HEALTH

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Motivating Illegal Drug Use Recovery:  
Evidence for a Culturally Congruent Intervention

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Public health interventions may be more effective if they are congruent with cultural values of the target community. To test this possibility, the authors conducted a randomized field trial of a motivational intervention to promote recovery from illegal drug use among a sample of 269 African Americans. The intervention, based on transtheoretical stage-of-change concepts, featured a needs assessment and service referrals and was congruent with relevant African American cultural values. Participants were randomly assigned to this intervention or to a standard assessment-referral protocol. Motivational intervention participants were significantly less likely to be using illegal drugs 1 year later. This finding suggests that motivational intervention congruent with cultural values of the target population can be effective in promoting recovery from drug use.

Researchers and community advocates have argued that public health interventions can be more effective if they are congruent with values shared by members of the target community (Amuleru-Marshall, 1991; Asante, 1987; Kambon, 1992; Singer, 1991). Interventions congruent with African American culture have been described in drug abuse prevention and

AUTHORS’ NOTE: Preparation of this article was supported by the National Institute on Drug Abuse grant DA07699. We wish to acknowledge contributions by Kiku Annon and Rhumel Grady, University of California, Los Angeles, Drug Abuse Research Center; Earl Massey, Surviving In Recovery, Inc.; and Kirk Johnson Productions. Correspondence regarding this article should be addressed to Douglas Longshore, Ph.D., RAND Drug Policy Research Center, Santa Monica, CA 90407-2138; phone: 310-393-0411, ext. 6421; fax: 310-393-4818; e-mail: doug_longshore@rand.org.

JOURNAL OF BLACK PSYCHOLOGY, Vol. 26 No. 3, August 2000  288-301  
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treatment, HIV preventive education, and psychotherapy (A. M. Jackson, 1983; M. S. Jackson, 1995; Phillips, 1990; Saulnier, 1996). However, few such interventions have been evaluated by experimental or other rigorous research methods (Prochaska & Norcross, 1994; Rowe & Grills, 1993). Kalichman, Kelly, Hunter, Murphy, and Tyler (1993) found more favorable change in concern about AIDS among African American women randomly assigned to HIV education that was culturally congruent. Other studies in the domain of HIV prevention have produced similar findings (Kalichman & Coley, 1995; O’Donnell, San Doval, Duran, & O’Donnell, 1995). However, cultural congruence has not been shown to enhance the effectiveness of interventions targeting adolescent smoking or delinquency (Sussman, Parker, Lopes, Crippens, & Scholl, 1995; Woolredge, Hartman, Latessa, & Holmes, 1994).

In this article, we report the results of a randomized field trial of a motivational intervention to promote recovery from illegal drug use among African Americans. During this intervention, service needs arising from the client’s drug use were assessed and appropriate referrals made. African American values were integral to the content and format of the intervention. Our purpose was to determine whether the culturally congruent protocol is more effective than a standard assessment-referral protocol with this population.

CONCEPTUAL BACKGROUND

In this section, we review African American cultural values on which the intervention was based. We also review transtheoretical stage-of-change concepts from which motivational intervention techniques were derived. Finally, we describe our intervention design with particular attention to its culturally congruent and motivational aspects.

CULTURAL CONGRUENCE

Among the values central to African American culture is communalism or collective identity. This value is distinguishable from the White European emphasis on an individual’s separate identity and self-actualization (Dana, 1993; Grills & Longshore, 1996; Karenga, 1988). The greater relevance of communalism among African Americans is manifest in the relationship between perceptions of one’s group and perceptions of self, such as subjective well-being. This relationship is closer for African Americans (and for other non-Whites) than for Whites (Crocker, Luhtanen, Blaine, & Broadnax, 1994; Kim, Triandis, Kagitcibasi, Choi, & Yoon, 1994; Oysterman, 1993; Oysterman, Gant, & Ager, 1995).
In accord with communalism in African American culture, perceptions of reality (in judging the credibility of information, interpreting behavior and events, and so forth) are based on group process as well as individual cognition (Asante, 1987). A concrete example is the African American vocal tradition (“call and response” in church settings) based on the presence of others who actively affirm the thoughts, feelings, and experiences invoked by a speaker.

TRANSTHEORETICAL MODEL

In the transtheoretical model of behavior change (Prochaska & DiClemente, 1986; Prochaska & Norcross, 1994), people move through discrete stages leading to adoption and maintenance of new behaviors. As applied to illegal drug use, these stages are as follows: (a) precontemplation (the user does not recognize problems arising from drug use and is not considering change); (b) contemplation (the user does recognize problems arising from drug use and is considering change); (c) preparation (the user plans to change behavior in the near term); (d) action (the user makes an overt behavior change, e.g., stops drug use for a trial period or enters a drug treatment program); and (e) maintenance (the user works to prevent relapse and to consolidate steps taken at the action stage). Specific cognitive, emotional, and behavioral processes are associated with movement from one stage to the next (Prochaska, DiClemente, & Norcross, 1992; Prochaska & Norcross, 1994). For example, processes known as consciousness raising (acquiring information about the problem), dramatic relief (emotional responding to problem recognition), and environmental reevaluation (recognizing the effects of problem behavior on others) are prominent as people move from precontemplation to contemplation. These processes all involve raising one’s awareness of a problem and assessing its impact on the self and others (Belding, Iguchi, Lamb, Lakin, & Terry, 1995).

The transtheoretical model has been applied in the development of motivational interventions designed to assess a person’s stage of change and to apply counseling techniques likely to trigger processes that move a person forward in the stage sequence. Miller and Rollnick (1991) defined motivational intervention as a set of five techniques: (a) expressing empathy (accepting participants’ feelings without judging, criticizing, or blaming); (b) developing discrepancy (leading participants to recognize discrepancies between their behavior and values and/or goals); (c) avoiding argument (not confronting participants about negative aspects of their lifestyle or behavior); (d) rolling with resistance (moving participants toward appropriate insights and decisions by using their own words and thoughts to guide them); and (e) sup-
porting self-efficacy (encouraging participants to take steps they view as achievable). Motivational intervention, as a component of substance abuse treatment protocols, has significantly enhanced treatment effectiveness (J. M. Brown & Miller, 1993; Miller, Sovereign, & Krege, 1988). Bien, Miller, and Boroughs (1993) found that a motivational component added to standard outpatient alcohol treatment led to superior 3-month outcomes in comparison to standard treatment only. However, the effect decayed and was no longer statistically significant at a 6-month follow-up. In a study of opiate users in methadone maintenance treatment, Saunders, Wilkinson, and Phillips (1995) found that commitment to abstinence and treatment compliance were stronger among users assigned to motivational counseling than among those in an educational (control) condition. However, the groups did not differ in rates of opiate dependence at a 6-month follow-up.

We have seen no prior research on the effects of motivational intervention targeting drug users outside treatment settings and designed for congruence with cultural values of a specific population. In our view, motivational intervention holds promise for drug-using African Americans. In this form of intervention, the counselor neither offers an independent assessment of client needs nor seeks to break through a client’s denial. Issues arise in dialogue between counselor and client; options are identified, and next steps are chosen by the client. Moreover, many African Americans are ambivalent about drug treatment or other formal care even if they recognize their drug use as a problem (B. S. Brown, 1985; Longshore, Hsieh, & Anglin, 1993; Longshore, Hsieh, Anglin, & Annon, 1993). In transtheoretical terms, highly ambivalent users are at the precontemplation or contemplation stage of change (Brownell, Marlatt, Lichtenstein, & Wilson, 1986). Motivational intervention is designed expressly to move participants past these early stages and into the later stages of action and maintenance.

**INTERVENTION DESIGN**

The content and format of our intervention were designed to be congruent with cultural values of communalism and group process and to employ motivational intervention techniques appropriate for participants at the precontemplation or contemplation stage of change. We began with a traditional African American meal (fried chicken or ribs, greens, potatoes, red beans and rice), which served as a culturally specific frame for the intervention. For this meal, the participant was joined by an intervention team consisting of one counselor and a former drug user, whom we called a peer. This group then watched a 15-minute video, which combined voice-over with still photos, original and documentary footage, and clips from commercial films.
about African Americans. (Permission to use clips was obtained from holders of the copyrights.) The final step was a counseling session to review the participant’s interest in recovery and service needs. It was based on issues, thoughts, and emotions expressed by the participant during the meal or video.

In the video and counseling session, drug use was represented as both a personal problem and a community problem rooted in cultural and power disparities between the African American community and dominant institutions. Moreover, discussion acknowledged the totality of one’s life experience (e.g., racial prejudices, self-image issues, and job opportunities) not only as an individual but also as an African American. It was emphasized that behavior change is important not only for the individual but also for the collective good.

The peer role was to share personal thoughts and experiences similar to those mentioned by the participant and to demonstrate to him or her that it was both safe and appropriate to speak honestly about one’s drug use experiences and one’s ambivalence regarding recovery. In addition, the peer converted the standard one-on-one format in which a counselor interviews a client to a culturally congruent group process format in which counselor and peer actively affirm the thoughts, feelings, and experiences invoked by the participant.

Counselor and peer were trained in motivational intervention techniques (Miller & Rollnick, 1991) derived from the transtheoretical model of behavior change. Because most participants were expected to be at the precontemplation or contemplation stage of change, staff were trained to focus on processes most relevant at those stages. As indicated above, these processes are consciousness raising, dramatic relief, and environmental reevaluation. Video content was chosen to evoke the same processes. Moreover, we sought to articulate processes in terms consistent with African American cultural values. For example, relevant to dramatic relief, some video clips featured former drug users who described ways in which drug use had interfered with their ability to express feelings of fear and intimacy and to take proper care of loved ones. Relevant to environmental reevaluation, a music video clip showed the execution-style killing of a young African American boy who played a small part in a drug-related gang incident. These clips were chosen as a means of prompting participants to acknowledge on an emotional level the consequences of drug use for themselves and others. Use of culturally congruent video material to promote stage-specific processes of change was perhaps a particularly powerful aspect of the intervention inasmuch as dramatic relief may operate as an essential emotional trigger for behavior change (Prochaska, Velicer, Guadagnolo, Rossi, & DiClemente, 1991).
METHOD

PARTICIPANTS

A sample of 364 African American drug users were recruited into the study via outreach to community service providers, streets, and jails. Eligibility criteria were as follows: current self-reported dependence on heroin or cocaine, current self-reported need for drug use treatment, or self-reported use of heroin and/or cocaine on at least 15 of the past 30 days. Prospective participants were told that we were testing a new counseling strategy to encourage recovery from drug use; that they would have an equal chance of being assigned to the new counseling strategy or a standard one; that both study conditions included a needs assessment and referral to appropriate services; that their involvement would begin with an intake interview and counseling session, to be scheduled as soon as possible (usually within 1 to 3 days), and end with a follow-up interview 1 year later; that they would be paid $40 for completing each interview; and that neither admission of a drug problem nor commitment to abstinence was required.

Demographic and drug use characteristics of these participants are shown in Table 1 and are similar to known characteristics of the wider population of lower income African American drug users in this region (Longshore, Wellisch, & Bradford, 1995). Given the diversity of our recruitment sources, it is difficult to gauge the external validity or generalizability of findings.
based on this sample. However, because participants were randomized into the two conditions, findings do address the question of internal validity: Can a culturally congruent motivational intervention show enhanced effectiveness in this population?

MEASURES

Intake data were collected on participants’ personal history, past and present drug use, treatment motivation, commitment to abstinence, treatment perceptions, and other topics. Participants were asked to complete a follow-up interview on these topics 1 year later. From a random subsample of participants (78 at intake, 81 at follow-up), we asked for urine specimens by which to verify self-reported recent use of cocaine or heroin. Willingness to provide a urine specimen was not a condition of participation in any other aspect of the study. Specimens were screened by the enzyme multipled immunoassay technique and confirmed by gas chromatography/mass spectrometry at standard cut-off points.

Drug use. Participants were asked whether they had used heroin, crack cocaine, or other cocaine at any time in the past 30 days. Those who reported drug use were also asked to specify the number of days on which they had used each drug. Any drug use during the month prior to the follow-up interview was the criterion measure we used in this study.

Covariates. Measures employed as covariates included age and employment status. The reasons for including these covariates are discussed below. The latter was a dummy variable scored 1 if the participant was working full- or part-time when interviewed at intake.

PROCEDURE

Participants were randomly assigned to a control (standard practice) condition or the experimental (culturally congruent) condition. For the sake of logistical feasibility, we alternated assignment to conditions on a weekly basis; that is, all participants in 1 week got the control condition, whereas all those in the following week got the experimental condition. The control condition was a needs assessment and referral protocol designed to identify critical needs and to match them with an appropriate type and level of service. Our protocol was based on George (1990); Giuliani and Schnoll (1985); Lawson, Lawson, and Clayton-Rivers (1996); and Rothman (1994). The assessment focused on the nature and severity of the participant’s drug use
and his or her psychosocial reality (e.g., social support, employment, medical and psychiatric problems). Counselors assessed a participant’s needs and provided relevant referrals regardless of whether the participant viewed his or her drug use as a problem. In the experimental condition, counselors sought to evoke the participant’s own views of his or her drug use and to focus on processes appropriate to the participant’s stage of change, as indicated at intake and conversation during the meal and video. Referrals were made to services in which participants expressed interest. (Additional information on intervention content and format was provided above.) Mean duration of the intake interview and counseling was 130.5 minutes (ranging from 95.5 to 174.2) in the control condition and 165.0 minutes (ranging from 123.6 to 215.0) in the experimental condition. This difference is statistically significant, $F = 2.77$, $p = 0.000$. The duration of the counseling sessions themselves was similar across the two groups. The time difference is attributable to the inclusion of a meal and video in the experimental condition. Both conditions were delivered at a community center specializing in community drug and alcohol issues and located in the African American community of South Central Los Angeles. To avoid confounding conditions with attributes of individual counselors, we rotated counselors through each condition on a regular basis.

**ANALYSIS**

Five participants died during the 1-year follow-up period. We completed follow-ups with 300 (84%) of 359 living participants. The most common reason for sample attrition was movement out of state. There was no difference in attrition rates between experimental (19%) and control (16%) groups. However, 31 of the participants interviewed at follow-up were excluded from this analysis because of incomplete data. Thus, the sample size for analysis was 269 (131 experimental participants and 138 controls). On the basis of background characteristics shown in Table 1, we found no significant differences between participants who were and were not reinterviewed at follow-up or between follow-up participants with and without complete data.

Experimental and control groups were similar in sex, marital status, percentage completing high school, and lifetime number of drugs used. Despite random assignment, mean age was lower in the experimental condition than in the control condition (40.5 compared to 43.8 years, $p < 0.001$), and experimental participants were more likely to be employed full-time or part-time at intake (12.0% compared to 4.5%, $p < 0.02$). We adjusted for these differences by treating age and employment status as covariates. Although conditions did not differ in the percentage of participants reporting drug use at intake (see
self-reported drug use at intake was treated as an additional covariate to adjust for possible differences in predisposition to ongoing drug use.

RESULTS

About 83% of participants (85% of experimentals and 81% of controls) reported use of heroin or cocaine in the 30-day recall period prior to intake. The other 17% entered the sample on the basis of self-reported drug dependence or self-reported need for drug treatment. Analyses of urine specimens indicated that participant self-reports were accurate. Of 78 participants from whom urine specimens were collected at intake, 83% tested positive for recent use of heroin and/or cocaine. About 94% of these participants had also self-reported use of heroin and/or cocaine in the past 30 days. Of 81 participants providing urine specimens at follow-up, 68% tested positive for recent use of heroin and/or cocaine. About 92% of these participants had also self-reported use of heroin and/or cocaine in the past 30 days.

Table 2 reports results of a logistic regression analysis in which drug use at intake, age, employment status, and condition (0 = control and 1 = experimental) were tested as predictors of drug use at follow-up. Participants who reported drug use at intake were significantly more likely to report drug use at follow-up as well. Follow-up drug use was unrelated to the other covariates, namely, age and employment status. Regarding intervention effectiveness, drug use at follow-up was significantly less likely in the experimental group ($\beta = -0.22$). The adjusted odds ratio (0.45) indicates that experimentals were

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Standardized Regression Coefficient</th>
<th>Adjusted Odds Ratio</th>
<th>Wald $\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug use at intake</td>
<td>0.56**</td>
<td>14.61</td>
<td>36.07</td>
</tr>
<tr>
<td>Age</td>
<td>0.03</td>
<td>1.01</td>
<td>0.15</td>
</tr>
<tr>
<td>Employment status (1 = employed)</td>
<td>0.04</td>
<td>1.31</td>
<td>0.26</td>
</tr>
<tr>
<td>Experimental condition</td>
<td>-0.22*</td>
<td>0.45</td>
<td>7.29</td>
</tr>
</tbody>
</table>

Adjusted $R^2 = 0.27$, $df = 4$
Gamma = .47
$-2 \log L \chi^2 = 60.52$, $df = 4$

*p < .01. **p < .001.
The purpose of this study was to determine whether a culturally congruent assessment-referral protocol can be more effective than a standard protocol in promoting recovery among African American drug users. We found that study participants assigned to a culturally congruent assessment-referral protocol were significantly more likely than those assigned to a standard assessment-referral to report being drug abstinent 1 year later. These findings were not attributable to differences in the willingness of participants to

DISCUSSION
self-report drug use. Urine specimens taken from a random subsample of participants confirmed the reliability of self-reported drug use or nonuse.

We operationalized cultural congruence as follows. First, addition of a peer (former drug user) to the counseling team converted the typical one-on-one format to a group process in which identification of drug problems and goals and/or values was interactive. The peer encouraged and modeled disclosure of participant’s drug use and honest expression of ambivalence regarding recovery. Second, drug use was depicted as both a personal problem and a community problem rooted in cultural and power disparities between the African American community and dominant institutions. Third, we placed issues in a context that acknowledged the totality of a participant’s life experience, not only as an individual but also as an African American. Fourth, we emphasized that change is important not only for the individual but also for the collective good. Finally, change processes in the transtheoretical model were articulated in terms consistent with African American cultural values.

Prior motivational interventions targeting people with substance use problems were based on drug or alcohol users in treatment. Those studies found short-lived effects of motivational adjuncts to treatment protocols. Effects were no longer apparent at 6-month follow-ups. Our study targeted not-in-treatment drug users assumed to be highly ambivalent about behavior change. We found a favorable effect when participants were assessed fully 1 year after the intervention. It is possible that we were able to produce this effect because many participants, perhaps most, did not have drug problems severe enough to meet abuse and/or dependence criteria and require treatment. (Time constraints precluded a formal diagnostic assessment of current drug use.) Nevertheless, it appears that our intervention may have been successful in prompting the cognitive and/or emotional processes that move people forward in the stages of change—from drug use to abstinence. It remains for future research to determine whether motivational intervention can be effective if delivered to drug users who are not in treatment but whose drug use is clearly severe and among drug users already further along in the stages of change.

In addition, it remains to be seen whether other interventions can succeed in replicating the longer term effect found in this study. There are grounds for optimism. A recent development in several health-related fields is the so-called brief intervention, sometimes but not always based on the transtheoretical model of change. In brief interventions, participants typically receive a single session of counseling, view an educational video, and/or receive a self-help manual. In several cases, sustained effects have been documented (Heather, 1995; Miller & Taylor, 1980). Quite possibly, our intervention, like other brief interventions, succeeded because of its “kindling” effect—that is, its role in
triggering small changes in behavior, cognitions, or emotions that finally culminate in the person’s recognition of the problem behavior and acceptance of change (De Leon, 1994). The public health value of such interventions will be particularly appealing if they motivate drug users to take steps toward recovery before their drug habit and its associated problems become severe enough to require treatment or other more intensive attention, including medical care, other social services, and criminal justice intervention.

This analysis did not attempt to identify intervening outcomes, for example, cognitive, emotional, or behavioral processes that may have mediated effects on drug use. In future analyses, we will examine such processes. These may include motivation to abstain from drug use, perceived self-efficacy for abstinence, and seeking social support for abstinence. We will also focus on the effects of the intervention on participants’ efforts to obtain help from drug treatment providers or other services to which we referred participants or from sources other than those included in referrals.

Like many other interventions, ours was multifaceted. Cultural congruence was operationalized in multiple ways and blended into a motivational intervention based on the transtheoretical stage-of-change framework. Apart from the content of counseling, the intervention also differed from standard practice in its use of a two-person team (counselor and peer), an educational video, and a meal. Finally, the time required to deliver the experimental intervention exceeded by roughly 30 minutes the time required for the standard assessment and/or referral. Future research is needed to determine whether particular aspects of the intervention were the more crucial “active ingredients.” However, with favorable initial evidence for the intervention overall, now it is appropriate to conduct research in which the importance of its constituent parts is tested.

REFERENCES


