr>
<td>Positive</td>
<td>29</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>29</td>
<td>31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Positive = improved score (lower score at post-test than at pre-test). Negative = same or worse score (same or higher score at post-test than at pre-test).
First, the probation and parole officers in this study were able to select the offenders included in this investigation. Although the offenders in treatment and control groups were similar in the characteristics examined, there is the potential that some level of unmeasured bias could have influenced their selection. Second, a strict criterion for inclusion was enforced. Only offenders that were moderate- or high-risk for recidivism, ages 14-65, fluent in English, not sentenced for a sex offense, and without a diagnosis of a severe mental illness were included in the study. Such a design is able to advance knowledge for the type of offenders included in the study, but the results may not necessarily translate to those groups not included in the study. Third, the measurement of antisocial attitude and values through the use of the CSS-M relies solely upon offender self-report, and there is reason to speculate that some offenders may not be truthful in reporting their level of procriminal thinking. However, research has continuously found that antisocial attitude assessments (including the CSS-M) possess adequate psychometric properties and the constructs of antisocial attitudes can be reliably measured (Andrews & Bonta, 2010). Regardless of the potential limitations of self-report measures, they remain the method of choice for assessing offender antisocial attitudes. Further, the use of the CSS-M is supported by the extant research and easily replicable for future study. Finally, although there was an attempt to obtain pre- and post-test information for all of the study participants, there are approximately half as many post-tests (n = 121) as there are pre-tests (n = 238). The attrition of the offenders submitting post-test information limits the value of the results drawn from the change in score analyses, as it is unknown if the results would have been the same if all of the offenders had completed the post-testing.

Future investigations of offender change could be more precise in examining the differences in score in alternative ways, such as the raw difference in score from pre-test to post-test, the percentage change in score from pre-test to post-test, or the use of more advanced change measures such as the Reliable Change Index (for more information see Jacobson, Follette, & Revenstorf, 1984).

**Conclusion**

There is little doubt that the recent initiatives to apply the principles of effective intervention in probation and parole settings (i.e., STICS, EPICS, STARR) will play an important role in the future of community corrections. Prior research has found that these models are responsible for increasing offender use of core correctional skills (Bourgon et al., 2010; Bourgon & Gutierrez, 2012; Bonta et al., 2011; Labrecque et al., 2013b; Robinson et al., 2012; Smith et al., 2012; Trotter & Evans, 2012), improving the relationship between officer and offender (Labrecque et al., 2013a), and, most important, reducing recidivism (Bonta et al., 2011; Latessa et al., 2012; Lowenkamp, Holsinger, Robinson, & Alexander, in press; Robinson et al., 2012; Taxman et al., 2006), especially when officers are also trained in motivational interviewing (Lowenkamp et al., in press). The current study adds to this research base by suggesting that these models may also be responsible for reducing offender antisocial attitudes. This is an important contribution and adds to the mounting support that community-based RNR models “work” (MacKenzie, 2006).

**References**


