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Abigayl M. Perelman and Carl B. Clements Criminal Justice and Behavior 2009; 36; 184 DOI: 10.1177/0093854808328122

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BELIEFS ABOUT WHAT WORKS IN JUVENILE REHABILITATION

The Influence of Attitudes on Support for "Get Tough" and Evidence-Based Interventions

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Throughout the past half century, public sentiment about sentencing of offenders has vacillated between rehabilitative and punitive goals. Whether these shifting positions are influenced by actual knowledge regarding program effectiveness or merely reflect underlying attitudes is unknown. The current study used an online survey to examine college students' (N = 130) judgments about the effectiveness of different interventions for juvenile offenders. Results indicated that participants rated three popular but empirically unsupported (get tough) programs as being equally effective as four empirically validated treatments. However, personal attitudes were a strong moderator of program effectiveness ratings. For example, those endorsing rehabilitative goals were more likely to rate empirically supported interventions as effective. A punishment orientation was associated with endorsement of get tough programs. Possible follow-up studies include evaluating the connection between attitudes and program effectiveness knowledge, examining the impact of educational interventions, and conducting replications with justice professionals and community leaders.

Keywords: rehabilitation; punitive strategies; public attitudes; evidence-based treatment

 ${\bf B}$ eliefs about the effectiveness (or ineffectiveness) of correctional rehabilitation have been dependent on attitudes and judicial philosophy, particularly before the emergence of outcome evaluations. Unfortunately, one of the first empirical reviews of rehabilitative efforts ignited a pessimism that has spread and smoldered for decades. Martinson's (1974) analysis of 231 program studies and his conclusion that a "radical flaw [exists] in our present strategies [such] that [rehabilitation] at its best, cannot overcome, or even appreciably reduce, the powerful tendency for offenders to continue in criminal behaviors" (p. 49) launched a "nothing works" era just at a point in history when the field of correctional rehabilitation was beginning to gain momentum (Gendreau, 1996). Some have continued to argue that "rehabilitative methods tend, by and large, not to rehabilitate. . . . [R]esearch into the effectiveness of 'methods of intervention' . . . is a doomed endeavour" (Pitts, 1992, p. 144). Such pessimism finds many ready adherents and seems to have dominated the prison enterprise (Haney, 2006) as well as public and political attitudes (Clements, 1999). A recent text makes the compelling argument that the U.S. "addiction to incarceration" is based in large part on misinformation (Pratt, 2008).

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CRIMINAL JUSTICE AND BEHAVIOR, Vol. 36 No. 2, February 2009 184-197 DOI: 10.1177/0093854808328122

During the late 1980s, the discussion surrounding the treatment of offenders was revitalized by researchers and practitioners who began to formulate a "best practice" or "what works?" agenda (Losel, 1995). In the context of the gloomy environment shaped by Martinson, their goal was to conduct well-designed studies to identify the effectiveness of specific correctional rehabilitation programs and their critical components. Many of these efforts and much of this history has been summarized by Cullen and Gendreau (2001). Equally important, as pointed out by Herbert Quay (1977), was an examination of program integrity, that is, whether a given program was actually carried out as originally designed. As it turned out, most of the programs reviewed by Martinson suffered from poor fidelity (Palmer, 1975.) Unfortunately, the momentum to reaffirm rehabilitation through empirical study was relatively short-lived (Cullen, Skovron, Scott, & Burton, 1990).

By the 1990s researchers like Pitts (1992) helped advance the "get tough on crime" movement. In the United States, many states began to impose life sentences without the possibility of parole for an offender's third felony conviction, regardless of its severity (Gendreau, 1996; Sundt, Cullen, Applegate, & Turner, 1998). In addition, boot camps, shock incarceration, and programs such as scared straight, electronic monitoring, and drug testing all gained popularity (Gendreau, 1996). The penal harm movement, so well described by Clear (1994), was in full sway.

ATTITUDES TOWARD REHABILITATION

Although judicial and political leaders typically claim that their decisions reflect public sentiment, there is limited objective research on attitudes regarding imprisonment and related sanctions (Lane, 1997; Roberts & Hough, 2005). Surprisingly, there may have been less public support for the "get tough" movement than politicians imagined. For instance, when Sundt et al. (1998) compared the differences in attitudes between their 1995 survey and the one conducted in 1986 by Cullen et al. (1990), they found that the majority (54.7%) of those surveyed in 1986 believed that rehabilitation should be the main emphasis of incarceration. Only 5.7% favored pure punishment. Nevertheless, by 1995, a noticeable shift in public attitudes was apparent. Only 32.6% of the population surveyed felt that rehabilitation should be the primary focus of prison, whereas 27.2% favored punishment. Although the support for punishment had increased during the 10-year interval, rehabilitation was still a preferred option for a plurality of respondents. As Cullen (2002) has implied, rehabilitation and punishment shared public endorsement, but political rhetoric was more one-sided.

More recently, rehabilitation has received renewed support as a worthy aim, but it is unclear whether the public has a working knowledge of how the correctional system might achieve this goal. Prisons have long been thought of as "schools of crime," in which offenders exit more hardened than when they entered (Hough & Roberts, 1998). In the context of this pessimism, citizens appear to support the idea of rehabilitation although they continue to believe that, in practice, it often fails to occur (Roberts & Hough, 2005).

Attitudes toward juvenile rehabilitation. Societal inclination toward punitive or rehabilitative goals varies across circumstances and offender type (Wood & Viki, 2004). Finkel, Maloney, Valbuena, and Groscup (1996) found that otherwise identical offenders were more likely to receive harsher sentences when previous convictions were revealed—a

difference perhaps based on the belief that harsher punishments will deter reoffending by those with prior records or will incapacitate such offenders for a longer period—both punishment goals. With respect to correctional rehabilitation, typically juvenile offenders are seen to be more amenable to change and less fully responsible than adults for their decisions (Moon, Sundt, Cullen, & Wright, 2000). Nevertheless, Moon et al. (2000) found a paradox in perceptions. Although 63.3% of their large sample agreed that the main emphasis of juvenile corrections (MEJC) *should be* rehabilitation, only 29.4% thought such emphasis was being implemented. Over one third were uncertain about the day-to-day agenda of the juvenile system.

Opinions versus evidence of program effectiveness. Despite the increasing range of options for juvenile offenders and the mounting empirical evidence for specific programs, little is known about the public's knowledge about program effectiveness or its support for particular interventions. One exception with respect to public support was Moon et al.'s (2000) previously noted survey of Tennessee residents that examined attitudes toward the goals of juvenile corrections and endorsement of various community-based interventions. The results revealed a number of interesting, albeit inconsistent, findings and indicated that more dissemination about program effectiveness research is in order. Respondents supported all types of therapy, for example, insight, group, family. Furthermore, tough love approaches (boot camp and, especially, scared straight¹) and electronic monitoring were thought to build character in their participants. Drug testing received the highest level of support.

Given the accumulating empirical data on actual program effectiveness, societal attitudes and perceptions about specific rehabilitation programs can be compared with these results. In a major review, Gendreau (1996) identified several distinguishing characteristics of interventions shown to be either effective or ineffective in reducing recidivism in adults. A decade later, Andrews and Bonta (2006) reported very similar findings. Programs judged as ineffective included (a) psychodynamic and client-centered therapy; (b) programs characterized as punishing smarter (e.g., boot camp; Mackenzie, Brame, McDowall, & Souryal, 1995), scared straight (Petrosino, Turpin-Petrosino, & Buehler, 2003), drug testing, electronic monitoring, and shock incarceration (Stinchcomb & Terry, 2001); and (c) programs that did not target the multiple causes of offending (i.e., criminogenic needs; Gendreau, 1996).

Alternatively, effective programs appeared to focus on criminogenic needs and were firm and fair in manner, intensive, and longer in duration. They were typically based on a cognitive-behavioral approach and included modeling and teaching prosocial skills. In addition, the program structure and activities incorporated the offender's social network in a manner that disrupts delinquency connections and requires prosocial interaction (Gendreau, 1996).

Consistent with this what works momentum, agencies such as the U.S. Office of Juvenile Justice and Delinquency Prevention (OJJDP) now have databases of evidence-based programs for juveniles, characterized as promising, effective, and exemplary. Exemplary programs have the highest level of fidelity when implemented, demonstrate robust empirical findings, and use a reputable conceptual framework and an evaluation design of the highest quality (OJJDP Development Services Group, 2004). Cognitive-behavioral therapy (Sadock & Sadock, 2003), multisystemic therapy (Bourdin, 1994), aggression replacement training (Goldstein, Glick, & Gibbs, 1998), and LifeSkills training (Botvin & Kantor, 2000) are examples of this category. Many of these programs have been identified by the Center for the Study of Violence Prevention as part of their Blue Print series (Mihalic, Irwin,

Elliott, Fagan, & Hansen, 2001) and share most of the characteristics cited by Gendreau (1996) and Andrews and Bonta (2006).

Given the apparent public support for get tough programs for juveniles (Moon et al., 2000), despite accumulating negative evidence, it is critical to examine this paradox. In this study, we assessed support for the four evidence-based programs noted above and three get tough but generally ineffective programs similar to those surveyed by Moon et al. (2000). In addition, participants rated a generic counseling intervention, which although not of the get tough genre, has also been shown to have little positive impact on recidivism (Gendreau, 1996). Furthermore, based on long-standing evidence that attitudes may heavily influence program endorsement (e.g., Carroll, Perkowitz, Lurigio, & Weaver, 1987), we also examined participants' preexisting sentencing philosophies, political ideologies, and their attributions about crime causation.

METHOD

DESIGN

This study used both mixed groups and correlational designs. We examined participants' ratings of program effectiveness of eight different interventions (within subjects variable) for either first-time juvenile offenders or repeat juvenile offenders (between subjects variable). Second, we assessed the relations among several participant attitudes (e.g., sentencing goals, crime attributions, demographics, political ideology) and their ratings of program effectiveness.

PARTICIPANTS

Participants were recruited from Introductory Psychology classes from a large southeastern U.S. university, and they received research credits. Of the 141 students who initially participated, 11 were removed primarily based on an inconsistent response style or scores on the Paulhus Deception Scales (PDS; Paulhus, 1998). Of the 130 in the final sample, 53.7% were women and 83.8% were White. Participants had a modal age of 19 years (47.1%), and a plurality were self-described political moderates (36.8%).

MEASURES

Program effectiveness ratings (PER). To assess program endorsement, we designed a 6-point rating measure to reflect one's belief about the effectiveness of each the eight named programs. These programs were briefly defined and described to participants, but no information about relevant research findings was provided (see Appendix A). Effectiveness response options ranged from 1 (detrimental) to 6 (strongly effective; see Appendix B). A factor analysis of the measure confirmed, in large part, the a priori division of programs described in the procedure section below. Participants were also asked to reveal whether they based their responses on gut feeling, media, peers, parents, courses taken, scientific evidence, other personal experience, or other.

Sentencing Goal Inventory (SGI). Clements, Wasieleski, Chaplin, Kruh, and Brown (1998) developed the SGI, a 30-item, three-factor instrument designed to assess the

endorsement of traditional sentencing goals: rehabilitation (Rh), retribution (Rt), and utilitarian punishment² (UP). Coefficient alphas (p < .05), ranging from .76 for UP to .86 for Rh, indicated acceptable internal consistency as did item–total correlation ranges of .49 to .82 for Rh, .41 to .70 for UP, and .38 to .73 for Rt.

MEJC. This two-question measure was adapted from Harris (1968) and Moon et al. (2000). From among five choices—rehabilitation, punishment, protection, retribution, or not sure—participants declared what they thought the main emphasis in dealing with juvenile offenders *currently is* and what it *should be*. These questions were used to gauge consistency between perceptions of actual and ideal emphasis in juvenile corrections and to compare this adapted measure from Moon et al. (2000) to the SGI described in the previous paragraph.

Crime Attributions Scale (CAS). This two-factor, 26-item instrument assesses individual attitudes regarding the causes of crime (Clements & Schumacher, 1988). Based on a dispositional–situational model, the CAS assesses the extent to which individuals attribute criminal behavior to internal influences and personal defects as well as to external influences and situational circumstances. Coefficient alpha (p < .05) of .70 for the Internal scale and .77 for the External scale and item–total correlations ranging from .20 to .42 for Internal and .16 to .65 for External indicated adequate reliability of this measure (Clements & Brown, 1998).

Political ideology. As part of the demographic questionnaire, participants were asked to identify their political ideology by checking one of the following descriptors: very liberal, liberal, moderate, conservative, or very conservative.

PDS. This 40-item questionnaire measures one's propensity to give socially desirable responses (Paulhus, 1998). The PDS comprises two relatively independent subscales: self-deceptive enhancement and impression management. In this study, we examined inflated scores on impression management as well as patterns of inconsistent responding.

PROCEDURE

College students were solicited for the 20 to 30 min online survey. Those who showed interest in continuing were given a link to the online survey3. Participants were assigned to either the first-time offender condition (n = 68) or the repeat offender condition (n = 62). All were given eight program descriptions and asked to assign a PER to each. The specified ineffective and/or get tough programs were counseling, boot camp, scared straight, and electronic monitoring, The designated empirically supported programs were cognitivebehavioral therapy, multisystemic therapy, aggression replacement training, and LifeSkills training. These eight program descriptions (see Appendix A), each about three sentences long, were presented in a mixed order. Because our goal was to assess baseline beliefs and knowledge, no information was provided as to the available evidence regarding program effectiveness. Other than a brief description of the type of offender, the ratings task for firsttime offender condition was identical to that for the repeat offender condition. Participants also completed the demographic questionnaire (including political ideology), the SGI, the MEJC scale, and the CAS. The latter three surveys (SGI/MEJC/CAS) were counterbalanced with the PER task to control context effects. The impact of survey order on ratings of program effectiveness was nonsignificant; thus, results are based on combined surveys.

RESULTS

MAIN EMPHASIS OF JUVENILE CORRECTIONS AND SENTENCING GOALS

We compared an adapted measure—MEJC—from Moon et al. (2000) to responses on the SGI. When asked "[What] do you think the main emphasis in dealing with juvenile offenders *currently is*?" the largest plurality of participants responded, "to punish the adolescent to deter them from future crime" (38.2%). This percentage was followed by support for rehabilitation (28.7%), retribution (11%), and not sure (10.3%). Alternatively, when asked "[What] do you think the main emphasis in dealing with juvenile offenders *should be*?" a majority of participants (60.3%) responded, "To try to rehabilitate the adolescent so that he or she might return to society as a productive citizen." This percentage was followed by support for punishment as a form of deterrence (16.9%), retribution (9.6%), and not sure (5.9%) For both questions the option "to detain and isolate the adolescent to protect society?" was chosen least often (7.4% and 2.9%, respectively).

Participant responses to the second question (should be) were expected to match their highest score on the SGI. Using independent samples t tests, the Rh scores for those endorsing the MEJC rehabilitative response (M = 36.73, SD = 6.56) were found to be significantly greater than those for all other possible MEJC responses (M = 31.21, SD = 5.32), t(128) = 4.96, p < .001. Similarly, UP scores for the MEJC punishment responders (M = 26.93, SD = 5.08) were significantly greater than those for all other possible MEJC responses (M = 23.22, SD = 6.17), t(128) = 2.87, p = .005. Finally, Rt scores for the MEJC retributive endorsers (M = 44.15, SD = 5.16) were significantly greater than those for all other responses (M = 37.38, SD = 6.89), t(128) = 3.43, p < .001. Thus it appears that the SGI is consistent with the endorsement choices given to participants in an earlier study for which this is a partial replication (Moon et al., 2000). Moreover, it is clear that MEJC responses for *currently is* and *should be* diverge markedly.

PER

The principal criterion measure used in this study was participant ratings of the eight selected interventions. Four of these were from a group of empirically supported treatments, whereas the remaining four have been shown to be ineffective if not counterproductive in reducing juvenile recidivism. We submitted ratings of the eight programs to a factor analysis to determine, in part, whether they coalesced along the lines noted above. Eigen values (>1.0) and a scree plot suggested either a two- or three-factor solution. In a two-factor solution (Principal Axis factoring with Oblimin rotation and Kaiser Normalization), results were consistent with the a priori division (empirically supported vs. ineffective) with one exception. All empirically supported programs loaded on Factor 1 but were also joined by Counseling, an intervention from the nonsupported group. Factor 2 included the other three interventions from the get tough cluster. Together, these two factors accounted for 45% of the variance in the overall measure. It would appear that participants found that counseling sounds like some of the other evidence-based treatments despite its questionable record of success. Also, counseling has less get tough flavor than programs like boot camp and scared straight. Table 1 displays the relevant factor loadings.

Program	Factors and Loadings		
	1	2	
Counseling	.606		
Cognitive-behavioral therapy	.514		
Aggression replacement training	.475		
Multisystemic therapy	.438		
LifeSkills training	.426		
Boot camp		.713	
Scared straight		.503	
Electronic monitoring		.425	

TABLE 1: Program Effectiveness Ratings, Two-Factor Model

In a three-factor solution, accounting for 58% of total variance, multisystemic therapy separated as a one-item factor. Otherwise, the other two factors remained the same. It appears that participants saw MST (correctly) as an intensive, multipronged approach, similar to but somewhat distinct from other interventions in Factor 1. Of note, MST has accumulated some of the strongest evidence of effectiveness of any juvenile program (Mihalic et al., 2001). The finding that counseling merged with the empirically supported treatments and that MST is seen as somewhat unique altered the planned analysis of PER. Below we describe the differences in participant ratings using the above-noted two-factor model, that is, four evidence-based versus three get tough programs. Counseling was not included in these comparisons.

A mixed design ANOVA revealed no significant main effect for program type, F(1,128) = .091, p = .763, $\eta^2 = .001$. Mean effectiveness ratings (1 = detrimental to 6 = strongly effective) given to more well-known "get tough" programs (M = 3.69, SD = .98) as compared to less familiar, but empirically supported, programs (M = 3.67, SD = .71) did not differ. Furthermore, collapsed across program type, no main effect was found for first-time versus repeat juvenile offenders F(1, 128) = 1.05, p = .307, $\eta^2 = .008$. Finally, the interaction between programs and type of offender was also not significant, F(1, 128) = 1.407, p = .238, $\eta^2 = .011$. The mean effectiveness rating across both program types and both target groups fell between slightly effective and moderately effective. These results are displayed in Figure 1.

SENTENCING GOALS, CRIME ATTRIBUTIONS, AND PER

Our planned analyses of moderator effects anticipated the likelihood that concurrent attitudes might predispose participants to endorse programs differently. To examine this possibility, we first correlated scores on the subscales of the SGI (Rh, UP, and Rt) with PER scores. Sentencing goals—one's relative endorsement of Rh, UP, and Rt—had a clear impact on ratings (see Table 2).

Particularly noteworthy are the medium-to-large positive correlations between endorsement of Rh goals and the rated effectiveness of empirically supported programs for all offenders, r(128) = .349, p < .01, and, especially, empirically supported programs for first-time offenders, r(66) = .472, p < .01. No significant correlations were found between Rh goals and effectiveness ratings for get tough programs or those for repeat offenders.

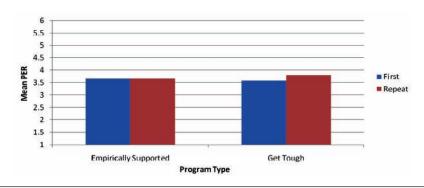


Figure 1: Mean Program Effectiveness Ratings as a Product of Program and Offender Type

TABLE 2: Correlations (r) Between Program Effectiveness Ratings (PER), Sentencing Goals Inventory (SGI), and Crime Attribution Scale (CAS)

	SGI			CAS	
PER	Rehabilitation	Punishment	Retribution	Internal Attribution	External Attribution
All Offenders (empirically supported programs)	.349**	.035	.123	134	.423**
All offenders (get tough programs)	022	.343**	.149	.207*	.075
First-time (empirically supported programs)	.472**	07	.190	372**	.417**
First-time (get tough programs)	009	.273*	.134	.205	.039
Repeat (empirically supported programs)	.212	.159	.041	.176	.436 **
Repeat (get tough programs)	027	.422**	.176	.183	.111

^{*}p < .05. **p < .01.

The converse was found for UP goals. A medium-sized positive correlation was revealed between UP scores and the rated effectiveness of get tough programs for all offenders, r(128) = .343, p < .01. This attitude-effectiveness relation was particularly strong with respect to get tough programs for repeat offenders, r(66) = .422, p < .01. No significant correlations were found between UP and the effectiveness ratings of empirically supported programs for any offender condition.

Finally, endorsement of Rt goals was not significantly correlated with the ratings of either get tough or empirically supported programs for the first-time or repeat offenders.

We similarly examined possible relations between crime attributions (internal and external) and ratings of program effectiveness. Results are less dramatic here but reveal a consistent pattern. Higher External CAS scores are associated with greater confidence in empirically supported programs for all offenders, r(128) = .423, p < .01, a relation that is reflected across programs for the first-time, r(66) = .417, p < .01, or repeat offenders, r(66) = .436, p < .01.

Alternatively, the correlation between Internal CAS scores and the get tough programs for all offenders was significant, r(128) = .207, p < .05. Interestingly, participants who score higher on Internal CAS actually rated empirically supported programs for first-time offenders as less effective, r(66) = -.372, p < .01.

DEMOGRAPHIC ANALYSIS

Participant gender also was examined as a potential moderator. With regard to PER, in the aggregate, men gave lower ratings (M = 24.67, SD = 4.09) than did women (M = 26.56, SD = 4.47), t(128) = -2.49, p = .014. However, men gave higher ratings than did women to get tough programs (M = 11.53, SD = 2.94) versus (M = 10.47, SD = 2.87), t(128) = -2.06, p = .041. With respect to the four empirically validated programs, women gave higher effectiveness ratings than did men (15.0 vs. 14.2), and this difference approached significance, t(128) = 1.67, p = .097. No other gender differences were found.

Most of the participants in the current study stated that their attitudes toward program effectiveness stem from gut feeling (47.8%), whereas very few acknowledged scientific evidence (4.4%) or courses taken (7.4%). In addition, it is noteworthy that our participants did not indicate that their beliefs were heavily influenced by the media (5.9%) as was originally expected.

DISCUSSION

The public mood-swings between punitive and rehabilitative goals and the discrepancy between hoped for and actual juvenile program effectiveness require examination. Preexisting attitudes and ideology also may play a role in determining support for various interventions. The goal of this study was to examine these inconsistencies and relations in greater depth. To do so, it was important to determine how participants would rate a selection of juvenile interventions in terms of their perceived effectiveness.

Participants rated three get tough programs, all generally empirically unsupported as well as four evidence-based programs. Half of the participants rated programs for first-time juvenile offenders; the remainder rated the same programs directed toward repeat offenders. Overall, participants did not differentiate between program type. Effectiveness ratings for get tough options were equal to those for empirically supported programs. The effectiveness finding is less pessimistic than our original prediction in which we had assumed that raters would endorse more strongly the popular get tough programs.

Our analysis of moderator effects revealed that the no difference findings obscured compelling associations between effectiveness ratings and preexisting attitudes. For example, support for rehabilitation goals and higher levels of external crime attribution were associated with a strong belief in the effectiveness of empirically supported programs, particularly when targeted at first-time juvenile offenders. In contrast, and consistently, participants with a punishment orientation and higher levels of internal crime attribution were much more likely to rate get tough programs as being effective, especially when targeted at repeat juvenile offenders. To a lesser degree but still noteworthy, men tended to endorse get tough juvenile programs and women rated evidence-based programs as more effective. These differences were not accounted for by gender divergence on the attitude measures.

It is clear that effectiveness ratings for the get tough version of juvenile corrections and for its evidence-based counterparts is, to a large extent, influenced by sentencing ideology (rehabilitation or punishment priorities), blame attribution (dispositional or situational), and gender. Less clear is whether this divergence is due to actual knowledge differences regarding outcomes research. Are persons with a rehabilitative set better informed about

research findings? Are men not so well informed? Alternatively, perhaps the brief program descriptions (get tough vs. evidence-based) simply matched preconceived notions of what constitutes effective programs. It is likely that the affinity of punishment—individual blame oriented participants for get tough programs, despite empirical evidence to the contrary, reflects their bias, rather than a knowledge deficit. Likewise, in this argument, rehabilitative-situational types would not be credited with superior knowledge; their bias merely happens to coincide with empirical evidence.

This finding is consistent with previous research by Finkel et al. (1996) and Wood and Viki (2004), who found that people who support rehabilitative sentencing goals were more optimistic about program effectiveness. The impressive connection between Rh scores and effectiveness ratings for empirically supported interventions targeting first offenders (r = .472) suggests that sentencing philosophy does indeed promote differentiation among alternative treatments. Similarly, as noted by Finkel et al. (1996), those who adhere to a more punitive sentencing attitude tend to believe that treatment programs are less beneficial than traditional penal measures. In our study, a punishment orientation was particularly strongly connected to ratings of get tough programs for repeat offenders (r = .422). Punitively minded people may well be less informed about or perhaps less willing to consider empirical research. The inclination to support get tough programs, some of which are shown to be counterproductive, and the reliance on gut feeling in assessing programs is a particularly dangerous combination. A logical next step in this line of research would be to investigate the amenability of different groups to educational interventions. If current public perceptions are not based on knowledge of empirical evidence, can the dissemination of that knowledge alter citizens' level of support?

Consistent with the findings on sentencing goals, crime attributions also had a predicted influence on program endorsement. As hypothesized, one's level of internal crime attribution, in which the participant sees criminal behavior as linked primarily to dispositional personcentered features, was positively correlated with effectiveness ratings of get tough programs. In contrast, such attributions were strongly negatively associated with empirically supported effectiveness ratings. Alternatively, higher levels of external attributions, the inclination to recognize situational components of crime, were associated with support for all programs but particularly empirically supported programs. These participants may either be better informed about empirical evidence or, more likely, saw the program descriptions as addressing those situational factors.

Although Moon et al. (2000) found stronger public support for programs that are popular with politicians and in the media as compared to those with growing empirical support, our participants endorsed evidence-based programs as much as the get tough sanctions. They also mimicked Moon et al.'s respondents: 60% supported a rehabilitative approach as a priority, but only 28% thought this aim was being carried out. These findings suggest that the public, here represented by a cross section of students, has the capability to comprehend the benefits of empirically supported programs and to recognize the problems with the get tough options. Like Moon et al.'s respondents, however, they doubt that effective rehabilitation programs are being implemented.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

A number of possible study limitations require comment. For example, some have argued that the use of self-report measures, particularly online self-reporting, may increase the

likelihood of biased or inconsistent responding (Paulhus, 1986; Richman, Kiesler, Weisband, & Drasgow, 1999). However, for the current research, this measurement approach has a number of advantages. Previous studies suggest that Internet-based results are consistent and in some ways superior to findings from studies using more traditional pencil-and-paper methods (Stanton, 1998). Similarly, online studies have been shown to help increase the amount of sensitive information revealed, particularly through the enhancement of confidentiality, thus alleviating some of the problems (e.g., self-serving bias) that may arise with face-to-face measures. In addition, we eliminated approximately 7% of our sample participants due to inconsistent responding to further minimize this source of error.

The use of self-report measures throughout the current study may have led to a common measurement bias. Mulitrait–multimethod designs that examine different constructs using multiple formats are often used to address this concern and could be considered in follow-up studies (Trochim, 2006).

In addition, the use of a college sample limits the study's external validity. Although the participants displayed some trends similar to those found by Moon et al. (2000), it will be interesting to examine other populations. For example, measuring the sentencing goals, crime attributions, and PER of politicians, judges, and treatment providers might extend our understanding about the attitudes and knowledge base of these central players.

Similarly, because so many participants made decisions based on gut feeling rather than empirical evidence, a future study that examined attitudes and program effectiveness knowledge before and after a university level psychology-law or delinquency course or a focused review-of-the-evidence workshop would be useful. Whether dissemination of research findings can override attitudes and ideological influences remains an open question. Some evidence for knowledge-driven attitude change and the impact of educational interventions has been found in death penalty research (Cochran & Chamlin, 2005; Wright, Bohm, & Jamieson, 1995). Similarly, Lane (1997) found a decrease in punitiveness following a college corrections course, but a direct link between knowledge attainment and attitude change was not found.

Successful dissemination of program effectiveness research could be extended to policy makers, correctional staff, and citizen groups. The goal would be to encourage officials and key actors to support programs based on evidence of effectiveness in reducing recidivism and promoting rehabilitation. Gendreau (1996) has eloquently summarized the problem in this way: "There is a sobering reality that far too little of this knowledge is being used by practitioners, scholars, and policy makers. The major impediments in this regard . . . [are] the shortage of appropriate training programs" (p. 157). The widespread infusion of knowledge about what works in correctional rehabilitation is a clear priority.

Appendix A Program Descriptions Provided to Participants

EMPIRICALLY SUPPORTED INTERVENTIONS

Multisystemic therapy. A 3- to 5-month intensive family-oriented home- and community-based treatment program that targets chronically violent and substance abusing juveniles who face imminent risk of incarceration. This program is designed to develop natural support systems with extended family, teachers, neighbors, friends, church members, etc.

Appendix A (continued)

LifeSkills training. A 10- to 30-session classroom-based program to help prevent the early stages of substance abuse by addressing risk factors associated with experimental use of drugs and alcohol in children. The program consists of three major components that seek to teach students: (a) general self-esteem and self-confidence skills, (b) social skills, and (c) information and skills specifically related to drug use.

Aggression replacement training. A program designed to teach adolescents to understand and replace aggression with positive thoughts and behaviors. It incorporates three techniques: (a) skill-streaming that uses imitation and role-playing to learn healthy behaviors, (b) anger-control training in which participants provide descriptions of anger provoking situations to learn to deal with them, and (c) training in moral reasoning which develops a sense of fairness relative to the needs of others.

Cognitive-behavioral therapy. A problem-focused approach in which a therapist assists an individual to recognize illogical beliefs, thoughts, and dysfunctional behaviors. This therapy can take place in groups or individually. The cognitive component helps change faulty or unhealthy thinking patterns, whereas the behavioral component works to replace negative behaviors with positive ones.

UNSUPPORTED INTERVENTIONS

Boot camp. A 3- to 6-month residential program modeled after military basic training camps, using highly disciplined and structured techniques. They emphasize vigorous physical activity, manual labor, and other activities that ensure that participants have little, if any, free time. Correctional officers act as drill instructors, initially using intense verbal tactics designed to overcome resistance and lead to constructive changes.

Electronic monitoring. A 24-hr surveillance consisting of an electronic device (e.g., ankle bracelet) attached to a person usually on community mandatory supervision allowing location and activities to be monitored as well as mobility restricted. In addition, it allows for the enforcement of the juvenile's curfew.

Counseling. The goal of these one-on-one sessions with a counselor is to address personal conflicts, rather than the treatment of any specific disorder. The counselor works with the client to promote insight into problems, relief of symptoms, and changes in behavior. In addition, the counselor often assigns psychological homework activities as one method for the client to address problems outside of the meetings.

Scared straight. Organized visits to prison facilities by delinquents or at-risk youth to meet with adult inmates who graphically emphasize the negative consequences of criminal behavior, including harsh prison conditions. The foundation of this approach is one of deterrence. In other words, the goal is that juveniles will not follow the same path as these inmates who ended up in prison.

Appendix B Program Effectiveness Rating

Detrimental 1	Ineffective 2	Slightly Effective 3	Moderately Effective 4	Effective 5	Strongly Effective 6
Likely to have a negative overall effect on first-time (or repeat) offenders	Likely to have no overall effects, positive or negative, on first-time (or repeat) offenders	Likely to have a small positive overall effect on first-time (or repeat) offenders	Likely to have a moderate positive overall effect on first-time (or repeat) offenders	Likely to have a large positive overall effect on first-time (or repeat) offenders	Likely to have a very large positive overall effect on first-time (or repeat) offenders

NOTES

- 1. In our study, we use scared straight to represent a family of programs designed to make juveniles acutely aware of the consequences of continued offending, particularly the harsh realities of adult prison.
 - 2. Utilitarian punishment embraces both deterrence and incapacitation.
- 3. Conducted via www.SurveyMonkey.com, a widely used software program designed to allow one to create and publish customized online surveys.

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