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The Phenomenon of Self-Change: Overview and Key Issues

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> The way ahead in alcoholism treatment research should be to embrace more closely the study of 'natural forces' that can then be captured and exploited by planned interventions.
>
> Orford & Edwards, 1977, p. 3

Introduction

In his classic treatise 40 years ago on the study of deviants, Becker (1963) cautioned against studying only extreme cases. Over the years, other researchers have made similar arguments with regard to studying the addictions. For example, Cahalan (1987), based on epidemiological surveys of problem drinkers (Cahalan, 1970, 1987; Cahalan, Cisin, & Crossley, 1969; Cahalan & Room, 1974), used the phrase "tip of the iceberg" to refer to the fact that their survey data demonstrated that clinically defined "alcoholics" constituted only a relatively small proportion of those whose drinking created significant problems for themselves and society. Room (1977) later labeled the distinction between persons with alcohol problems in surveys versus those in clinical studies as the "two worlds of alcoholism." A few years later, based on their well-known longitudinal study, Vaillant and Milofsky (1984) asserted that we cannot understand the natural history of alcoholism by solely looking at clinic samples. Finally, based on a study of Vietnam veterans who used heroin during their tour but stopped on returning to the United States, Robins stated that "[a]ddiction looks very different if you study it in a general population than if you study it in treated cases" (Robins, 1993, p. 1051). Price, Risk, and Spitznagel (2001) conducted a 25-year follow-up of the Vietnam veterans study with the 841 living members of the previously interviewed cohort. It was found that (a) most attempted to quit and the majority succeeded at the time of their last attempt without the aid of traditional drug treatment programs, (b) less than 9% of current drug users had been treated in a formal treatment setting, and (c) "Most drug abusers who had started using drugs by their early 20s appeared to gradually achieve remission. Spontaneous remission was the rule rather than the exception" (p. 1107).

In another large study, the Collaborative Study on the Genetics of Alcoholism, the clinical histories of 3,572 DSM-III-R-defined alcohol dependent individuals who were either (a) never in treatment, (b) in outpatient or Alcoholics Anonymous (AA), or (c) in inpatient treatment were compared. As demonstrated in many other studies, those in inpatient treatment had more serious histories compared to those who had never been in treatment. The authors concluded that "studies using data from inpatient populations may give a skewed picture of the clinical characteristics of alcohol dependence" (Raimo, Daeppen, Smith, Danko, & Schuckit, 1999, p. 1605). With regard to cocaine, Erickson and Alexander (1989) studied naturally recovered cocaine abusers and concluded that the addicts in treatment represented only the tip of the iceberg of all cocaine users. Lastly, today there is no shortage of survey studies supporting the original findings of Cahalan and his colleagues that treated alcohol and drug abusers constitute only a small percentage of all individuals with such problems (Cunningham, 1999b; Cunningham, Lin, Ross, & Walsh, 2000; Dawson, 1996; Dawson et al., 2005; Grant, 1997; Narrow, Regier, Rae, Manderscheid, & Locke, 1993; Roizen, 1977; Room & Greenfield, 1993).

For years, the addiction field has been dominated by an almost exclusive focus on individuals who are severely dependent. The emphasis on severe dependence has resulted in a myopic view of substance abuse problems that has characterized them as progressive, irreversible, and only resolved through treatment. Further support that the traditional view based on treatment populations is myopic comes from studies that show those who recover on their own typically have less serious substance use problems and more intact social resources (e.g., marriages, education, jobs) than those who have sought formal treatment or help (Hodgins & el-Guebaly, 2000; Humphreys, Moos, & Finney, 1995; Sobell, Ellingstad, & Sobell, 2000; Sobell, Sobell, Toneatto, & Leo, 1993; Vaillant & Milofsky, 1984).

If substance use problems are viewed as lying along a continuum ranging from no problems to mild problems to severe problems, rather than as dichotomous (i.e., alcoholic versus not alcoholic, drug addict versus not drug addict) it has profound implications for how one views and treats such individuals. One implication is that there are multiple pathways to recovery, including self-change, a pathway that has largely been ignored by the addiction field. This first chapter has several objectives, most notably to help readers understand where the field is currently and where it is headed. It also provides a historical overview of the phenomenon of self-change, reviews key methodological issues, presents a state-of-the-art review of the field of self-change, and discusses barriers to treatment as well as the major models of change.

The Respondents Speak

Several investigators who have examined the self-change process with substance abusers have reported that such individuals "wanted to tell" their stories (Shaffer & Jones, 1989; Sobell, Sobell, & Toneatto, 1992; Tuchfeld, 1981). In this regard,

respondents' stories are used throughout this book to illustrate aspects of the self-change process. Thus, starting with this chapter, quotations from individuals who were interviewed about their successful self-change from an addictive behavior are presented in boxes throughout the book. These short narratives relate to various topics discussed within each chapter. The narratives are not meant to be in-depth descriptions of the entire recovery episode, and details of the respondents are not provided. Rather, the comments are included to give readers a grass-roots flavor of various issues relating to recovery (e.g., reasons for change, barriers to treatment, maintenance factors) discussed in each chapter. The narratives come from several studies of self-change conducted over the years.

Telling My Story

In one of the first studies to comment on respondents' reactions to discussing their self-change from alcohol problem, Tuchfeld (1981) found alcohol abusers to be quite proud of their recovery without formal treatment or help. Some years later Shaffer and Jones (1989), after interviewing cocaine abusers who quit on their own, reported that the "typical cocaine quitter wanted—even felt compelled—to tell us his or her story" (p. 6). Sobell and her colleagues (1992) further noted that many recovered alcohol abusers said they had never talked with others about their recovery. Thus, it appears self-changers from substance use problems find the interview experience helpful and therapeutic.

Is What We Call the Phenomenon Important?

Concepts such as "spontaneous remission," "natural recovery," and "maturing out" are not new. In the medical field, the term *spontaneous* has been used for many years and refers to an improvement in the patient's condition that occurs without treatment (Roizen, Cahalan, & Shanks, 1978). Psychological working definitions of the terms emphasize the individual's own cognitive achievement (i.e., self-initiated recovery or change in behavior; Biernacki, 1986; Marlatt & Gordon, 1985). From a sociological viewpoint, the primary consideration is to exit from a deviant career without formal intervention (Stall, 1983) or to mobilize external resources (i.e., self-organized remission; Happel, Fischer, & Wittfeld, 1993). Lastly, from the perspective of juvenile delinquency the term "maturing out" has been synonymous with no longer engaging in delinquent behaviors (Labouvie, 1996).

In the addictions field over the years, many terms (e.g., *spontaneous remission*, *auto-remission*, *untreated remission*, *self-change*, *maturing out*, *burning out*, *spontaneous recovery*, *natural recovery*, *untreated recovery*, *self-quitters*, *natural resolution*, *spontaneous resolution*) have been used to describe individuals who have recovered from an addiction on their own. Although these terms have been used interchangeably, presumably to describe the same phenomenon (i.e., self-change), the notion of spontaneous remission has been challenged as semantically and conceptually imprecise (Institute of Medicine, 1990;

Shaffer & Jones, 1989; Tuchfeld, 1976, 1981). For example, Mulford (1988) has suggested that " 'spontaneous remission' is a euphemism for our ignorance of the forces at work" (p. 330). Although some terms used to describe natural recoveries suggest the change has no cause, it is doubtful that any investigator of the phenomenon would view it as "unexplainable," just "unexplained."

Lastly, while there is no currently agreed upon term, the common theme in each phrase is that they presume that an *unwanted* condition is overcome without professional treatment or help. Words such as *natural* and *spontaneous* are increasingly being replaced by more neutral terms like *untreated recovery* or *self-change*. While the various terms noted above have been used interchangeably to refer to a change in a person's substance use in the absence of formal treatment or help, the preferred term that will be used throughout this book will be *self-change*.

Defining Treatment and How Little Is Too Much

Although determining whether treatment has taken place would seem to be a straightforward matter, how treatment episodes are defined in the literature has been very fluid (Sobell et al., 2000). There are also problems with treatment intensity (i.e., number of sessions). For example, do brief physician interventions, often involving a single session and sometimes lasting less than 30 minutes, constitute formal treatment (Fleming & Manwell, 1999; Fleming, Manwell, Barry, Adams, & Stauffacher, 1999; Fleming et al., 2000, 2002; Heather, 1989, 1990, 1994; Law & Tang, 1995)? Further complicating the picture is advice by laypersons such as ministers, rabbis, and friends, or a trip to a detoxification center or emergency room for any reason (e.g., traffic accident, but no psychotherapy provided). In addition, do we consider community or organizational interventions that provide treatment at a broad, social level as formal treatment (e.g., weight loss programs like Weight Watchers or smoking cessation programs such as the American Lung Association; Cunningham & Breslin, 2004; Foulds, 1996; Giffen, 1991; Green et al., 1995; Hughes, Cummings, & Hyland, 1999)? The last two major reviews of this literature show that most studies and surveys provide detailed definitions of what constitutes treatment and self-help (Sobell et al., 2000; Chapter 5), including the most recent National Epidemiologic Survey on Alcohol and Related Conditions (National Institute on Alcohol Abuse and Alcoholism, 2006a).

Recent self-change studies (Bischof, Rumpf, Hapke, Meyer, & John, 2002; Sobell et al., 1993, 2000; Toneatto, Sobell, Sobell, & Rubel, 1999; Tucker, Vuchinich, & Gladsjo, 1991; Tucker, Vuchinich, Gladsjo, Hawkins, & Sherrill, 1989) have addressed the problem of how little treatment is considered treatment by adopting a conservative definition (i.e., any intervention by recognized programs or individuals whose primary goal was to treat individuals with substance use problems). Because brief interventions for substance abusers have been found to be effective, even as little as one session, these

must also be considered treatment. In a related regard, recognizing that a great many individuals might attend a few self-help group meetings without seriously adopting a recovery program, some natural recovery studies have now included respondents who had attended one or two self-help group meetings (Sobell et al., 1992, 1993, 2000; Tucker, Vuchinich, & Gladsjo, 1994).

An interesting dilemma occurs when one considers the perspective of treatment from different cultures. For example, one recent self-change study conducted in Germany defined the absence of treatment as no more than five outpatient visits with a physician (Rumpf, Bischof, Hapke, Meyer, & John, 2000). The reason for this is that in Germany, alcohol treatment, until very recently, took the form of psychiatric hospitalization and five outpatient visits, which has been more than enough to be considered a brief intervention in the United States (for these German researchers this did not seem to constitute treatment).

Another issue that has clouded research in this area is that many studies that examine the natural history of change across the life span (i.e., look at the progression of the disorder) include individuals who have used treatment or self-help groups in the past. The most notable among such studies are those by Vaillant (Vaillant, 1995; Vaillant & Milofsky, 1982), and unfortunately, these are often confused and included with natural recovery studies that exclude participants who have used treatment or self-help groups.

Mixing Treated and Untreated Respondents

A serious methodological problem with self-change studies in the addiction field has been combining individuals who had received prior treatment with those who never had prior treatment (Bischof et al., 2002; Cunningham, 1999a; Sobell et al., 1992, 2000; Sobell, Toneatto, & Sobell, 1990). Examples of studies that have combined previously treated with untreated participants are abundant in the literature (Cunningham, 1999a; Ludwig, 1985; Saunders & Kershaw, 1979; Stall, 1983; Tuchfeld, 1976, 1981). Most of these studies are older and did not subscribe to a strict definition of "no treatment." Therefore, substance abusers who were unsuccessfully treated, but later resolved their problem on their own, were included in study samples. For example, 22% of Tuchfeld's (Tuchfeld, 1976, 1981) respondents had, at some time, received treatment for an alcohol problem. In another study (Cunningham, 1999a), the author reported the following:

> Of 9,892 adult lifetime drinkers, 2,177 had experienced at least one problem related to their alcohol consumption and, of these, 885 (57.2% male) had experienced no problems in the last year. Estimates of the prevalence of nontreatment recoveries ranged from 87.5% to 53.7% depending on the stringency of the definition of prior alcohol problems employed. (p. 463)

To address this problem, recent self-change studies have not only used stricter definitions of treatment, but have also presented data separately for

individuals who had gone to treatment or self-help meetings several years prior to their recovery but said they recovered on their own, from self-changers who had no prior treatment or self-help contact (Klingemann, 1991; Sobell et al., 1993). One important reason for differentiating recovered respondents who have and have not received prior treatment is because several studies have shown that never treated recovered substance abusers and smokers have less severe problem histories, symptoms, and consequences compared to those who were once in treatment but later recovered on their own (Fagerström et al., 1996; Hingson, Scotch, Day, & Culbert, 1980; Raimo & Schuckit, 1998; Sobell, Cunningham, & Sobell, 1996; Sobell et al., 1992; Weisner, 1987).

State-of-the-Art in Self-Change

While methodologically rigorous studies of natural recoveries with substance abusers emerged about a decade ago, published studies and isolated reports of the phenomenon are not new. One of the first reports was in the early nineteenth century by Benjamin Rush (1814), a physician and author of one of the earliest scientific treatises on inebriety. He described several individuals who had recovered from alcohol problems on their own (alcohol treatment as we know it today was nonexistent in the 1800s). Further, some of the recoveries appeared to have become moderate drinkers (i.e., they gave up the evils of "spirituous liquors"). However, serious study of the process of self-change with substance abusers appears to have started in the 1960s (Drew, 1968; Schachter, 1982; Winick, 1962). Given the attention to this area over the last decade (see the Preface to this book), research and published studies on the process of self-change have experienced considerable growth as evidenced by the results from two major systematic reviews of this literature. The first article reported results for 38 studies published over almost four decades (Sobell et al., 2000). The second review (see Chapter 5) found 22 studies that met the same strict inclusion criteria as in the Sobell et al. review, but were published during only a 6-year period (i.e., 1999 through 2005). These two reviews clearly demonstrate that considerable evidence has accumulated showing that natural recovery (i.e., recovery without treatment) or self-change is a major pathway to change for individuals with alcohol and drug problems.

However, the study of self-change has been very uneven across the addiction field. Although self-change has long been a well documented common route to recovery for cigarette smokers (estimates range from 80% to 90% of all those who stop smoking; Carey, Snel, Carey, & Richards, 1989; Fiore et al., 1990; Hughes et al., 1996; Mariezcurrena, 1994; Orleans, Rimer, Cristinzio, Keintz, & Fleisher, 1991; U.S. Department of Health and Human Services, 1988; Chapter 6.1), until the past decade the systematic study of this phenomenon was largely ignored for substance abuse. As reflected by the results of the 22 studies reviewed in Chapter 5, this is now changing. Furthermore, as discussed in other chapters of this book, the process of self-change

has been expanded to other addictive behaviors such as gambling (Chapter 6.2) and eating disorders and obesity (Chapter 6.3) and to behaviors outside of the addiction field (Chapter 6.4, crime; Chapter 6.5, stuttering).

Evidence for self-change from addictive behaviors comes from several lines of study: (a) prevalence and longitudinal (i.e., cases identified at two different points in time) studies in the general population (e.g., Cahalan, 1970; Cahalan et al., 1969; Cunningham, 1999a,b; Dawson et al., 2005; Fillmore, Hartka, Johnstone, Speiglman, & Temple, 1988; Sobell, Cunningham, & Sobell, 1996), (b) waiting list control groups (e.g., Alden, 1988; Kissin, Rosenblatt, & Machover, 1968) and follow-ups of clients who left treatment (e.g., Kendell & Staton, 1966), (c) active case finding studies, largely done through media advertisements (e.g., Sobell et al., 1993; Toneatto et al., 1999; Tucker et al., 1989) and snowball techniques (i.e., nomination of someone who respondents know has a problem similar to theirs; Granfield & Cloud, 1996; Schasre, 1966) that specifically recruited and interviewed individuals who have recovered without formal treatment or help (e.g., Biernacki, 1986; Hodgins & el-Guebaly, 2000; Ludwig, 1985; Shaffer & Jones, 1989; Sobell et al., 1993; Tuchfeld, 1976; Tucker et al., 1994), and (d) official registers of addicts (e.g., Snow, 1973; Winick, 1962).

Advantages of Survey and Other Methods for Studying the Process of Self-Change

Surveys have many advantages over other methods for studying self-change, but they also have some disadvantages. Although general population surveys with large samples can provide overall rates of self-change, most contain very few, if any, questions about the actual process of self-change. However, recent convenience samples recruited via media advertisements and snowball samples have typically focused more on recovery issues and how the process of self-change proceeds.

Why Has Self-Change as an Area of Study Been So Long Overlooked or Ignored?

One possible reason why the addiction field has paid little attention to self-change as an area of study (Shaffer & Jones, 1989; Sobell et al., 1992) is that such individuals do not come to the attention of researchers or practitioners, as they do not enter treatment or attend 12-step meetings. Another reason may relate to the fact that individuals who exhibit severe forms of the disorder have occupied most of the public's attention. Thus, many in the field have been blinded to the fact that there are multiple pathways to recovery (i.e., treatment, self-help groups such as AA, self-change). A third reason natural recoveries have long been ignored relates to the disease model of

addiction, a model that is wholly inconsistent with self-change (Chiauzzi & Liljegren, 1993; Shaffer & Jones, 1989; Sobell et al., 2000). Advocates of the disease model put forth a tautological argument that "an ability to cease addictive behaviors on one's own suggests that the individual was not addicted in the first place. If one is *not* able to stop independently, then an addiction is present" (Chiauzzi & Liljegren, 1993, p. 306). For some health care professionals (Dupont, 1993; Johnson, 1980; Winick, 1962) as well as the general public (Cunningham, 1999a; Cunningham, Sobell, & Chow, 1993; Cunningham, Sobell, & Sobell, 1999; Ferris, 1994; Rush & Allen, 1997), self-change has been met with disbelief. As reflected by the three quotes in the next box, disease model proponents postulate a progressive, irreversible disorder that can only be resolved through intervention.

Traditionalists Claim Self-Change Is Not Possible

"Addiction is not self-curing. Left alone addiction only gets worse, leading to total degradation, to prison, and, ultimately to death" (Dupont, 1993, p. xi–xii).

"Alcoholism is a fatal disease, 100 percent fatal. Nobody survives alcoholism that remains unchecked…. These people will not be able to stop drinking by themselves. They are forced to seek help; and when they don't, they perish miserably" (Johnson, 1980, p. 1).

"There has been considerable skepticism in both lay and professional circles of the thesis that many addicts never stop using drugs, but continue as addicts until they die"(Winick, 1962, p. 1).

Nonabstinent Outcomes and Natural Recovery

Another issue that runs counter to the disease model of addictions is the claim that individuals can engage in moderate drinking or low-risk drug use (also referred to as *chipping*; see Shaffer & Jones, 1989) as a form of recovery. Studies reporting moderation have, over the years, been met with emotional reactions ranging from a deep-seated disbelief to serious attacks (reviewed in Hunt, 1998; Marlatt, 1983, 1998; Rosenberg & Davis, 1994; Sobell & Sobell, 1995). Reports that some naturally recovered substance abusers successfully returned to low-risk nonproblem drinking or drug use can be viewed as a dual threat to the disease model (i.e., recovering without treatment and reversing the disorder). Both of the recent major reviews of the self-change literature with alcohol and drug abusers have reported low-risk alcohol use to be a very frequent occurrence (Sobell et al., 2000; Chapter 5). Over three quarters (78.6%, 22/28 studies, Sobell et al., 2000; 86.6%, 13/15 studies, Chapter 5) of the studies in these two reviews reported that some alcohol abusers who recovered from an alcohol problem on their own also reported engaging in low-risk nonproblem drinking. These results parallel findings from alcohol treatment outcome studies (Breslin, Sobell, Sobell, & Sobell, 1997; Rosenberg, 1993) and suggest that the way the field views recovery from alcohol problems is not consistent with the empirical literature and is, therefore, in need of change (Sobell & Sobell, 2006). Although fewer studies of natural recoveries from

drugs, as opposed to alcohol, have been reported, a similar pattern emerged in the first review (Sobell et al., 2000) where nearly half of the studies reviewed (46.2%, 6/13) reported limited drug use recoveries. This is consistent with reports of controlled opiate use (Blackwell, 1983; Klingemann, 1991; Shewan et al., 1998; Waldorf, 1983; Zinberg, Harding, & Winkeller,1977; Zinberg & Jacobson, 1976) and controlled cocaine use (Cohen & Sas, 1994; Hammersley & Ditton, 1994; Mugford, 1995; Waldorf, Reinarman, & Murphy, 1991). In light of such evidence, an important priority for the addiction field is to develop a conceptualization that accommodates discontinuity over time (i.e., does not declare progressivity to be a required element of substance use disorders), and accommodates multiple pathways to recovery, including moderation and harm reduction (Marlatt, 1998; Witkiewitz & Marlatt, 2006).

What Can Be Gained by Studying the Process of Self-Change?

As reflected by the quotes in the next box, several notable addiction researchers have suggested that much can be gained by studying the self-change process.

- "Addiction looks very different if you study it in general populations compared to treated cases" (Robins, 1993, p. 1051).
- "Clinically defined 'alcoholics' constitute only a relatively small proportion of those whose drinking creates significant problems for themselves and society" (Cahalan, 1987, p. 363).
- "First, we cannot understand the natural history of alcoholism by drawing samples from clinic populations. Alcoholics with the most benign prognoses often never come to clinical attention" (Vaillant & Milofsky, 1984, p. 53).
- "The way ahead in alcoholism treatment research should embrace study of 'natural forces' that can then be captured and exploited by planned interventions" (Oxford & Edwards, 1977, p. 3).
- "If treatment as we currently understand it does not seem more effective than natural healing processes, then we need to understand those healing processes" (Vaillant, 1980, p. 18).

Another compelling reason for studying the process of self-change is that the addiction field has not provided enduring, effective treatments (Emrick, 1982; Miller & Heather, 1986; Sobell et al., 1990). Not one treatment can be pointed to as having demonstrated a high rate of sustained recoveries. In addition, little is known about how to successfully match individuals to treatments (Orford, 1999; Project MATCH Research Group, 1998a,b). An understanding of the self-change process has already been used to design and conduct a more effective intervention program (Sobell et al., 2002). Although few in number, some studies examining the process of self-change have started to shed some light on what triggers and maintains the recovery process (Sobell et al., 2000; Chapter 5).

An additional reason for studying the self-change process is that the vast majority of individuals with addictive behaviors never come to the attention of researchers or clinicians. For example, about three-quarters of ex-smokers and untreated alcohol abusers recover on their own (Dawson et al., 2005; Fiore et al., 1990; Hughes et al., 1996; Orleans, Schoenbach, et al., 1991; Sobell, Cunningham, & Sobell, 1996), and less than 3% of pathological gamblers (i.e., severe cases) have received treatment (National Gambling Impact Study Commission, 1999).

Doing It on My Own: Why I Did Not Seek Formal Treatment or Help

Respondent A: "I just felt that if I couldn't do it on my own a group of people isn't going to help me at all. A very good friend of mine he just got his ten-year pin so… he's very proud of it and he should be but I just couldn't. … They are friends of mine but I just couldn't. If I can't quit by myself I just didn't see how anyone else was going to help me. I have nothing against AA, don't misunderstand me, it's a good organization but 15 to 20 people aren't going to tell me what to do."

Respondent B: "I felt I had a problem but I didn't figure it was like over the edge sort of thing and I figured it wasn't bad enough that I couldn't cure it myself."

Respondent C: "Well, I think I had the feeling that if I'm gonna beat this thing, it's up to me, and nobody else is going to make me stop drinking. It's my problem and I have to resolve it myself. Why should I go to, and ask somebody else and put my problems on their shoulders, when it's one of my own."

Respondent D: "I guess self pride like I didn't feel … I wanted to try it without it. I think I may have gone to AA perhaps or some agency if I hadn't been able to beat it myself but initially I just wanted to do it on my own and thought I could."

Respondent E: "Only that I think it's a greater victory because I did it on my own. I didn't need anybody else."

The two recent reviews of the literature (Sobell et al., 2000; Chapter 5) revealed that substance abusers report the following three major reasons for not entering traditional treatment programs: (a) stigma associated with being

Stigma and Embarrassment: A Big Barrier

Respondent A: "Yes, because I think people usually look at alcoholics as down-and-outers, you know. And a person that's just a social drinker doesn't want to be associated with those kinds. Like the ones you see down in the lower end of the city, these winos. That's what you class yourself as a true alcoholic."

Respondent B: "I think the strongest one was the embarrassment before my relatives and my friends that I had to go to AA or some other place. If I had gone to those places I was admitting or letting everybody say that I was an alcoholic and to this day I don't think I was an alcoholic. I think I had a heavy drinking problem."

Respondent C: "I don't think anybody wants to be classified as an alcoholic or a drunk rummy. At least I didn't. I was embarrassed, yes."

Respondent D: "I don't feel I'm an alcoholic, period. I have … I had a drinking problem but the word is terrible."

Respondent E: "Because I'm maybe a private person I wasn't the type that, you know, would go out and seek help and I would be embarrassed if a lot of people were … heard about the problem."

labeled, (b) beliefs that their problems are not serious enough to require treatment (i.e., traditional programs are often too intense and too demanding for individuals who are not severely dependent), and (c) desire to handle their problem on their own.

Barriers to Treatment or Help-Seeking for Racial/Ethnic Minorities and Women

Several studies have also found significant gender differences in reports of barriers to treatment (Gomberg & Turnbull, 1990; Roman, 1988; Schmidt & Weisner, 1995; Schober & Annis, 1996; Thom, 1986, 1987). One study (Weisner, 1993) that examined differences among problem drinkers in treatment and in the general population found differences in the factors that influence treatment entry for women and men. In another study looking at gender differences, Weisner and Schmidt (1992) found that female problem drinkers were more likely than male problem drinkers to use non-alcohol-specific health care settings, particularly mental health treatment services, and to report greater symptom severity. Others have similarly found that women seek nontraditional avenues of help such as general health and mental health care settings for coping with their alcohol problems (Beckman & Kocel, 1982; Schmidt & Weisner, 1999; Schober & Annis, 1996).

It is likely that the availability and acceptance of professional help and treatment also influences the rates of natural recovery. According to Duckert (1989), the failure of treatment systems to adapt to the specific needs of female addicts and "the lack of more attractive treatment alternatives" (p. 176) are major reasons for the relative unwillingness of women to seek treatment. Therefore, natural recovery would be expected to occur more frequently among women than among men. Given the lower prevalence of problem drinking among women than among men (Blume, 1986) and that among heroin addicts there is a typical male–female ratio of 4:1 (Klingemann, 1994), small absolute numbers of female respondents are to be expected in self-change studies.

In a review of naturally recovered alcohol and drug abusers, the mean percentage of women across all studies was 31.6% (Sobell et al., 2000), a statistic only slightly higher than figures for alcohol treatment facilities,

Alcohol Abuse: A Worse Stigma for Women

Respondent A: "I feel that to be labeled an alcoholic, especially as a woman, is degrading and it means you're something kind of like … you don't have any will power. You make an ass of yourself. It's sort of disgusting to me"

Respondent B: "Yes too embarrassing. Especially … it's always OK for a man to drink and it's great for a man to seek help but as a woman, you look … it's not quite the same thing."

Respondent C: "I didn't want to be found out. I didn't … because I still think, perhaps it's not quite so much now but it is more of a stigma for a woman."

where one-quarter of the clients are female (National Institute on Drug Abuse, 1992). The fact that about one-third of all alcohol and drug abusers who naturally recover are female parallels results from brief treatments where larger than expected samples of females are recruited to treatment through advertisements (e.g., Sanchez-Craig, Neumann, Souzaformigoni, & Rieck, 1991; Sobell & Sobell, 1998).

Only a few studies have looked at gender differences in studies of self-change (Bischof, Rumpf, Hapke, Meyer, & John, 2000; Rounsaville & Kleber, 1985; Tucker & Gladsjo, 1993), and all have found an absence of significant variables as a function of gender between treated and untreated samples of alcohol and opiate abusers. One plausible explanation is that both brief treatments and self-change embody the concept of greater empowerment and thus are more appealing to women compared to entering traditional addiction treatment programs that are viewed as stigmatizing and promoting a sense of powerlessness.

In contrast to the sizable body of literature in the addictions field examining and identifying factors that affect treatment entry by gender, there are "very few studies that inform differences in service use by ethnicity" (Schmidt & Weisner, 1999, p. 79). Despite the fact that access to treatment for minorities has not been widely evaluated, there is evidence that factors such as lack of health insurance and a greater likelihood of living below the poverty level limit access to treatment for Hispanics and African-Americans (Gordis, 1994).

In an excellent review of ethnic and cultural minority groups, Castro, Proescholdbell, Abeita, and Rodriguez (1999) found that (a) past studies have shown that minority clients have questioned seeking mental health and substance abuse services from mainstream agencies, (b) there is a high dropout rate among minority clients who seek counseling, and it has been suggested that one reason for this high dropout rate is because counselors are not culturally empathic (Sue, Fujino, Hu, Takeuchi, & Zane, 1991), and (c) failure to engage clients in treatment either through rapport or raising positive expectations have been factors suggested as likely to affect dropout rates. A further reason for failure to enter treatment and high dropouts is that most substance abuse treatment programs have neither been designed or evaluated for minorities. In another large study of seriously mentally ill adults (Substance Abuse and Mental Health Administration, 2003), less than half received treatment in the past year, with almost half reporting that they either did not feel a need for treatment, could handle problems without treatment (10.4%), feared being committed or having to take medicine (9.25), or because of the stigma associated with seeking treatment (28.2%).

In summary, because of the stigma associated with entering substance abuse treatment in general, coupled with the reluctance of women and minorities to enter mainstream substance abuse programs, self-change studies and interventions for these two groups are critical.

Furthermore, cross-cultural comparisons of self-change within and between countries are needed to determine the generalizability of findings. Lastly, while national surveys have shown treatment utilization to vary by gender

and ethnic groups, this may be due to any of several factors (e.g., agency discrimination, lack of interest, failure to recognize a problem, available services are not attractive or do not exist). Thus, one issue for the development of alternative services is to be sensitive to the needs of particular groups and individuals. The old adage of one size fits all is outdated.

Models of Change

Over the past 35 years, several models of change or models of decisional processes with inherent similarities have been posited. Although this chapter is not the forum to review these models in depth, a brief description of the prevailing models will help set the context for the studies and findings reported in subsequent chapters. At the heart of the decisional theories of behavior change is a cognitively based cost–benefit evaluation. Such models look at beliefs and feelings, in addition to their role in how decisions to change behavior occur. According to this view, what drives an addiction is that initially, and perhaps for some time thereafter, the positives of using outweigh the negatives (Orford, 2001, 1986). Over time, individuals weigh the pros and cons of their use and when they perceive that the negatives outweigh the positives, they then are more likely to decide to stop or reduce their use.

In a seminal research article, Eysenck (1952) questioned the effectiveness of psychotherapy for what was then called neurosis. Reviewing treatment studies published up to that time, Eysenck concluded that "roughly two-thirds of a group of neurotic patients will recover or improve to a marked extent within about two years of the onset of their illness" (p. 322). By virtue of his early questioning of the effectiveness of psychotherapy, Eysenck was also one of the first to try to understand the common elements of therapeutic change for behavior and mental health problems. From this time forward, several comprehensive models of change have been proposed that integrate different theoretical models of the change process (e.g., Goldfried, 1982).

Conflict Theory

Janis and Mann's (1968) conflict theory postulates that tension results when there is dissonance between attitudes. To reduce such dissonance, individuals must examine the positive and negative aspects of conflicting viewpoints and make a decision about how to lessen the conflict. Janis and Mann's decision-making model involves five stages of decision-making: (a) appraisal of a challenge, (b) appraisal of alternatives, (c) selection of the best alternative, (d) commitment to the new policy, and (e) adherence to the new policy despite negative feedback (Janis & Mann, 1968, 1977). An individual's effort to resolve tension (i.e., inner conflict) is thought to be a function of the amount of dissonance between beliefs.

Transtheoretical Model of Change

The transtheoretical model of change grew out of efforts to apply a set of common change processes from existing theories of therapy to the process of smoking cessation. In explaining behavior change, Prochaska and DiClemente (1984) used a five-stage model of change (i.e., precontemplation, contemplation, preparation, action, and maintenance) similar to the decision making stages put forth by Janis and Mann (1968). Prochaska and DiClemente's model, however, extends to change outside of therapy (Prochaska, DiClemente, & Norcross, 1992) and asserts that the stage that people are in reflects the likelihood of their changing (Prochaska, 1983). In the stages of change (SC) model, (a) precontemplators are individuals who are not considering changing, (b) contemplators are considering change, (c) preparation occurs when an individual starts to make plans to change, (d) individuals in the action stage are actively engaging in change, (e) individuals in the maintenance stage are sustaining their change, and lastly, (f) if a change attempt fails, the person is viewed as relapsing, and the stage process starts over.

This model has come under increasing scrutiny for not accounting adequately for the complexity of behavior change (Bandura, 1997; Budd & Rollnick, 1996; Carey, Purnine, Maisto, & Carey, 1999; Davidson, 1998; Sutton, 1996). It has been argued that the SC model is a complex way of describing behavior that can better be explained on a continuum, and that actual change from addictive behaviors does not move systematically through discrete stages (Budd & Rollnick, 1996; Carey et al., 1999; Sutton, 1996). In a true stage model, all stages must be passed through and no stage is revisited (Bandura, 1997). Thus, the SC model violates both of these premises because when individuals relapse, the model asserts that they must return to an earlier stage. Furthermore, because many who recover on their own successfully complete the change as soon as they decide to stop, this contradicts a stage development. In this regard, a recent study reported that 42.9% (15/35) of naturally recovered alcohol abusers successfully resolved on their first attempt (King & Tucker, 2000). Finally, it is a force fit to explain cases of true spontaneous remission (e.g., religion conversions) as passing through all stages rapidly, when what seems to occur is a quantum jump from precontemplation to action.

Lastly, although the transtheoretical model (TM) received considerable attention over the past decade and has inspired much of the empirical work on "readiness to change" (RTC), the psychometric literature provides inconsistent support for stages of change (Carey et al., 1999). Several have criticized the TM as being seriously flawed as a true stage model (Bandura, 1997; Brug et al., 2005; Littell & Girvin, 2002; Sutton, 2001; West, 2005, 2006). Carey et al. (1999) suggest that RTC (i.e., the degree to which an individual is motivated to change a problem behavior) may best be thought of as a "multidimensional and continuous construct with complex relationships to behavior, cognition, and environmental content" (p. 245).

Crystallization of Discontent

Baumeister (1996) has conceptualized the change process as related to individuals' personal perception of circumstances surrounding their behavior. He further asserts that people continually reevaluate their beliefs and behaviors in an effort to maintain consistency while also maintaining their beliefs. In this process, individuals make attributions that support their choices. Using examples from marriage and religion, Baumeister explains how people make extreme causal attributions in an effort to support their strongly held commitments or beliefs. Conversely, he posits that people discount disconfirming evidence to retain their commitments or beliefs.

Baumeister (1996) states that if consequences perceived by individuals as negative reach a certain threshold of discomfort, they will begin to see the consequences as related, thereby crystallizing the belief that the consequences are strongly linked with the behavior. He calls this process "crystallization of discontent." Thus, when an individual's perception crystallizes or solidifies negative aspects as related to a belief, affiliation, or behavior, the individual becomes motivated to change the situation. For example, one might end a committed relationship perceived to have become negative because of increased awareness of uncomfortable consequences beyond that which the individual is willing to tolerate. Another example would be a change in political beliefs as one comes to realize that the consequences of such beliefs are unacceptable. In the addiction field, Winick's (1962) maturation hypothesis is a good example of the process of crystallization of discontent. Addicts who quit using drugs talk about the extra "hustle" that is required over time to get drugs, with the strain building such that the negative consequences eventually reach a threshold of discomfort that then motivates behavior change (i.e., drug addicts are no longer willing to do this or they do not have the energy to continue doing drugs). This approach, however, fails to explain the occurrence of relapses (i.e., if discontent has crystallized, why would one again engage in the behavior?).

Becoming an Ex

In a process of change akin to Baumeister's crystallization of discontent, Ebaugh (1988) describes the change process as a role exit that includes developing a perception that a current role is not what individuals desired when they began the role. He refers to this as "Becoming an Ex." A good example of Ebaugh's role exiting involves nuns who, after taking their vows and entering the church, over time start to see things they strongly disagree with about the institution's policies. As their disenfranchisement builds, their commitment in the face of negative consequences (i.e., disagreement with church policy, defrocking) decreases and as the consequences build, dissonance increases between what they personally value and what their role entails. The point where individuals finally decide to exit a role and become motivated to do something different is seen as a focal point where persons have finally crystallized

their discontent. Ebaugh (1988) feels "turning points" play an important role in behavior change as they "(a) announce to others and give ultimate reasons for change; (b) reduce cognitive dissonance and conflict; and (c) help mobilize resources" (p. 134).

Major Findings from Self-Change Studies

Although the study of natural recoveries is relatively new, the majority of the more recent studies have several findings in common. The major and notable findings from self-change studies are briefly discussed below.

Self-Change: A Major Pathway to Recovery

Several major surveys have shown that self-change appears to be the dominant pathway to recovery for: (a) *cigarettes* (Fiore et al., 1990; Hughes et al., 1996; Orleans, Rimer, et al., 1991; U.S. Department of Health and Human Services, 1988), (b) *alcohol* (Cunningham, Ansara, Wild, Toneatto, & Koski-Jännes, 1999; Cunningham et al., 2000; Dawson, 1996; Sobell, Cunningham, & Sobell, 1996), (c) *drugs* (Cunningham, 1999b), and (d) *gambling* (Hodgins, Wynne, & Makarchuk, 1999). The majority of the self-change studies of alcohol and drug abusers, included in the two major recent reviews (Sobell et al., 2000; Chapter 5), were conducted in the United States, Europe, and Canada (Sobell et al., 2000). The two recent reviews also found that the majority of self-change studies were conducted with alcohol abusers (75.0%, 30/40, Sobell et al., 2000; 81.8%, 18/22, Chapter 5).

In the first systematic study of natural recovery from marijuana, 25 cannabis abusers who were recovered for at least 1 year described their successful quit attempts, their past substance use, antecedents to recovery, and factors supportive of change through structured interviews and autobiographical narratives (Ellingstad, Sobell, Sobell, Eickleberry, & Golden, 2006). Marijuana cessation appears to have been motivated more by internal rather than external factors, and precipitants of attempts to quit involved more positive cognitive and affective components than social or health factors. The most commonly cited reason for stopping cannabis use was a change in how the participants viewed their cannabis use, followed by negative personal effects. The most commonly reported recovery maintenance factors were avoidance of situations in which cannabis was used, changes in lifestyle, and the development of non-cannabis-related interests. Lastly, over three quarters of respondents reported not seeking treatment because they believed it was not needed or because they wanted to quit on their own.

Can We Believe What They Tell Us?

Corroboration of self-changers' self-reports is important because respondents are being asked to recall events over long time periods. As with treated substance abusers, the primary confirmation of self-reports of self-changers

has been by interviewing collaterals and thorough official records (reviewed in Sobell et al., 2000).

In examining the validity of self-reports among naturally recovered substance abusers, four major studies (Blomqvist, 1996; Gladsjo, Tucker, Hawkins, & Vuchinich, 1992; Klingemann, 1991; Sobell, Agrawal, & Sobell, 1997; Sobell et al., 1992, 1993; Tucker, 1995; Tucker et al., 1994) found that such individuals give reasonably accurate accounts of their pre- and post-recovery substance use as compared to reports from collaterals. These results parallel findings from studies of treated substance abusers (Babor, Brown, & Del Boca, 1990; Babor, Steinberg, Anton, & Del Boca, 2000; Maisto & Connors, 1992; Maisto, McKay, & Connors, 1990; Sobell, Toneatto, & Sobell, 1994). Although some studies (King & Tucker, 2000; Sobell et al., 1993; Toneatto et al., 1999) have reported problems in getting respondents to provide the name of someone who knew them when they had their problem (i.e., in the distant past, for example 10–20 years ago), one suggestion has been to incorporate reliability checks (e.g., asking the same questions when first screened into the project and when interviewed at a later date) into the interview process (Sobell et al., 2000). In summary, it can be concluded that naturally recovered substance abusers' reports of their pre- and post-recovery and related experiences generally are consistent with reports from other sources.

Stability of Natural Recoveries

In two recent reviews of self-change studies, it was found that across all studies the average recovery length was about 6 (Sobell et al., 2000) to 8 years (Chapter 5). Because substance use is a highly recurrent disorder (Marlatt & Gordon, 1985) and because several recent studies have suggested that stability of recovery with or without treatment does not seem to occur for at least 5 years (Dawson, 1996; De Soto, O'Donnell, & De Soto, 1989; Jin, Rourke, Patterson, Taylor, & Grant, 1998; Sobell, Sobell, & Kozlowski, 1995), it is suggested that studies of the self-change process use a minimum recovery period of 5 years or more. Such a recovery period parallels findings from the medical field showing that a survival rate of 5 or more years is associated with very stable outcomes from serious diseases (e.g., Bonadonna & Robustelli, 1988; Devita, Hellman, & Rosenberg, 1985).

Longitudinal studies of self-changers can also be used to examine how a change in the use of one substance relates to changes in other behaviors. There have been a few reports of respondents stopping one drug but increasing the use of another (Biernacki, 1986; Sobell et al., 1994), and one longitudinal study found that close to one-half of naturally recovered alcohol abusers reported increases in the use of nonalcoholic beverages within the first 6 months of stopping drinking alcohol; one-quarter also reported that they ate more sweet things, and about one-fifth reported smoking more cigarettes as well as eating more food (Sobell et al., 1995). However, some studies have contradicted the above findings by reporting that cessation of alcohol

problems was associated with an increase in the likelihood of subsequent smoking cessation (Breslau et al., 1996).

A final issue concerns evaluating the use and abuse of all drugs, and not just the substance from which the person recovered. For example, the onset of heavy drinking has been reported by some naturally recovered cocaine abusers (Toneatto et al., 1999). In another study, for some naturally recovered heroin addicts who were totally abstinent, "the use of other drugs, especially alcohol, continued for longer periods and eventually became a problem in themselves" (Biernacki, 1986, p. 126).

What Triggers Self-Change? Thinking about Changing

One of the most common ways that self-change has been reported to occur is by a process described as a "cognitive appraisal" or a "cognitive evaluation" (i.e., individuals report that their initiation of change was preceded by a process of weighing the pros and cons of changing their substance use and eventually becoming committed to change). With the exception of gambling (Hodgins & el-Guebaly, 2000), cognitive appraisals have been reported across a variety of substances: (a) cigarettes (Carey et al., 1989), (b) drugs such as cocaine and heroin (Biernacki, 1986; Klingemann, 1992; Toneatto et al., 1999; Waldorf et al., 1991), and (c) alcohol (Granfield & Cloud, 1996; Klingemann, 1992; Ludwig, 1985; Sobell et al., 1993; Tucker et al., 1991). Further support for a cognitive appraisal process comes from the two major reviews of the literature. In the first review (Sobell et al., 2000), 27.5% of the studies reported such reasons for recovery, and 42.5% reported health-related reasons. In the second review (Chapter 5), three reasons (family-, health-, and finance-related) were endorsed by over one-half of the respondents. Cognitive appraisal was endorsed as a reason by 36.4% of respondents. Cognitive processes also have been reported for treated alcohol abusers with long-term recoveries (Amodeo

Recoveries Described as Cognitive Appraisals

Respondent A: "You know, I had thought about it for awhile and I had made up my mind that I wanted to do it. To me, I had a problem. It was a big problem. It was a bigger problem than I certainly thought that I had. And once I came to grips with it and realized that there was something wrong there … that once I started thinking along those lines, it wasn't too long before I discovered what the problem was and why it was there. So if it's staring you in the face, I mean you got to do something about it … so I just made up my mind to stop drinking. But this … didn't happen Tuesday, Thursday, or Wednesday … there's a lot more to it than that. I mean it's hard for me to sit here and tell you how I was thinking Tuesday, 1978. Or how I was thinking Wednesday, but the overall picture … that's about as plain as I can make it … how it came about. It was a process of … over a period of time. It was a gradual thing … it was probably over a year, maybe 18 months time."

Respondent B: "I looked at myself as being dirt, that I had not achieved more than that; when you are 36 years old, you begin to draw kind of a balance sheet, you realize you are you are down on the ground and you have spent everything on alcohol."

& Kurtz, 1990). Collectively, the results from several studies suggest that ongoing cognitive evaluations are central to the change process for many substance abusers who had problems but recovered on their own.

Recoveries associated with cognitive evaluations as opposed to recoveries precipitated by discrete events are of particular interest, as such recoveries have implications for clients in treatment as well as for individuals who want to change on their own but do not want to enter treatment. If a cognitive appraisal process (e.g., a balance sheet evaluating the pros and cons of continuing to use or not use) facilitates the resolution of substance abuse problems, then outcomes for clients might be improved by having them engage in an appraisal of their substance use. A decisional balance process has been used with smokers and for weight loss (Mann, 1972; Velicer, DiClemente, Prochaska, & Brandenberg, 1995), with college students to reduce alcohol use (Carey, Carey, Maisto, & Henson, 2006), and with problem drinkers in a large community intervention (Sobell, Cunningham, Sobell et al., 1996; Sobell, et al., 2002).

Maintaining Recoveries

In terms of coping strategies for maintaining recovery, the literature is scant but consistent. The single biggest factor associated with maintaining recoveries has been social support or a positive milieu, particularly from friends and family (reviewed in Carey et al., 1989; Klingemann, 1991; Sobell et al., 1993, 2000; Tuchfeld, 1981; Chapter 5). These findings are consistent with the literature showing that a positive family milieu or social support is the single most notable factor associated with positive outcomes in treatment studies (Billings & Moos, 1983; Moos, Finney, & Chan, 1982). For drug abusers, a common strategy for avoiding relapse has been to leave the environment where drugs are used and to break off social relationships with friends who use drugs (Sobell et al., 2000; Waldorf et al., 1991)

Resolved Alcohol Abuser

"[I stayed] away from old playmates and the old playground with people who drink and use … [and stayed] connected with positive people in positive environments."

Conclusions and Future Directions

Multiple and converging lines of evidence have led to the recognition of self-change as an important pathway to recovery from alcohol and drug problems (American Psychiatric Association, 1994; Institute of Medicine, 1990; National Institute on Alcohol Abuse and Alcoholism, 2006b; Sobell et al., 2000). Research on the process of self-change has also led to the development of alternative interventions for problem drinkers (Chapter 8).

As reviewed earlier, research on the self-change process is important for several reasons, including the fact that the addiction field does not have enduring, effective treatments and has failed to reach large numbers of individuals with less severe problems. In this regard, Humphreys and Tucker (2002) persuasively argue that addiction intervention systems need to be responsive to the full range of problems, resources, treatment preferences, goals, motivations, and behavior-change pathways, including self-change. In conclusion, it is time for the addiction field to respond to the entire continuum of addictive behaviors by offering multiple and varied behavior-change pathways, including self-change.

As noted in two recent reviews (Sobell et al., 2000; Chapter 5), future studies of self-change need to be methodologically sound, including uniformly reporting demographic and substance use history information. If not, it will be impossible to draw conclusions across studies. In addition, a minimum recovery interval of 5 or more years has been suggested in order to draw valid conclusions that are based on stable recoveries. It will also be important to identify substance related differences (e.g., environmental change such as moving may be an important factor in natural recoveries from heroin, but less important for alcohol) and commonalities (e.g., social support may be a helpful maintenance factor for all substance abusers). Finally, since one of the goals of studying natural recoveries is to understand what factors might be associated with successful recoveries and to test those factors in clinical interventions, an in-depth qualitative understanding of what drives and maintains recovery in the absence of treatment or self-help is critical.

In summary, the proliferation of self-change studies in the addiction field and the findings of low-risk alcohol and drug use provide empirical support for a conceptualization of multiple pathways for recovery from addictive behaviors, including moderation and harm reduction. As well, the evidence clearly demonstrates that substance abuse problems should be viewed as lying along a continuum from no problems to mild problems to severe problems, rather than as a dichotomy. Such a view, of course, has implications for the types and intensities of services that can be offered. Lastly, with one exception (Sobell et al., 2001), there have been no investigations of the self-change processes across different cultural or social contexts (Klingemann, 2001). As discussed in Chapters 5 and 10, to substantiate that the phenomenon of self-change and what triggers it is not culture specific, cross-cultural evaluations are needed. Although the concept of self-change runs counter to the disease model of addictions and has been met with disbelief, there has been a significant increase in research in this area in the past decade.

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