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Self-Change in a Broader Context: Beyond Alcohol and Drugs

6.1
Self-Change: The Rule among Smokers

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Epidemiology of Smoking and Quitting

In 2000, 23.3% of adults in the United States were current smokers and approximately 70% of them reported the desire to quit smoking completely. Among the estimated 42.4% ever-smokers, 50.6% were former smokers (Centers for Disease Control and Prevention [CDC], 2002). In other words, about one-half of U.S. ever-smokers become nonsmokers during their lives (Hughes, Keely, & Naud, 2004).

In Germany, the proportion of ex-smokers in the adult population is 24.2% (Augustin, Metz, Heppekausen, & Kraus, 2005). Whereas the highest prevalence of smoking and the lowest number of ex-smokers can be found in the young adult cohort (41.3% current smokers, 6.7% ex-smokers), the number of smokers is decreasing with increases in age, first slowly, then progressively more rapidly. At the same time, the proportion of ex-smokers is continuously increasing (Augustin et al., 2005; Lampert & Burger, 2004). The declining prevalence of smoking is the result both of the elevated mortality rate among smokers (see Doll, Peto, Boreham, & Sutherland, 2004) and of the increase in smokers becoming nonsmokers. The quit rate, defined as the ratio of ex-smokers to the sum of all individuals who have ever smoked, is increasing with age. In the cohort of persons aged over 65 years, the rate is 73.8% for women and 77% for men (Lampert & Burger, 2004); this means that in Germany three-quarters of the ever-smokers have quit smoking at some point.

Several quit attempts are typically necessary before lifelong success (Hughes et al., 2004). In the course of 1 year, approximately one third of smokers in Germany and the United Kingdom (Junge & Nagel, 1999; West, McEwen, Bolling, & Owen, 2001), and about 40% of smokers in the United States and Australia (CDC, 2002; Trotter & Letcher, 2000) report having tried to quit smoking for at least 1 day. However, only a small proportion is able to maintain abstinence for a sustained period; the medium-term success rate for a given attempt is about 3–5% (CDC, 2002; Meyer, Rumpf, Schumann, Hapke, & John, 2003; West et al., 2001). From their review of studies on unaided quitting, Hughes et al. (2004) conclude that for a typical U.S. smoker it may take 10–14

attempts before a smoker stops. However, this interpretation assumes that the success rate does not vary across attempts and that most successful smokers never access treatment.

Self-Quitting

As the existing evidence suggests, most quitters do not utilize any aids for smoking cessation. The first systematic analysis of the use of assistance for smoking cessation in the general population was published by Fiore et al. (1990). They found that, in the 10 years preceding the survey, about 15% of respondents used assistance in at least one of their quit attempts and that only 7.9% reported using any aid in their most recent attempt. That means that over 90% of smokers who quit at that time did so on their own. Since this seminal paper, much has occurred in the field of tobacco control and new aids for smoking cessation have been developed. A number of studies since then have investigated what methods are used by smokers in quit attempts. They differ in many methodological aspects. Some ask open-ended questions about methods used for quitting while other studies have participants choose from a list of possible aids. No consensus exists regarding what is actually considered an "aid" (e.g., in one study "support from family or friends" was included in the list of aids for quitting; Buck & Morgan, 2001). Therefore, the resulting proportions of individuals who tried to quit smoking in the course of 1 year and used at least one form of assistance vary to some extent and range between approximately 15% and 30% (Buck & Morgan, 2001; Cokkinides, Ward, Jemal, & Thun, 2005; Hammond, McDonald, Fong, & Borland, 2004; Meyer, Rumpf, Hapke, & John, 2000; Westmaas & Langsam, 2005; Zhu, Melcer, Sun, Rosbrook, & Pierce, 2000). While it can be concluded that the use of assistance has somewhat increased in the last decade, the overall result remains that most smokers quit on their own.

Interestingly, most studies consistently found that aids are more often used in unsuccessful than in successful quit attempts (Doran, Valenti, Robinson, Britt, & Mattick, 2006; Fiore et al., 1990; Kraus & Augustin, 2001; Meyer et al., 2000). There has been much discussion about the meaning of this finding. One could conclude that quitting without external help is the best strategy to become a nonsmoker. Yet, this would contrast sharply with the findings from effectiveness studies indicating that smokers who engage in strategies such as counseling, nicotine replacement therapies, or other pharmacological aids show much higher success rates than control groups (Lancaster, Stead, Silagy, & Sowden, 2000). Therefore, authors are forced to come up with different explanations for the lower utilization rate among former smokers. In one study, the episode of active smoking dated back much further for ex-smokers not having used any help (Meyer et al., 2000). Regarding the increase in available aids in the last decade, there could have been an overall lower utilization rate among smokers at the time these individuals made their quit attempt.

There is also the possibility of a growing recall bias, with more time having passed since quitting. Another explanation could lie in the special characteristics of help-seeking smokers. Some studies found that those seeking assistance were heavier smokers (Fiore et al., 1990; Meyer et al., 2000) with a longer duration of smoking and higher nicotine dependence (Meyer et al., 2000) and had made more cessation attempts than those who quit unaided (Fiore et al., 1990). Therefore, as Zhu et al. (2000) state, perhaps "the potential advantages of assistance did not overcome the initial disadvantages of those who sought help" (p. 305). In their study, the individuals who used assistance had more than double the long-term cessation rate of those who quit without assistance (15.2% versus 7.0%). This effect may at least in part be due to different characteristics of the study sample; those who sought help in the Zhu et al. study smoked much less than, for example, those in the Fiore et al. study.

Success in a Given Self-Quit Attempt

There are two major reviews concerning the success of a given quit attempt in self-quitters (Cohen et al., 1989; Hughes et al., 2004). Both come to the conclusion that success rates for self-quitting are very low. Cohen et al. (1989), in their summary of 10 prospective studies, found a median long-term prolonged abstinence (LTPA) rate of 5% for 6-month and 4% for 12-month follow-ups. The studies published since then and reviewed in the paper by Hughes et al. (2004) replicate these results and conclude "that the 6-month LTPA rate for a given quit attempt among untreated smokers appears to be between 3 and 5%" (p. 35). In addition, Hughes et al. (2004) looked at the shape of the relapse curve and found that the majority of initial quitters relapsed within the first 8 days following their quit date. Thus, it appears that the main problem in stopping smoking by oneself is initiating a period of abstinence rather than late relapse. Even if the observed outcomes of self-quit attempts do not appear very promising, one must bear in mind that the evaluation of a single quit attempt may not necessarily be a good predictor of the probability of quitting over a lifetime (Schachter, 1982). Additionally, despite the relatively low abstinence rates in quit attempts, the overall volume of self-quitting is enormous and, thus, unaided quitting has the greatest impact on smoking prevalence in the population (Shiffman, Mason, & Henningfield, 1998).

Reduction as Outcome

If one looks at "self-change" rather than "self-healing," one also must consider reduction of tobacco consumption as an outcome. Attempts to reduce the amount of cigarettes smoked are at least as common as quit attempts.

In a British study with a representative sample of the adult population, 51% of smokers said they had attempted to cut down in a 1-year period (West et al., 2001). In a German sample, 39.4% reported a serious reduction attempt during a period of 30 months (Meyer et al., 2003), and data from the Community Intervention Trial for smoking cessation in the United States suggest that 40% of smokers had reduced their smoking by at least 5% during a 2-year period (Hughes, Cummings, & Hyland, 1999). Quit and reduction attempts overlap to a great extent; for example, Meyer et al. (2003) found that among participants who tried to reduce, 56.5% reported a quit attempt as well. The likelihood of maintaining reduction is at least equal to the likelihood of maintaining abstinence. In the study by Hughes et al. (1999), 21% of assessed smokers succeeded in reducing their cigarette consumption and maintained this reduction for at least 2 years. In the German study, 15% of all still-smoking participants managed to maintain their achieved reduction (Meyer et al., 2003). Concerns that reduction undermines the probability of later quit attempts are not supported by current studies, but neither is the fact that reduction attempts enhance the probability of quitting (Hughes et al., 1999; Meyer et al., 2003).

Reasons for Quitting

Existing studies often fail to probe influences that trigger the self-change process. Nevertheless, some data are available on reasons for quitting and quit attempts cited by current and former smokers. The social environment seems to have a strong impact on the smoker. A German study suggests that during the past 12 months smokers were most frequently urged to quit smoking by family or friends, mainly by their spouse or partner (34%; Kraus & Augustin, 2001). In addition, 20% of men and about 15% of women were advised by their physician to quit smoking. Hyland et al. (2004) reported that, compared with an earlier study (Hymowitz et al., 1997), the percentage of participants reporting pressure to quit from family, friends, and doctors has increased with time. The most common reason given for quitting smoking is concern for one's own health (Grotvedt & Stavem, 2005; Hyland et al., 2004; Hymowitz et al., 1997; Larabie, 2005; West et al., 2001), followed by reasons such as wanting to improve physical fitness, disliking addiction, expense, and concern for the effect on others (Grotvedt & Stavem, 2005; Hyland et al., 2004; Hymowitz et al., 1997). The priorities tend to change somewhat with age and gender. While the wish to improve physical fitness is particularly important among young men, women tend to quit more often out of consideration for their children or for aesthetic reasons. In addition, quitting because of an existing illness or as the result of advice from a physician increases with age (Grotvedt & Stavem, 2005). (See L. Sobell's chapter on conceptual issues in self-change in this book for a discussion of whether brief physician advice constitutes treatment rather than a mere trigger for self-change.)

Predictors of Successful Self-Quitting

Determining what factors predict successful smoking cessation, specifically in self-quitters, is a complex task limited by the difficulties of comparing studies (e.g., predictor variables assessed differ across studies, definitions and time frames for short- and long-term maintenance are not standardized, and few studies compare factors related to short- and long-term outcomes within the same study; Ockene et al., 2000). One finding across studies is that variables that predict short-term success do not seem to be the same as those related to long-term maintained abstinence (Garvey, Bliss, Hitchcock, Heinold, & Rosner, 1992; Gulliver, Hughes, Solomon, & Dey, 1995; Marlatt, Curry, & Gordon, 1988; Westmaas & Langsam, 2005).

In their review of 11 prospective studies of self-quitters, Ockene et al. (2000) found the following variables to be consistently predictive of maintained abstinence for at least 6 months: higher education, greater confidence in ability to stay quit (i.e., self-efficacy), lighter smoking, less alcohol consumption, fewer cigarettes smoked per day, and fewer slips in current quit attempt. In conclusion, more studies are needed to overcome the methodological obstacles prevalent in the existing research in order to determine what factors are important in successfully quitting smoking by oneself.

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6.2
Natural Recovery from Problem Gambling

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With the growing accessibility to and availability of a wide range of gaming activities throughout North America, there is growing concern over the increasing number of individuals who are seeking treatment for problem gambling. This issue has received the greatest systematic attention in North America (Arseneault, Ladouceur, & Vitaro, 2001; Kallick, Suits, Dielman, & Hybels, 1979; Ladouceur, Jacques, Ferland, & Giroux, 1999; Moore, 2001; Volberg & Steadman, 1989; Welte, Barnes, Wieczorek, Tidwell, & Parker, 2001). Prevalence rates ranging from 1% to 2% throughout most North American jurisdictions have been widely reported, with rates several times greater when subclinical gamblers are included (Rush & Moxam, 2001; Shaffer, Hall, & Vander Bilt, 1999).

In recent years, the global impact of gambling problems has become evident. Studies in Australia (Dickerson & Hinchy, 1988; Productivity Commission, 1999), New Zealand (Abbott & Volberg, 2000; Problem Gambling Foundation of New Zealand, 2003), South Africa (Collins & Barr, 2003), and throughout Europe—in particular, Great Britain (Fisher, 1999; Orford, Sproston, Erens, White, & Mitchell, 2003), Norway (Götestam & Johansson, 2003), Sweden (Rönnberg, 2001; Volberg, Abbott, Rönnberg, & Munck, 2001), Switzerland (Bondolfi, Osiek, & Ferrero, 2000; Molo Bettelini, Alippi, & Wernli, 2000), and Spain (Baacke, 1997; Becoña, 1996; Legarda, Babio, & Abreu, 1992)—have shown similar rates of gambling problems.

Several sources of evidence suggest that recovery from a gambling problem may not always be mediated through contact with the formal treatment system, but may reflect natural recovery processes paralleling the results found with untreated recovery from substance dependencies (e.g., Blomqvist, 2002; Klingemann, 1992; Sobell et al., 2001; Stewart, 1999; Toneatto, Sobell, Sobell, & Rubel, 1999). Epidemiological studies of gambling prevalence frequently identify significant numbers of "former gamblers." For example, Hodgins, Wynne, and Makarchuk (1999) found that over one-third of lifetime gamblers surveyed reported no problems in the previous year. Similarly, Bland, Newman, Orn, and Stebelsky (1993) found that only about 50% of those with lifetime pathological gambling problems continued to have such

problems in the 6 months prior to the interview in a population survey of psychiatric patients. In a study of two large representative national surveys in the United States, Slutske (2006) found that only 36–39% of individuals who had reported a lifetime history of DSM-IV pathological gambling reported any gambling symptoms in the previous year. Since only 7–12% had sought formal treatment or had attended Gamblers Anonymous, the study's findings suggest that about one-third of problem gamblers may have naturally recovered.

In addition, the number of treatment-seeking gamblers is often considerably below what would be expected based on the point prevalence data. The National Gambling Impact Study Commission (1999) estimated that less than 3% of pathological gamblers have sought formal treatment. In Ontario, Canada, for example, the number of individuals seeking treatment (a few thousand per year) is well below what the prevalence data would indicate (i.e., approximately 340,000 Ontarians with at-risk or problem gambling; Rush & Moxam, 2001). A Swiss study (Künzi, Fritschi, & Egger, 2004) found approximately 1,000 to 1,500 (or between 2.8 and 3.1%) of the estimated 35,000 to 48,000 problem gamblers (based on a prevalence rate ranging between 0.62 and 0.84%; Bondolfi, Osiek, & Ferrero, 2000) sought treatment in Switzerland in 2003.

These findings suggest that alternative recovery pathways may be more common than believed. The natural recovery from gambling as an alternative pathway has been studied in a small number of studies. In one study, Hodgins and el-Guebaly (2000) found gambling severity to predict treatment entry, with less severe problem gamblers being more likely to prefer natural recovery. These results were largely replicated by Toneatto et al. (in press) and Nett, Schatzmann, Klingemann, and Gerber (2003) who showed that treated gamblers had a longer problem gambling duration, greater gambling severity, more gambling symptoms (e.g., feelings of despair, panic, suicide), and more gambling-related negative consequences (e.g., higher financial losses, more severe family and health problems) compared with the naturally recovered gamblers. There is also some evidence that comorbidity with problematic substance use is relatively more pronounced among treated gamblers (Nett et al., 2003). Finally, according to Turner (2000) there is a correlation between self-recovery from gambling and a deeper understanding of the nature of randomness and the principles of probability. He suggests that teaching people about randomness may be an important part of both treatment and prevention of problem gambling.

Similar to untreated recovery from addictions, natural recovery from problem gambling appears to involve a cognitive evaluation process focused on the detrimental impact of gambling on individuals' core values, as well as an accumulation of gambling-related negative consequences (Hodgins, 2001; Hodgins, Makarchuk, el-Guebaly, & Peden, 2002; Toneatto et al., in press). Hodgins et al. (2002), for example, identified negative emotional states, financial crisis, interpersonal distress, and conflict as frequently mentioned reasons

for resolving a gambling problem. Additionally, Nett et al. (2003) noted that before a change in gambling behavior, there is usually a "spontaneous" decision to do so. Such change was rarely preceded by a gradual decision-making process.

Hodgins (2001) and Hodgins and el-Guebaly (2000) found that the change strategies that naturally recovering gamblers reported were generally practical and action-oriented. Such strategies included stimulus control, avoidance, instituting desirable lifestyle changes, and maintaining an acute ongoing awareness of gambling-related negative consequences (see also Nett et al., 2003). Toneatto et al. (in press) found that the most common change strategies during the year postresolution included stimulus control, adoption of a gambling-incompatible lifestyle, limited access to money, self-disclosure to others of the commitment to stop gambling, and an acute awareness of gambling-related negative consequences. As suggested by Nett et al. (2003), a well-planned modification of social and leisure activities is an important element to be considered when an attempt to quit gambling is undertaken.

Toneatto et al. (in press) also asked recovered gamblers to suggest effective ways other gamblers might succeed if they chose untreated recovery. About half of the sample said that there was "nothing" that could be done to trigger the recovery process; however, those who made suggestions pointed to the importance of raising awareness of the negative consequences of problem gambling and arousing cognitive dissonance between the individual's values and the consequences of continued gambling. A controlled gambling goal was generally advised against by about half of the sample, 80% of whom had chosen abstinence from gambling. For those who might choose nonabstinence, limiting time and amount spent gambling and adopting gambling-incompatible lifestyles were advocated by the recovered gamblers.

In summary, Hodgins and el-Guebaly (2000) and Toneatto et al. (in press) suggest that severity of problem gambling may be the primary variable distinguishing those who choose to recover from gambling without treatment from those who seek treatment. Most studies of natural recovery from gambling (e.g., Hodgins et al., 2002), like those of substance dependence, identify a crisis in self-image or values, accompanied by multiple gambling-related negative consequences; these consequences thus precipitate a reevaluation process of the role of gambling in their lives. Hodgins (2001), Hodgins and el-Guebaly (2000), Toneatto et al. (in press), and Nett et al. (2003) reported similar change strategies by their recovered gamblers consisting primarily of limit-setting, stimulus control, and the adoption of a gambling-incompatible lifestyle.

Additional research is needed to better understand the methods that initiate and maintain natural recovery as an important and alternative pathway to recovery from gambling. Such knowledge may influence educational and prevention strategies as well as inform treatment for problem gamblers.

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6.3
The Natural Course and Outcome of Eating Disorders and Obesity

Janet Polivy

The natural course of recovery from eating disorders and obesity has not received much attention; in part because once a diagnosable disorder is identified the individual is generally put into some form of treatment. Thus, most examinations of the course and outcome of these disorders rely on studies of patients who are receiving or have received treatment for the problem rather than a "natural (untreated) course." This makes it difficult to determine whether therapy is actually helpful in alleviating eating disorders or obesity. Is symptomatic improvement in some individuals a result of treatment or part of the natural course of the disorders? Are those who receive treatment representative of patients with the disorders, or do they represent a biased sample? Does therapy increase the number of people who improve or does treatment have either no effect or a negative effect on ultimate outcomes? These questions need to be addressed with respect to eating disorders. What has been addressed, in part, is the extent to which individuals recover from the disorder (with or without treatment), and, to a lesser degree, the general progression of the disorder (at least with respect to eating disorders, though not obesity).

In reviewing the literature on outcomes in eating disorders, Pike (1998) noted that "there is no predictable or normative long-term course associated with anorexia nervosa. Some individuals achieve complete recovery, others are ravaged by a chronic disorder, and some die from it" (p. 447). Thus, she suggested that researchers integrate findings from both treatment outcome and naturalistic follow-up studies. A more recent review (Steinhausen, 2002) concluded that for anorexia nervosa, there is a high rate of mortality, and less than one-half of those who survive recover fully from the disorder.

From the current literature it seems there may be a natural progression among the eating disorders from anorexia nervosa (AN) to bulimia nervosa (BN) or eating disorder not otherwise specified (EDNOS), although this does not imply that all eating disorder patients ever had AN or more than one disorder. For example, 51 teenaged patients diagnosed with AN in a community screening were compared with 51 controls, and reexamined 6 years later (Råstam, Gillberg, & Gillberg, 1995). Although most of the anorexic cases no longer fulfilled the criteria for the diagnosis of AN, many currently

met the diagnostic criteria for BN or EDNOS, and so were not free of eating disorder symptoms. Another study found that 2 years after inpatient treatment, 22% of AN patients had developed BN (Fichter & Quadflieg, 1996). After 6 years, there were still 27% with AN, 10% had developed BN, and 2% had EDNOS (Fichter & Quadflieg, 1999). Similarly, approximately 6 years after diagnosis and treatment, 8 of 43 AN patients who were reexamined had developed EDNOS, 5 had BN, 3 had both AN and BN, while only 4 still suffered from AN (Schulze et al., 1997). By 5 years after treatment for AN, 30% of the patients had developed BN (Strober, Freeman, & Morrell, 1997), although by 7 years three quarters of patients were deemed fully recovered from their AN. Another 7-year follow-up of AN patients indicated that of 34 patients, 7 still had AN, 4 had developed BN, and 10 were diagnosed with EDNOS. By 10 years after initial treatment, 1 of 39 AN patients still exhibited AN, and 2 had BN (Herpertz-Dahlmann et al., 2001). Thus, it seems that although one-half to three quarters of AN patients recover from the disorder over several years, a large number progress to develop another eating disorder or remain anorectic.

Looking more broadly at eating disorder patients following treatment, studies find that the majority no longer meet diagnostic criteria for an eating disorder, but many continue to have serious problems. For example, a prospective, naturalistic study following 225 women with AN, BN, and mixed AN and BN found that although nearly one-half of the initially anorexic and mixed diagnosis individuals no longer met full eating disorder diagnostic criteria during the first-year posttreatment follow-up, the recovery rate of bulimics was significantly better than that of anorexic or mixed diagnosis cases (Herzog et al., 1993). Herzog (1993) interviewed 33 women with subdiagnostic AN and/or BN who were seeking treatment for eating disorder, and reexamined them 24 and 52 months afterwards. During the initial follow-up period, 15 of the 33 developed a fully diagnosable eating disorder. At the final assessment, 4 continued to have a diagnosable disorder, 22 were subdiagnostic, and 6 had recovered. In a different group of participants, 2 years after treatment, 50% of BN patients continued to have the full BN syndrome, 3.1% fulfilled criteria for AN, and 46.9% were below threshold for a diagnosis of AN or BN (Fichter & Quadflieg, 1996). In this same study, 30% of AN patients continued to have AN and 22% had developed BN, while the remaining 48% no longer had an eating disorder. After 6 years, of the original BN patients, 22% were still bulimic, 3.7% had AN, 2% had EDNOS, and two died. Most of these individuals (72%), though, had no diagnosable eating disorder (Fichter & Quadflieg, 1997). As mentioned earlier, the AN patients studied by this team did not improve as much over 6 years, with 39% still having an eating disorder, and six patients (6%) had died; however, the majority (55%) no longer had an eating disorder (Fichter & Quadflieg, 1999). Patients who presented with binge eating disorder (BED) tended to do well 3 to 6 years after treatment, with only 1 death out of 68 patients, 4 maintaining their BED, 5 moving to BN, and 5 developing EDNOS; this left 77% with no remaining

disorder (Fichter, Quadflieg, & Gnutzmann, 1998). After 12 years, almost 8% of the patients had died and 39% had a negative outcome. While 56% were no longer diagnosed with an eating disorder, about one-half remained somewhat symptomatic (Fichter, Quadflieg, & Hedlund, 2006). Negative predictors of outcome included sexual problems, impulsivity, longer duration of inpatient treatment, and long duration of an eating disorder. During a 7-year follow-up at another center, 15 of 34 patients still fulfilled criteria for an eating disorder diagnosis, and 21 qualified for some other psychiatric diagnosis (Herpertz-Dahlmann, Wewetzer, Hennighausen, & Remschmidt, 1996). A more recent follow-up of a large number (246) of AN and BN patients found that the full recovery rate after 7 years was significantly higher for BN (74%) than for AN (33%; Herzog et al., 1999).

The order in which symptoms remit over time was examined in treated patients with AN and BN (Clausen, 2004). Similar patterns emerged for recovery from the two disorders; physical symptoms remitted before psychological symptoms of both AN and BN, while psychological symptoms such as obsession with weight and shape were the last to remit.

The progression of eating disorder symptomatology in treated individuals is instructive, but does not necessarily indicate the true course of the disorder. In order to determine whether eating disorders spontaneously remit, or are resolved only after treatment, the progression of symptoms in untreated individuals who either have the disorders or seem to be developing them needs to be examined. To this end, several studies have screened community samples of women (and occasionally men) and followed them over time. Joiner, Heatherton, and Keel (1997) screened over 400 female students from Harvard University while they attended college and again 10 years later, and found that bulimic symptoms were remarkably stable over the interval, and that initial scores on symptom indices predicted later pathology. Over a 6-month period, a group of women whose self-reports indicated that they suffered from BED reported decreased symptomatology to the extent that 10 of 21 were in at least partial remission (Cachelin et al., 1999). Adult women self-reported their eating attitudes and pathological eating behaviors twice, and reported fewer symptomatic behaviors 6 years later, but increased disturbances of eating-related attitudes (Rizvi, Stice, & Agras, 1999). Two community-based groups of women with BN or BED were assessed every 15 months for 5 years (Fairburn, Cooper, Doll, Norman, & O'Connor, 2000). In both samples, participants reported improvements in symptoms over time, particularly those with a diagnosis of BED; only 18% continued to have any form of an eating disorder after 5 years (although 39% became obese). Comparatively, one-half to two thirds of the BN patients continued to have a diagnosable disorder. A later report on the BN sample indicated that 44% could be considered as remitted over the course of 5 years, 51% persisted in their binge eating, 56% continued in compensatory behaviors, and the remaining women fell between cured and persisting in pathology (Fairburn et al., 2003). Finally, the natural course of BN and EDNOS was assessed over a 2-year period, and, as in previous studies,

it was found that the probability of remission was higher for EDNOS (59%) than for BN (40%), and that those with BN took longer for their symptoms to remit (Grilo et al., 2003).

Because disordered eating often emerges during the first year of university (e.g., Striegel-Moore, Silberstein, Frensch, & Rodin, 1989), college students have been studied over time to determine whether those who begin with evidence of eating pathology improve over time or go on to develop a clinical disorder. A number of female and male undergraduate students at Harvard University were assessed as students and again 10 years later (Heatherton, Nichols, Mahamedi, & Keel, 1995). Almost all measures indicated improvements in disordered eating attitudes and behaviors over the course of 10 years, with 33% of those who initially appeared to have BN scoring as nondisordered at follow-up. Binge eating and related pathological behaviors declined, dieting became less frequent, and body image improved. More recently, students entering university were given self-report questionnaires, and subgroups that scored especially high or low in terms of eating pathology were interviewed every 6 months for 2 years (Mills & Polivy, 2005). Self-reported eating pathology decreased over the 2 years, although dietary restraint and body dissatisfaction did not change. Participants who had been identified as potentially eating-disordered at the beginning of the study generally showed evidence of improvement in eating pathology, including being less upset by out-of-control and overeating episodes by the last assessment. Those who scored highest on pathology at the start of the study, however, were least likely to improve over time, and weight and shape continued to play a major role in self-evaluation and interfered with their ability to feel good about themselves.

Finally, patients newly admitted for treatment for AN were asked what variables they thought were most conducive to recovery (Tozzi, Sullivan, Fear, McKenzie, & Bulik, 2003). The three most commonly mentioned factors were supportive relationships outside the family, therapy, and maturation.

The research thus suggests that different eating disorders have different courses, with AN being the most recalcitrant and having the highest mortality, BN being somewhat less refractory than AN, but more so than EDNOS or BED. Moreover, the latter two disorders appear most likely to remit over time. Subclinical pathological eating attitudes and behaviors such as those seen in many university students appear to improve naturally over time, but in more severe instances they seem likely to progress to full-blown pathology.

Comparing treated and nontreated individuals who recover from eating disorders, it appears that treated patients are more likely to recover fully from the disorder. Studies generally find that a majority of treated patients recover over the long term, but somewhat less than half of untreated patients seem to recover on later assessment. Before concluding that treatment is more effective than self-change, however, more research is needed to determine whether self-selection factors such as becoming motivated to seek treatment (and presumably giving up one's eating disorder symptoms) account for the observed differences in recovery among those with eating

disorders. The natural course of obesity is difficult to study because the emphasis on slimness in current Western society mandates that anyone who is not fashionably svelte should at least attempt to lose weight (i.e., treat the condition of obesity; e.g., Polivy & Herman, 1987). *Consumer Reports* asked their readership to describe their experiences with weight loss, and found that of over 32,000 readers who replied to the survey, nearly 25% lost 10% of their initial weight and maintained the loss for at least 1 year (Anonymous, 2002). Half of these people actually maintained a mean loss of 37 pounds (more than 10% of their weight) for 5 years or more. More than 80% of the individuals who reported losing weight claimed to have done so on their own, without treatment.

Tinker and Tucker (1997 a,b) interviewed and assessed 21 adults who had lost significant amounts of weight without treatment, and maintained the loss over a period of 4.5 years. These individuals viewed weight loss treatments in a negative manner, and utilized procedures such as making healthier food choices and increasing exercise in order to decrease their weight. Similarly, the individuals who comprise the National Weight Control Registry[1] (e.g., Klem, Wing, McGuire, Seagle, & Hill, 1997, 1998; Phelan, Hill, Lang, Dibello, & Wing, 2003; Wing & Hill, 2001), just over one-half of whom indicated that they had lost the weight without formal treatment (Klem et al., 1997), report having used similar techniques to meet the minimum standards required for entry into the Registry. Moreover, the converse behaviors of decreasing one's level of exercise and increasing the level of fat that one consumes were associated with weight regain during the year after entering the Registry in the 35% who regained weight (McGuire, Wing, Klem, Lang, & Hill, 1999).

This raises the question of whether instituting one's own regimen of changed eating habits and exercising in order to lose weight constitutes treatment (even if it is self-cure) as opposed to the natural course of the condition, in the way that eating disorders may remit "naturally" without treatment. There may be a difference between the "natural course" of a disorder (which can include a degree of spontaneous remission), and what is being called "natural recovery" from conditions such as obesity (e.g., Tinker & Tucker, 1997 a, b) or alcohol (e.g., Sobell et al., 2001) wherein the individual undergoes "self-change." The latter involves a decision to change followed by a self-initiated effort to alter the maladaptive behaviors that sustain the unwanted condition. Presumably, those focused on promoting self-change are interested in natural recovery rather than spontaneous remission that occurs without motivation or intentional behavior change on the part of the individual.

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[1] The National Weight Control Registry was begun in the United States a decade ago in order to study people who have managed to lose weight successfully and maintain the loss for at least a year. More than 4,000 participants were enrolled in the registry as of 2003 (Phelan et al., 2003).

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6.4
Spontaneous Desistance from Crime

Jukka-Pekka Takala

> The plot of a recent motion picture is based on a comparison of two boys engaged in theft. When discovered, one ran more rapidly, escaped, and became a priest; the other ran less rapidly, was caught and committed to a reformatory, and became a gangster. In other circumstances, the one who ran more rapidly might have become the gangster and the one who ran less rapidly the priest.
>
> Sutherland, 1939, p. 4

Sutherland does not give the name of the movie, but it is more than likely "Angels with Dirty Faces" (1938) directed by Michael Curtiz and starring James Gagney as the gangster and Pat O'Brien as his law-abiding brother. Edwin Sutherland's brief mention of the developmental plot of the film, in the third edition of his classic textbook *Criminology*, captured in a nutshell some of the problems of criminal careers and desistance from crime.

The plot actually used in the film illustrates insights and suggestions from the criminological labeling theory, which came of age in the 1950s and 1960s. The one caught became a serious criminal, presumably (partly or mainly) because he was labeled as a criminal and because other careers closed for him (or at least became more difficult). The one who got away desisted from crime because other career possibilities remained open for him. Labeling theory emphasizes these kinds of pathways. Thus, from this point of view, the best intervention in crime may be no intervention at all, and spontaneous desistance from crime seems the most reliable and successful road to a noncriminal way of life.

However, as Sutherland (1939) suggested in the quotation above, an opposite turn of the plot would have been just as plausible. The futures of the brothers could have been reversed. This idea gets support from some modern studies. In a follow-up study of a youth cohort in Edinburgh, young people who were caught by the police were more likely to persist in their offending than those who offended at a similar level (as measured by self-report) but who were not caught (Smith, 2006). However, getting caught is unlikely to be random. Thus, the study design leaves room for doubts about conclusions on causality. In some cases, an early warning or punishment seems to help the offender mend his ways. Furthermore, several former criminals have regretted that no one confronted them early and firmly enough

to guide them away from crime before they developed a serious career in crime. In an English study interviewing probationers and probation officers on the issues of criminal career and desistance, Sue Rex (1999) gained the impression that the offenders were willing to take more direction than the probation officers gave.

What Is to Stop Crime Spontaneously?

In "Angels with Dirty Faces," the O'Brien character abstained from crime without having been caught or punished. Was he a spontaneous desister? The criminal justice system is built on the assumption that people choose their actions freely, at least to some extent, and therefore either the threat of punishment or the imposing of punishment is expected to set them straight. In principle, there is no requirement or expectation that the offender should receive some therapy or treatment to make him or her stop offending. Of course, there are shades to this picture. Many jurisdictions try to combine punishment with behavior-altering therapies. This is as it should be, but these therapies are usually something added on, or something extra. The principle is that people should learn from the blame and threat of punishment, or, at the very least, from the punishment imposed on them. Of course, this process does not always work as intended, but several natural experiments in which the police, or the criminal justice system more generally, have stopped functioning for a while (because of a police strike, for instance) have convinced most observers that the system works at least to some extent. Of course, some people dispute the need or even minor efficacy of any kind of punishment, but they are a definite minority.

Researchers have used somewhat varying definitions of desistance from crime depending on how exactly they have tackled questions such as the following:

- What counts as crime?
- Is offending measured by official records, self-reported crime, or some other method? How long must one be free of crime to be a desister?
- Is decrease in frequency or seriousness of offenses taken into account?

Using the term *spontaneous* desistance adds further definitional issues. Is it required that the person has received no specific behavior-altering therapy to qualify as *spontaneous* stopping of crime? Under this definition, probably most recorded offenders have later spontaneously desisted, since such treatment is relatively rare. Or is a stricter definition used, so that it is also required that they have never been caught or punished for their offenses? If so, do we count only measures by the police and other criminal justice system agencies or do we include actions by other authorities, or even informal sanctions? A very strict definition might also require that the offender has not even met with any *informal* sanctions or penalties for the offenses.

There are interesting phenomena under all definitions. Some kinds of crime are wide ly considered to be hard to drop without therapy or treatment, such as persistent sexual offending. Recently, claims have also been made that domestic violence is impossible to stop without professional intervention, usually meaning some kind of therapy or violence-stopping program for the male perpetrator.

Most phenomena under the other definition (i.e., stopping offending without official punishment) may seem trivial. Based on surveys of self-reported crime, we know that most young people commit offenses and that almost all of them stop doing so (in any serious frequency) irrespective of whether they are caught or punished (e.g., Mulvey et al., 2004). Males commit more crimes than females, and the criminal activities of both groups seem to peak at around 16–17 years of age; thereafter, the majority engages in crime less frequently as they age. Population surveys seem to show that the number of people who report having committed crimes at some point in the past but not for a considerable period of time before the survey is much larger than the number of people who have been caught by the police (e.g., Budd, Sharp, & Mayhew, 2005).

Thus, one can state that most people who commit crime stop without any intervention by the criminal justice system or behavior-altering treatment. However, this may not be very interesting since it concerns fairly minor crimes (e.g., shoplifting, petty theft, minor criminal damage, minor assaults, occasional use of forbidden substances). It is true that such processes involve a very large number of people, and one could think that a greater understanding of the process of desistance might bring tangible benefits. Nevertheless, understanding desistance from more serious crime seems more important. During their criminally active stage, the most active offenders are responsible for a great proportion of the most serious crime that takes place in society.

Even young males who engage in serious types of crimes, such as burglary or assault, do so infrequently and do not persist at it for a long period of time. By their mid-20s, many prolific young offenders no longer accumulate serious criminal charges (Shover, 1996). Even in these cases, stopping crime is usually no dramatic or memorable event, and no reasons or causes are investigated.

Unfortunately, knowledge of spontaneous desistance from serious, persistent crime is not very well-developed. There are, to begin with, no reliable estimates on how many persistent serious offenders are never caught and yet, at some point, discontinue offending. Strictly speaking, only they would be considered spontaneous desisters from serious crime. More is known about some of those persistent offenders who have been caught and punished and then at some later point stop. One could use the results from those studies and make reasonable estimates as to what extent the results would apply to spontaneous desisters under the strict definition. A supplementary approach would be to do the same type of exploratory research on spontaneous remission from different addictions (e.g., alcoholism, drug dependence), as studies suggest

that there are many commonalities in desistance from addictions and desistance from crime. Laub and Sampson (2001) mention such common elements as "the decision or motivation to change, cognitive restructuring, coping skills, continued monitoring, social support, and general lifestyle change, especially new social networks" (p. 38).

Correlates of Desistance and the Desistance Process

From the literature on desistance from crime, a number of factors emerge as clear correlates of desistance: a good marriage and family, change from association with deviant people to associating with law-abiding persons, cutting down on alcohol or drug use, stable employment, and change or maturation of identity. Their causal role in bringing an end to criminal activities is more open to question, because most studies are unable to distinguish other causal pathways, such as the selection effect, from the effect of factors leading to desistance (e.g., those who desist are more likely to be able to start a good marriage). However, some studies (Laub & Sampson, 2001) support the idea that, to some extent, there is a true causality between these factors and desistance.

The Edinburgh study (Smith, 2006) lends support to the idea that social structure and social context are more important for growing out of delinquency than the circumstances of the individual family. Bonds with family and school are important, but it is likely that the neighborhood context has an influence on the formation of these bonds. In-depth studies of criminal careers and desistance tend to find that desistance is a process that can occur in multiple stages. Various authors denote and name them somewhat differently, but all schemes seem to include similar sets of core elements. First, there is a stage of growing awareness of the problems caused by offending, or a growing motivation to find another way of life. Second, there is some conscious decision to stop; the decision or intention can become more "fixed" by publicly announcing it to one's friends or in front of a larger audience, which can also involve a change of personal identity in some dramatic way (e.g., religious conversion). Third, there is maintenance of the nonoffending behavior. This may involve a variety of conscious or unconscious actions that lead to dropping old relations and building new ones, and forming new daily routines that provide less tempting opportunities for crime. Fourth, there may or may not be lapses and relapses to criminal behavior, but, in a successful process, they will be limited in time and severity.

In terms of gender differences, females commit far less serious offenses than males and it is not surprising that research on their desistance from crime has been more limited than research on male desistance. Studies using quantitative data (Uggen & Kruttschnitt, 1998) have found that the correlates for desistance for females are similar to those for males. Age, marriage and family, and stable employment are positively correlated with desistance.

In qualitative studies, differences between male and female desistance have been found. For instance, becoming a mother seems to be more reliably linked with desistance from crime than becoming a father.

In Stephen Farrall's study of English probationers (2003), desistance was linked to the number of problems that probation officers saw in their probationers. Specifically, as the number of an individual offender's problems (e.g., family, finances, substance use) increased, the likelihood that he or she was able to desist decreased. Among those who had problems, desistance was linked to probation officers' estimates as to how well their probationers would be able to cope with those problems.

Maturation and Morality

As mentioned above, the peak of criminal activity for most people is in adolescence. Some years into adulthood a clear majority has stopped committing crimes. Hence, growing older is closely linked to desisting. The mechanisms that transmit this change, however, are open to debate. One possibility is that developmental change in late adolescence and early adulthood facilitates the acquisition or refinement of competencies and values that make criminal behavior less attractive or less acceptable to one's self. Most people mature with age and, as they do so, they gain greater control over their impulses and begin to value achievements that criminal activity would jeopardize. In other words, their values or goals change so that crime becomes less acceptable for them. Emotional, intellectual, and moral development is linked to this. As people age, they tend to turn toward more socially desirable, long-term goals. They may also gain competencies that make conventional alternatives to crime more attractive; for example, they pay more in terms of money, satisfaction, or acceptance by valued others.

In the British offending survey (Budd et al., 2005), the two most commonly cited reasons for stopping crime were that "I knew it was wrong" and "I grew up and/or settled down" (p. 50). These reasons were more often given by those who had been engaged in "traditional" crimes such as theft and damage to property, and somewhat less so by drug dealers.

> Only a quarter of former drug sellers said they gave up dealing because 'I knew it was wrong', while for other offences between 42 per cent and 59 per cent said this. Conversely, while a third of drug sellers said stopping using drugs was a reason why they gave up selling, this was mentioned by a very small proportion for property and violent offences. (Budd et al., 2005, p. 51)

If most people mature to be more law-abiding after adolescence, then it also means that their same-age peers are less delinquent than they used to be. Hence, if everybody becomes law-abiding, it is difficult to distinguish peer influence from the aggregate effects of all individuals growing older. However, research does suggest that peers have independent influence.

First, not everybody drops crime; some maintain a criminally active way of life. Second, qualitative studies suggest that losing delinquent friends and gaining conventional ones is often important for desistance and may require work and effort.

Growing Aversion for Risk

For most people, appetite for risk diminishes with age after adolescence. This tends to diminish their taste for crime as well, as most serious crime carries a heightened risk of negative consequences. Physical prowess also starts to decline after young adulthood, and one is less able to endure physical exertion or to function on very little sleep. These kinds of reasons come up in interviews with older long-career offenders. They get tired of the physical and psychological demands of crime.

Some adopt a new approach to the possibility of getting caught: that is, they do not want to be exposed to the risk of getting caught (Shover, 1996). They also adjust their mode of operation toward less risky directions. Maximum risks are present when society's condemnations are at their most severe and the chances of getting caught are the highest. Background operations are often safer than being a front-line actor. Hence, some offenders first start avoiding the highest risks and might, in the process, gain positions and qualifications that make it easier to phase out crime altogether, even if the latter transition may not seem to be a dramatic one. Some may also gain business partners in crime and, with some of them, it is possible to develop a wholly legitimate gainful cooperation, although little is known on this subject.

Changes in Adult Life

Some may "drift" back into normalcy without any serious decision to do so when their circumstances, their acquaintances, or the persons they socialize with change, or when new possibilities appear. A pattern of daily activities may develop that leaves little time for crime. The context of their lives may change so that noncriminal ways of achieving their goals are easier to follow. This occurs through the acquisition of adult roles that are often associated with familial and occupational responsibilities. Such roles make it less possible and less useful to engage in criminal activities. Of course, they are far from failsafe methods. Much depends on the quality and details of these matters. While getting married or falling in love will generally stop or reduce offending, it does not do so in every case. The spouses or lovers can be partners in crime and when the spouse encourages or condones offending behavior, it may be difficult for the other to abstain from crime. Findings from studies conducted in the United States suggest that while marriage correlates with reduction of or desistance from crime, cohabitation does not. It would be

interesting to know whether this holds true for those European countries where cohabitation is more common than in the United States. In terms of occupational responsibilities, having a daily schedule can be an influential factor. Working in a place that is supervised or controlled during the day, and spending evenings and weekends with a spouse and children leaves little time to commit crime. This also changes the type of people one has a chance to meet and leads to less contact with active criminals.

Childhood antisocial behavior predicts adolescent offenses, which in turn predicts adult offending, but not very strongly. Depending on the study and the definition used for crime and desistance, the figures for those that continue engaging in serious offenses range from very few to a large majority. Also, a great proportion of adult offenders, sometimes over one-half, have not been recorded for committing crimes before adulthood. Laub and Sampson's (2001) research suggests that changes in one's adult life are important for changes in a criminal career, irrespective of childhood and adolescent factors and the general effects of growing older. For instance, a good marriage and stable employment enhance the probability of desistance.

Turning Points: Inside and Outside Views

Many reformed offenders cite a memorable event in their lives as a turning point. It can be a dramatic change in one's interpersonal circles such as a birth in the family, death of a friend, divorce, falling in love, or a religious experience (Gadd & Farrall, 2004; Mulvey et al., 2004). The accounts by former offenders tend to emphasize their own conscious decisions, while accounts by social workers and probation officers often put more emphasis on changes in external circumstances or the possibility for offenders to use their personal talents and strong suits. It is uncertain, however, to what extent these are somewhat arbitrary reconstructions of the past, or to what extent true causes pushed the development in the law-abiding direction.

One possibility of stopping crime is to turn a deviant career into an asset where it can be used as a partial fulfillment of the qualifications of some jobs (Klingemann, 1999). These positions typically have to do with reintegration of criminals into society or as an information source for methods geared toward harm reduction. In most, if not all, countries, there are a number of prominent ex-criminals who have started a successful career in philanthropic work, rehabilitation, or running halfway houses for people struggling with alcohol or other drug problems. It also appears that almost all of these individuals have adopted a strong religious identity.

While it is certainly true that any former offender can, in principle, help society by altruistic acts, it is also probable that there are only a limited number of niches in which this can be turned into a positive, full-time career. Klingemann (1999) also points out that some can continue parallel careers in both a deviant and non-deviant world.

Against All Odds

A Swedish team (Haggård, Gumbert, & Grann, 2001) studied four former serious violent offenders who had been at a serious risk of reoffending, but "against all odds" had not done so. The offenders had been sentenced to prison several times for violent and other offenses, and they had received very high scores on tests that predict violence (Psychopathy Checklist Revised PCL-R, and the historical subset H.10 of the Historical-Clinical-Risk Management Model-20). However, they had not been reconvicted for any crimes for 10 years, even if they had spent at least the last 5 years outside of prisons and forensic hospitals. In their accounts of their desistance from crime, all four emphasized one specific event or factor that they saw as a turning point that had taken them from their criminal career to a law-abiding way of life. For three of them, it was linked to a conscious decision. For one of the three, it was the negative experience of the forensic psychiatric hospital where he was committed. Another spoke about his being arrested and how he had had time to think about his behavior. The third attributed his desistance from crime to the relationship with the woman he lived with (a contextual, social support factor) as well as his unpleasant experience at the forensic hospital. The fourth, a former sex-offender, attributed his desistance to an understanding psychiatrist who prescribed him anti-androgen medication. The fact that two of the men were physically disabled may have also contributed to their desistance.

All four offenders reported that they had stopped or decreased their use of narcotics and alcohol. However, two of them still occasionally used drugs but, on these occasions, they isolated themselves so as not to get into trouble. This links to a more general finding: contrary to standard accounts of desistance, these men did not reestablish links with conventional society (except for families for some of them). "The violent and highly antisocial men interviewed in this study had to isolate themselves in their efforts to live as noncriminals. The reason was that they did not feel comfortable or safe with others; they were unsure of their own reactions to different situations and others' responses to them" (Haggård et al., 2001, p. 1061).

Family Violence and Question of Change without Treatment

There is a popular view that domestic violence cannot be stopped unless the perpetrator undergoes treatment or a violence-stopping program. Challenging men and their alleged ideologies of male domination has been proffered as the most (and only) promising form of intervention that could stop their violence. Without this, the cycle of violence would keep repeating.

It is true that domestic violence is *often* repeated and prolonged. Many cases, generally, do conform to the famous Duluth Wheel of Abuse, with

cyclically alternating periods of violence and tranquility (Pence & Paymar, 1993). However, these conclusions are drawn primarily from clinical samples of women in shelters, who have experienced severe and prolonged forms of violence. The picture changes when samples more representative of the victims of all levels of violence are investigated (Johnson, 1995).

The major aspects of domestic violence that are reported in general population surveys on violence against women *do not* conform to the Duluth Wheel. For instance, Feld and Straus (1990) compared the 1985 U.S. National Family Violence Survey and the 1986 reinterviews of married respondents and found that a large proportion of abusers had discontinued their violence. One third of those who had committed three or more acts of severe violence in the first year committed no violence in the second year, 10% used minor violence, and 57% continued using severe violence. The majority (58%) of those who committed one or two severe acts in Year 1, used no violence in Year 2.

Other surveys have had similar findings. In the Finnish National Survey on Violence Against Women, among those women in a long-term relationship whose first violent victimization by their partner had occurred more than 10 years earlier, only 26% reported a violent episode from the most recent year (Heiskanen & Piispa, 1998). Taking into account the sizable missing data, this means that violence discontinued in 40 to 74% of these relationships. Presumably, very few of the men who had stopped using violence had attended any treatment for their violence. Similarly, using data from the U.S. National Youth Survey, Wofford, Elliott, and Menard found that almost one-half (48%) of offenders suspended violence in their marital relationships 3 years later (as cited in Laub & Sampson, 2001, p. 31). Using data from a community-based sample, Quigley and Leonard (as cited in Laub & Sampson, 2001, p. 31) found that about one-quarter (24%) of those men who had been aggressive during the first year of marriage had not been violent during the following 2 years. However, those engaged in serious violence were less likely to stop, as only 14% of them desisted at Year 2 and 3.

Recent research from industrialized countries demonstrates that the forms of partner violence are not uniform. There is the classic, severe, and escalating form of violence characterized by multiple physical and psychological forms of abuse and threats combined with increasingly possessive and controlling behavior on the part of the abuser. However, there is also a more moderate form of relationship violence, where continuing frustration and anger occasionally erupt into physical aggression (Johnson, 1995; Krug et al., 2002).

Thus, it is clear that some portion of domestic violence against women stops without any therapy or antiviolence educational programs for the perpetrator, and some of it also ends without any criminal justice intervention. On the other hand, surprisingly little is reliably known on the effectiveness of different treatments and reeducation programs for

domestic violence reoffenders. There are only a couple of randomized controlled experiments, which show no differences, but their weight as general evidence *against* treatment programs is compromised by other problems (see Wathen & MacMillan, 2003). In quasi-controlled experiments, such programs tend to fare better (Babcock, Green, & Robie, 2004), but they, of course, leave more room for possible selection biases (e.g., those who are more likely to desist because of some yet unknown background reason are more likely to enter and stay in an antiviolence program). The most consistent predictor of continued violence is severity at the time of prediction. Other predictors often found are psychological abuse, attempts at isolation of the partner, and the youth of the perpetrator (Johnson, 2003).

Conclusion

In short, a simplistic lesson from the movie "Angels with Dirty Faces" might be that no intervention is the best intervention in crime *overall*. However, this would be going too far and would also ignore the possibilities of general prevention and vicarious deterrence. That is, it is not quite true that the eventual law-abiding brother in the movie had no experience with the criminal justice system. He was *almost* caught, and he experienced his brother being caught. It may be that in some cases, near-misses and experiences that happen to individuals' loved ones are effective turning points in the development from criminal to noncriminal behavior.

In the British offending survey, it was found that being caught by the police, or fear that this could happen and the likely sentence that would result, was given as one reason for stopping crime by a substantial number of those who had not offended for the past year. The proportion varied from 5% to 33% by crime type and was largest among those who had admitted burglary, vehicle-related thefts, shoplifting, and drug selling (Budd et al., 2005). The authors note that the impact of an official sanction in deterring offenders appears to be "relatively strong, but certainly not the main factor" (pp. 50–51).

Punishment and its threat, then, seem to have an effect on desistance from crime. However, they should be used wisely and moderately. They should express blame but not make it more difficult for the offender to go back to a noncriminal way of life. Furthermore, they should not prevent the operation of the processes of spontaneous desistance.

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6.5
Self-Change from Stuttering: An Overview

Patrick Finn

What Is Stuttering?

Stuttering is a highly variable disorder characterized by involuntary disruptions in speech fluency that usually consist of sound or word repetitions, sound prolongations, and momentary blocks during which no or very little sound is emitted. These disruptions are often marked by noticeable struggle, effort, and muscle tension. Debilitating feelings about communication and oneself as a speaker often develop, as well as avoidance behaviors related to speaking, especially in certain situations such as talking on the telephone or speaking to strangers. Onset of stuttering is usually between the ages of 2 and 5 years, with more males than females presenting with long-term symptoms. Prevalence, or the number of cases at a given time, is 5% and incidence, or average life frequency, is 1% (Bloodstein, 1995). Current theories and research suggest that stuttering is a genetically predisposed, neurophysiological speech disorder (Brown, Ingham, Ingham, Laird, & Fox, 2005; Felsenfeld et al., 2000).

Natural Recovery during Early Childhood Stuttering

Most preschool and early school age children who stutter recover without treatment usually within the first few years of onset, with reported rates ranging from 50% to 74% (Brosch, Haege, Kalehne, & Johannsen, 1999; Mansson, 2000; Yairi & Ambrose, 1999). This recovery is often sufficiently complete that the children's recovered speech is perceptually indistinguishable from that of normally fluent children (Finn, Ingham, Ambrose, & Yairi, 1997). The mechanisms underlying early childhood recovery are still unclear. However, there is evidence to suggest that genetic factors may play a role because many children who recover without treatment are more likely to report a family history of recovery than children who continue to stutter (Ambrose, Cox, & Yairi, 1997). There are indications that environmental factors may also be important in promoting natural recovery. Parents whose children recovered without treatment often reported that they encouraged

their child to "slow down" or "stop and say it over" whenever stuttered speech occurred (Lankford & Cooper, 1974; Wingate, 1976).

Treatment studies suggest that, in fact, these parental admonishments may have had an ameliorative effect. Pointing to the natural recovery research as the basis for their treatment approach, Reed and Godden (1977), using an ABA study design, demonstrated that when two preschool children who stuttered were simply instructed by the clinician to "slow down" contingent on a moment of stuttering, their stuttering frequency was essentially reduced to zero and maintained for up to 8 months after treatment was terminated. Similarly, the Lidcombe program, which was also influenced by the natural recovery literature (Onslow, Costa, & Rue, 1990), developed a parent-administered, operant treatment for preschool children who stutter. Parents were trained to provide correction to their child contingent on a moment of stuttering (e.g., "Whoops, that was a bumpy word, can you say it nice and smooth?") and reinforce stutter-free speech (e.g., "Good talking, no bumpy words!"). Over 10 years of clinical research trials have provided compelling evidence for the efficacy of this approach, demonstrating long-term treatment gains with speech behavior that is stutter-free and comparable to normal peers (Onslow, Packman, & Harrison, 2003).

Treatment Approaches for Managing Stuttering After Childhood

For children who continue to stutter into their elementary school years and beyond, it is widely believed that the longer they live with the disorder, the more persistent and chronic it will become (Guitar, 1998). As a result, approaches to managing persistent forms of stuttering are usually more complex and place a greater emphasis on self-control or self-regulation. The two best-known approaches for addressing persistent stuttering are generally referred to as stutter modification, or attitude therapy, and speech modification, or behavior modification therapy.

The stutter modification approach is based on the premise that clients must learn to accept their stuttering and self-regulate their reactions to stuttering, such as minimizing or eliminating their avoidance and struggle behaviors (Manning, 2001). Thus, treatment goals focus on self-acceptance of one's stuttering and reducing negative attitudes toward oneself as a communicator. The speech modification approach is based on the view that replacement of stuttered with stutter-free speech depends on how well the clients can learn to self-manage and self-evaluate their speech behavior (Ingham, 1999). As a result, treatment goals are directed toward natural-sounding, stutter-free speech behavior and the development of self-measurement skills for evaluating that speech.

The evidence base to support these two approaches differs markedly. Although the stutter modification approach has existed for over 60 years and

has been widely advocated (Cordes, 1998), there have been few scientifically rigorous studies to evaluate its efficacy, and the few that have been conducted provided negative support (Blomgren, Roy, Callister, & Merrill, 2005). In contrast, the speech modification approach has considerable supportive evidence as demonstrated in both systematic reviews (Bothe, Davidow, Bramlett, & Ingham, 2006) and meta-analysis studies (Andrews, Guitar, & Howie, 1980). Regardless, there continues to be much dissatisfaction among clinicians concerning both approaches for managing stuttering, as expressed by their lack of confidence in their ability to implement the therapies and their doubts about their clinical effectiveness (Blaker, Harbaugh, & Finn, 1996–1997).

The Phenomenon of Untreated Recovery after Childhood

The conventional wisdom is that untreated recovery becomes increasingly less likely after childhood and the need for treatment becomes increasingly more likely (e.g., Guitar, 1998). Nonetheless, there is research suggesting that persistent stuttering is not always as intractable as widely believed. Review of the past research literature on untreated recovery shows that on average, 70.7% (range = 56.9–90%) of subjects estimated that their age of recovery was during adolescence or adulthood and that much of this improvement occurred without the benefit of professional help (Finn, 2004). More recent findings based on a sample of 103 adult participants, the largest sample of persons who recovered from stuttering without treatment, found that 57% reported that they had recovered at or after the age of 12 years, with an average age of recovery being 17.7 years of age (range = 12–35 years of age; Finn & Felsenfeld, 2006). It should be cautioned, however, that these studies perhaps underestimated the rate of early recovery because many adults who recovered during their preschool years are unlikely to recall that they ever stuttered.

Although untreated late recovery appears to be a well-documented phenomenon, the most widely used textbooks on stuttering (Ratner, 2001), while citing rates of early childhood recovery, rarely mention late recovery. It is unclear why this phenomenon has been essentially overlooked, but some authorities have argued that because these findings have often challenged long-held, widely favored views about persistent stuttering as an intractable disorder, they have basically been ignored or suppressed (Ingham, 1983; Wingate, 1976). The potential problem with ignoring the evidence that recovery occurs after childhood is that an incomplete, one-sided view of persistent stuttering is likely to prevail and have negative implications for theoretical and clinical perspectives of the disorder. For example, it is argued that adults who have recovered from stuttering without treatment might serve as a behavioral, cognitive, and neurophysiological benchmark for evaluating treatments for adolescents and adults who continue to stutter, while helping to identify the limits of recovery from a persistent disorder (Ingham, Finn, & Bothe, 2005).

Findings from Late Recovery Research

Methodological Challenges

The importance of investigating late recovery without treatment is sometimes overshadowed by troublesome methodological challenges. Retrospective designs have been the main approach for investigating late recovery. Because research subjects are being investigated when they are no longer presenting with stuttered speech behaviors, there have been questions concerning the validity of participants' claims that they did, in fact, once have a clinically valid stuttering problem (Ingham, 1983). Furthermore, it is important to establish that their recovery was reasonably independent of any formal treatment that might have been received for their stuttering. Obviously, if recovery was clearly linked to formal treatment, then it is no longer a valid sample of untreated recovery.

These two concerns have been recently addressed in the literature. First, since past speech behavior such as stuttering cannot be verified directly, the most practical approach for cross-checking participants' claims that they used to stutter is to obtain the judgments of persons who knew the participant in the past when they did exhibit a stuttering problem, such as a parent, sibling, or friend. At the same time, it is unclear if such nonprofessionals are capable of making correct judgments whether a person had a clinically valid stuttering problem. Finn (1996), however, demonstrated that nonprofessionals were able to reliably identify speech-related behaviors in participants' past speech that were consistent with behaviors reported in the extant stuttered speech of persons verified as individuals with persistent stuttering. In contrast, these behaviors were never reported in the speech of persons verified as normally fluent speakers. Thus, obtaining collateral reports is a viable method for independently verifying untreated recovered stutterers' claims that they used to stutter. In addition, because the speaker-based experiences of stuttering are sufficiently unique in terms of struggled speech and avoidance behavior, the recovered stutterers' self-reports of their past stuttering can provide further supportive evidence that their claims of past stuttering are valid.

Second, many late recovered stutterers report that they did receive some treatment for their stuttering when they were children, usually when they were in elementary or middle school. Almost always, they have reported that this treatment was ineffectual or, if it did have any benefit, it was short-lived and their recovery did not occur until several years later when they were adolescents or older. This alone, in most cases, is supportive evidence that their recovery occurred independent of treatment because there is no reason to believe that unsuccessful treatment would somehow result in benefits several years later. In addition, treatment outcome studies have shown that most relapses from treatment gains usually take place within 6 months following the termination of treatment (Finn, 1998). Thus, even when exposed to formal treatment, recovery that occurs several years later is most likely independent

of that treatment. More importantly, when such untreated recovery does occur, the recovered speakers often attribute improvement to their own efforts or self-change.

Mechanisms of Self-change

Self-change as a possible mechanism for late untreated recovery from stuttering has been recognized for centuries. Bormann (1969), for example, described an account of the seventeenth century Colonial American clergyman and author, Cotton Mather, who self-managed his stuttering when he was 18 years old by practicing speaking slowly and deliberately. An early report by Heltman (1941) presented an account of a male who, during his high school and college years, overcame his severe stuttering by developing public speaking skills and actively competing in speaking contests and debates. Freund (1970) described a self-improvement program that he began when he was 35 years old that included practicing speaking in a smooth, melodic manner in various situations that led to reductions in his avoidance behavior. More recently, Anderson and Felsenfeld (2003) detailed three individuals who recovered after childhood without the benefit of treatment and categorized their reasons for recovery as a conscious decision to change, an increase in self-confidence, and active changes in speech behavior.

The most convincing accounts, however, have emerged from several surveys of recovered speakers. Finn (2004) examined these findings by focusing on the subjects' explanations as to why their late recovery from stuttering occurred without treatment. The results of this review revealed that self-change was the most frequently reported reason for recovery. Table 6.5.1 lists these reports along with the percentage of subjects who reported self-change. Self-change was defined in this review as recovered stutterers who managed or modified their own behavior, thoughts, or feelings in order to control or eliminate their stuttering without the benefit of professional help. Some examples of subjects' statements regarding the reasons for their untreated recovery are provided in Table 6.5.2. As these brief statements suggest, late recovered subjects describe a clear motivation to change, a shift toward a more positive attitude concerning their speaking abilities or themselves, and a conscious or willful change in their manner of speaking.

TABLE 6.5.1. Percent of subjects reporting self-change as a basis for late recovery.

Author(s)	Total *N*	Self-change
Johnson (1950)	*N* = 23	60.8%
Shearer & Williams (1965)	*N* = 58	69.0%
Wingate (1964)	*N* = 50	66.0%
Martyn & Sheehan (1968)	*N* = 48	62.5%
Quarrington (1977)	*N* = 27	74.0%
Finn (1996)	*N* = 15	78.6%

Table 6.5.2. Examples of respondents' statements when asked for reasons for untreated late recovery.

Respondent 1: "I finally just told myself 'Enough of that' and sat back down and never looked up the rest of the period. And went home after school. And I can't tell you how long I sat in front of that mirror but it was a long time. And there at the end I made a decision that instead of hiding behind this problem I was gonna fight it. I was gonna be the first one to raise my hand and just work my way through it."
Respondent 2: "I don't know, but I think I can guess a little bit. I think it's as I became more mature, and as I became more in control of my emotions, I think that contributed to it. And I think as I got older and I became more self-confident, I think that contributed to it. I also employed sometimes a little technique, and I have done this in later years, more recent years, and that is to increase the volume of my speech. And whether that creates a bit more airflow or more deliberacy or whatever, it seems to help. Not that I need that much help these days at all. But that could help."
Respondent 3: "So to overcome it I decided that I would teach myself, prove to myself that I could pronounce every sound in the English language. So I wrote a vast chart of sounds, like B-A-T would be bate, bat, bought, bot. And I practiced saying them until I could say the Bs."

Are These Accounts of Self-Change Credible?

The fact that subjects may attribute their recovery to self-management of their own speech behavior or thoughts and feelings related to speaking does not necessarily mean that this is the actual reason for their improvement. However, these descriptions of recovery by self-directed means are often remarkably similar to the clinical routines clients are instructed to follow in many well-known treatment programs (Finn, 2004; Ingham et al., 2005). In fact, systematic changes in speech behavior such as slowing down are well-established as effective treatment agents for long-term clinical reductions in stuttering (Bothe et al., 2006; Cordes, 1998) and there are compelling theoretical reasons (Perkins, 1989), as well as empirical evidence from treatment outcome research (Craig, 1998), to suggest that changes in attitude, especially increased self-confidence, are critical to long-term maintenance of treatment gains. Perhaps, most important of all, self-management and self-evaluation have been key features of several successful treatment outcome studies (Bothe et al., 2006; Craig, 1998; Finn, 2007). Thus, while it may be difficult to establish a direct link between reports of self-management and improvements in stuttering without treatment, it appears likely that these are credible accounts for late recovery until research suggests otherwise.

Outcomes of Self-Managed Late Recovery

How long do the gains from late recovery without treatment endure? The answer to this question is limited to only two studies; however, the findings from these reports indicate that recovery associated with self-change is remarkably long. Finn and Felsenfeld (2006) reported that the average duration of late recovery for subjects (n = 103) who had recovered during adolescence (i.e., recovered at

or after age 12 years) was 20.9 years with a range of 1 to 65 years. Finn, Howard, and Kubala (2005) also found a long duration of recovery of 31.4 years with a range of 13 to 68 years (this finding is based on 14 of the 15 subjects in this report as the one remitted subject recovered during early childhood). Moreover, this investigation also included speech behavior measures and self-report outcomes for untreated recovery, which will be described below.

Based on investigator judgment or subject self-report, outcomes of late recovery without treatment have suggested that the subjects' speech behavior is normally fluent in most cases, but there still may be an occasional tendency to stutter (see for review, Finn, 2004). The percentage of subjects reporting a tendency to still stutter ranged across early studies from 9% (Johnson, 1950) to 64% (Shearer & Williams, 1965). Findings from more recent studies, however, have been more consistent with a range of 60% (Finn, 1997) to 72.8%, with the latter based on a sample size of 103 subjects (Finn & Felsenfeld, 2006).

Listener judgments of the speech behavior of late recovered speakers, based on videotaped speech samples, have revealed that their speech is perceptually distinguishable from normal controls (Finn, 1997; Finn et al., 2005). Not surprisingly, it is the speakers who still report an occasional tendency to stutter that contributes to this perceptual difference. In contrast, those speakers who no longer reported a tendency to stutter were indistinguishable from the normally fluent speakers. Nonetheless, the speech quality of all the recovered speakers was rated by listeners as more natural sounding than the speech of clients who had been successfully treated for their stuttering (Finn, 1997).

Based on self-report data, Finn et al. (2005) have also found that self-managed late recovered stutterers no longer experienced the pervasive negative attitudes commonly reported by persistent stutterers or any overwhelming barriers to communication. Perhaps most importantly, they appeared to be confident that whenever stuttering did occur they would be able to regain their fluent speech. They also seemed especially sensitive to mental states or feelings that might prompt stuttering. Yet, when they found themselves in these circumstances, they thought of implementing strategies for dealing with or repairing any possible stuttering. This finding replicated the results reported by Anderson and Felsenfeld (2003), that recovered stutterers indicate that some ongoing level of vigilance is required for maintaining fluency despite the fact that they had been recovered for many years. It is also consistent with reports in the behavior modification literature suggesting that client vigilance and implementation of proactive strategies are important for managing lapses in order to ensure long-term maintenance of treatment gains for chronic problems (Kirschenbaum & Tomarken, 1982).

Recent Findings and Future Directions

As this overview has suggested, self-managed late recovery from persistent forms of stuttering is possible and this recovery is often enduring. It is also clear, however, that improvement is not always complete. Some late

recovered speakers continue to have residual stuttering, and although it is infrequent and readily controllable, they also report that they do not experience any sense of handicap and are essentially completely functional as everyday communicators (Finn et al., 2005). Future research will need to examine why some individuals are able to self-manage a complete recovery and others are not. Two hypotheses appear to be plausible. The first is that residual stuttering may represent the limits of any recovery, treated or untreated, because the diminished capacity for neural plasticity in adulthood may place constraints on expectations for producing a completely normally fluent speaker (Ingham et al., 2005). Related to this are recent findings that there may be a significant genetic factor that governs recovery from stuttering without treatment (Felsenfeld & Finn, 2003); thus, there may be some genetic component that places limits on recovery. The second hypothesis is that self-managed recovery may be imperfect, at least for some individuals, because they are nonprofessionals and further improvement could be possible with formal treatment (Finn, 2004).

Recently published findings related to the neurophysiological aspects of recovery, based for the most part on speakers who had recovered without treatment after childhood, have all suggested that these speakers' neurological systems have not completely normalized (Forster & Webster, 2001; Ingham, Ingham, Finn, & Fox, 2003; Mouradian, Paslawski, & Shuaib, 2000). Interestingly, some of these speakers (see Ingham et al., 2003) were also self-managed late recovered speakers who no longer reported a tendency to stutter, had been judged by listeners to be indistinguishable from normally fluent controls, and from an experiential perspective, also reported complete recovery from stuttering (see Finn et al., 2005). Yet, the neurophysiological evidence based on brain imaging findings suggested that although their neural systems no longer resembled those of adults who still stutter, they also did not function in the same manner as normal controls (Ingham et al., 2003). Clearly, further research is necessary to determine the impact of neurological normalcy and the relationship between normalcy and behavior. Self-managed late recovered speakers may provide one avenue for looking at these relationships.

Finally, it is clear that self-managed late recovered speakers are achieving long-term improvements in their stuttering that even clinicians would envy. Thus, it would seem logical that future research needs to further investigate what this population can tell us about procedures that can be incorporated into interventions for helping those who continue to stutter.

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