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Gender Differences in Early Maladaptive Schemas in a Treatment-Seeking Sample of Alcohol-Dependent Adults

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Abstract

The current study examined early maladaptive schemas among alcohol-dependent men and women and sought to determine whether men and women differed in their early maladaptive schemas. Using preexisting patient records of adults diagnosed with alcohol dependence from a residential treatment center in the Southeastern United States, from 2005 to 2010 ($N = 854$), results showed that women scored significantly higher than men on 14 of the 18 early maladaptive schemas assessed. Both women and men endorsed having a number of early maladaptive schemas, with four schemas being particularly prevalent across gender. Study limitations are noted and implications of these findings for treatment and future research are discussed.

Keywords

alcohol; treatment; early maladaptive schemas; cognitive therapy

INTRODUCTION

Alcohol dependence is a prevalent problem throughout the United States and the world. Recent estimates indicate that each year approximately 3.81% of the United States population meets the *Diagnostic and Statistical Manual, Fourth Edition* (DSM-IV; American Psychiatric Association, 1994) criteria for alcohol dependence (Grant et al., 2006). In fact, alcohol dependence is one of the most common mental health disorders in the world and causes considerable negative consequences (World Health Organization, 2001). For instance, in 1998, the last year this statistic was available, alcohol disorders were associated with approximately 184.6 billion dollars in economic costs each year (Harwood, 1998). A large portion of this economic cost is due to such negative consequences of alcohol use as violent crime, which is often preceded by alcohol use (Grant et al., 2006; Greenfield, 1998). Because problematic alcohol use is preventable and treatable, there is a need for continued research on factors that may place individuals at risk for consuming problematic levels of alcohol. Such variables could be targeted in treatment programs. Toward this end, the current study examined the early maladaptive schemas of a large sample of treatment-seeking alcohol-dependent adults and investigated whether these schemas were different for men and women.

Early Maladaptive Schemas

Beck (1967) was the first to propose the cognitive construct of schemas. He proposed that schemas, whether adaptive or maladaptive, are cognitive structures that individuals use for coding, screening, and interpreting information that individuals encounter in their environment. Although schemas can develop at any stage of development, it is theoretically believed that the majority of schemas first develop during early childhood and that they are perpetuated throughout the life span (Young, Klosko, & Weishaar, 2003). Because schemas represent core themes through which individuals interpret their environment, schemas set the stage for how individuals process experiences and stimuli throughout their lives (Young et al., 2003).

While the majority of schemas that individuals develop are adaptive throughout their entire lives, early maladaptive schemas are highly dysfunctional. Early maladaptive schemas, defined as "enduring and pervasive themes about oneself, others, and the world" (Ball, 2007, p. 307), fit closely with the concept of core beliefs, guiding how individuals interpret and respond to stimuli in their environment. Early maladaptive schemas are believed to develop through traumatic and toxic experiences during childhood, particularly experiences that involve one's family of origin and primary caretakers (Ball, 2007; Young, 1994; Young et al., 2003). Early maladaptive schemas are thought to generate high levels of negative affect and self-defeating consequences, and often interfere with meeting an individual's basic needs for connection, autonomy, and self-expression (Young et al., 2003). As with all schemas, early maladaptive schemas are perpetuated throughout childhood, adolescence, and adulthood, rendering them highly pervasive and resistant to quick change (Ball, 2007). Indeed, research has demonstrated that early maladaptive schemas are stable across multiple years (Riso et al., 2006). Young and colleagues (2003) have speculated that all early maladaptive schemas can be triggered and activated by everyday events and moods, specifically events and mood states that are dysfunctional and likely to cause emotional distress. In turn, the emotional distress caused by schema activation can result in highly dysfunctional interactions with others and maladaptive coping responses (Young et al., 2003). Further, Young and colleagues (2003) speculate that early maladaptive schemas may underlie a number of Axis I and Axis II problems, and research has shown early maladaptive schemas to be associated with a range of mental health problems, including depression (Riso et al., 2006), eating disorders (Waller, Meyer, & Ohanian, 2001), post-traumatic stress disorder (Cockram, Drummond, & Lee, 2010), and personality disorders (Ball & Cecero, 2001). Thus, early maladaptive schemas may represent a generic vulnerability to a range of mental health problems.

Recent advances in the assessment of early maladaptive schemas have resulted in 18 common, core schemas that individuals can possess (Young et al., 2003). As displayed in Table 1, these 18 early maladaptive schemas can be grouped into five separate domains (see Young et al., 2003, for an in-depth discussion of each schema). Because early maladaptive schemas cause significant emotional distress, a number of coping responses are theorized to develop to help individuals alleviate their distress (Young et al., 2003). However, the vast majority of these coping responses are dysfunctional, generate a high level of avoidance behavior, and even result in substance use as a key coping mechanism (Ball, 1998, 2007).

Substance Use and Early Maladaptive Schemas

Because Young and colleagues (1994, 2003) have postulated that early maladaptive schemas, and the dysfunctional coping behaviors they produce, may underlie substance use disorders, Ball (1998) proposed potential ways in which early maladaptive schemas may be relevant to the treatment of substance use. There is a wealth of research that suggests that substance use treatment outcomes can be improved when treatment also focuses on

maladaptive personality traits (e.g., Alterman & Cacciola, 1991; Messina, Farabee, & Rawson, 2003; Nace, Saxon, & Shore, 1986). Because research and theory suggest that early maladaptive schemas are pervasive and enduring characteristics, similar to personality traits (Ball, 2007; Young et al., 2003), Ball (1998) hypothesized that a focus on early maladaptive schemas may improve treatment outcomes. Ball (1998, 2007) therefore developed Dual Focus Schema Therapy (DFST) for the treatment of substance use. In combination with Marlatt and Gordon's (1985) relapse prevention model for substance use, DFST also employs the techniques and theory of schema therapy, as outlined by Young and colleagues (1994, 2003). That is, DFST attempts to modify and reduce early maladaptive schemas to a manageable level through cognitive restructuring, experiential work (e.g., imagery), behavioral skills (e.g., coping skills training), and the therapeutic relationship (Ball, 1998). It is unlikely that DFST will result in complete removal of early maladaptive schemas. Rather, the goal in DFST is to reduce belief in the schemas, leading to a reduction in the influence that they have over one's life while also reducing maladaptive coping responses in the face of schema activation. Although the initial results of this treatment approach appear promising (Ball, 2007), such that it is associated with reduced substance use and schema improvement, there is a dearth of research on the early maladaptive schemas of substance use patients and alcohol-dependent individuals specifically.

To date, only a handful of studies have examined the early maladaptive schemas of substance users. Using a sample of alcohol abusers[1] ($n = 44$), opiate users ($n = 36$), both alcohol misusers and opiate users ($n = 17$), and a nonclinical sample of individuals not misusing alcohol or opiates ($n = 87$), Brotchie, Meyer, Copello, Kidney, and Waller (2004) found that the clinical groups had more unhealthy early schemas than the nonclinical group. In addition, the alcohol groups endorsed greater levels of subjugation, vulnerability, and emotional inhibition than the other groups. Decouvelaere, Graziani, Gackiere-Eraldi, Rusinek, and Hautekeete (2002) found that alcohol-dependent individuals ($n = 46$) scored higher on almost all of the early maladaptive schemas than a nonclinical group ($n = 50$). Lastly, Roper, Dickson, Tinwell, Booth, and McGuire (2010) found that an alcohol-dependent group ($n = 50$) scored significantly higher on all early maladaptive schemas than a nonclinical group ($n = 50$), with the exception of unrelenting standards, self-sacrifice, and entitlement. Across these three studies, it is clear that alcohol-dependent individuals report greater early maladaptive schema scores than nonalcohol-dependent individuals, indicating that early maladaptive schemas are highly relevant for individuals dependent on alcohol.

It should be noted that one of the major limitations of the existing studies on the early maladaptive schemas of alcohol-dependent individuals is the use of small sample sizes. Larger sample sizes will allow researchers to determine whether specific early maladaptive schemas are more or less likely to be present in individuals presenting with alcohol dependence. In addition, larger sample sizes would allow for men and women to be compared on early maladaptive schemas, which have yet to be examined in an alcohol-dependent sample of adults. Knowledge regarding whether early maladaptive schemas vary among men and women could provide researchers and clinicians with important information that could be used to tailor alcohol dependence treatment for each gender. Furthermore, all existing studies on early maladaptive schemas among substance users have examined Young's older conceptualization of early maladaptive schemas, which generally contained 15 or 16 schemas, not the more contemporary conceptualization of 18 early maladaptive schemas (i.e., Young et al., 2003).

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[1]The journal's style utilizes the category *substance abuse* as a diagnostic category. Substances are used or misused; living organisms are and can be *abused.* Editor's note.

Therefore, the current study sought to examine the prevalence of early maladaptive schemas in a sample of treatment-seeking alcohol-dependent adults. To our knowledge, this is the first study to examine the 18 early maladaptive schemas identified by Young and colleagues (2003) in a substance use sample, as previous research has only examined earlier versions of Young's schema conceptualization. We also sought to examine whether early maladaptive schemas were different for men and women. Owing to a lack of research on this topic specifically, no definitive hypotheses were provided. However, consistent with past work in this area, it was expected that patients would endorse high levels of early maladaptive schemas.

METHOD

Participants and Procedures

Preexisting patient records from an adult residential program (ARP), an inpatient substance user treatment program, located in the Southeastern United States, were reviewed for the current study. This treatment program is a 30-day residential program that is guided by the 12-step model and also places a heavy emphasis on the identification and treatment of patients' early maladaptive schemas. The treatment center only admits patients into the facility if they have a primary substance use disorder diagnosis and are approximately 25 years of age or older.

As part of each patient's initial assessment upon admission to the treatment facility, a number of self-report measures and semistructured interviews are completed. Diagnoses, which are based on the DSM-IV criteria for mental health disorders (American Psychiatric Association, 1994), are made through consultation with a psychiatrist, a Ph.D. Licensed Psychologist, and substance use counselors.

Patient records were searched from January 2005 to November 2010 to identify patients with a primary diagnosis of alcohol dependence with no comorbid substance use disorders. This resulted in a total of 854 patients diagnosed with alcohol dependence only. The majority of patients were men ($n = 628$, 73.5%) and the mean age of patients was 43.5 ($SD = 10.3$). Ethnically, the majority were non-Hispanic Caucasian (87.1%), with the remaining patients being African American (5.7%), Hispanic (0.9%), and "other" (e.g., Multiracial, Native American, etc.; 0.9%). Some patients did not indicate their race (5.4%). At the time of admission to the treatment facility, 48.4% were married, 21% were divorced, 19.8% were never married, and 10.8% indicated "other" (e.g., widowed, life partner, etc.). The majority of patients were employed full time (59%) prior to admission into the treatment facility. Of all the demographic variables, men and women were only significantly different from each other on age $t(852) = 1.971$, $p = .05$, with women ($M = 44.7$, $SD = 9.3$) being slightly older than men ($M = 43.1$, $SD = 10.6$).

Measures

Demographics—Upon admission to the treatment facility, patients were asked a number of demographic questions, including their age, gender, race/ethnicity, relationship status, and employment status.

Early Maladaptive Schemas—As part of their initial intake assessment, patients completed the Young Schema Questionnaire—Long Form, Third Edition (YSQ-L3; Young & Brown, 2003). The YSQ-L3 is a 232-item self-report measure that assesses 18 early maladaptive schemas. Each question is rated on a 6-point scale (1 = completely untrue of me; 6 = describes me perfectly), where respondents indicate how much each item describes themselves. A score of 4 or greater on each item contributes to the overall total score for

each schema, as a response of 4 or greater is indicative that that particular schema may be relevant to the individual. The 18 early maladaptive schema subscales, and possible score ranges for each, are as follows: emotional deprivation (0–54), abandonment (0–102), mistrust/abuse (0–102), social isolation (0–60), defectiveness (0–90), failure (0–54), dependence (0–90), vulnerability (0–72), enmeshment (0–66), subjugation (0–60), self-sacrifice (0–102), emotional inhibition (0–54), unrelenting standards (0–96), entitlement (0–66), insufficient self-control (0–90), approval seeking (0–84), negativity/pessimism (0–66), and punitiveness (0–90) (Young & Brown, 2003; Young et al., 2003; see Table 1).

Using the established cutoff scores for each early maladaptive schema (i.e., Young & Brown, 2003), all the schemas can be divided into low, medium, high, or very high schema endorsement. When scores fall into the *high* and *very high* range, it indicates that an individual likely has that particular maladaptive schema; scores of *medium* indicate that a particular schema may be present in an individual and should be given attention/assessed further; and scores of *low* indicate that a particular schema is likely not present in an individual (Young & Brown, 2003). The YSQ has demonstrated good validity and reliability (Cockram et al., 2010; Saariaho, Saariaho, Karila, & Joukamaa, 2009).

RESULTS

All statistical analyses were run using SPSS 18.0. Schema scores were first examined for normality of data, with results showing nonnormality of schemas to not be a problem based on skewness and kurtosis. Thus, analyses that assume normality of data were used. Bivariate correlations among early maladaptive schemas were run for men and women separately.[2] For men, all early maladaptive schemas were significantly associated with each other, with the majority of correlations falling close to .40 or higher in magnitude. A similar pattern of findings was observed for women, although there were a few schemas that were not significantly associated with each other. The majority of correlations for women also fell close to a magnitude of .40. These findings show that having one early maladaptive schema is associated with an increased chance of having additional early maladaptive schemas.

Table 2 presents the difference in mean scores for early maladaptive schemas among men and women. The *t*-tests were used to examine potential gender differences in early maladaptive schema scores. Effect sizes (*d*) were also calculated by comparing the mean schema scores of men and women, divided by their pooled standard deviations (Cohen, 1988). According to Cohen (1988), a small effect size is equal to a *d* of .20, a medium effect size is equal to a *d* of .50, and a large effect size is equal to a *d* of .80. Women scored significantly higher than men on 14 of the 18 schemas. These 14 schemas included emotional deprivation, $t(852) = 4.466$, $p < .001$; abandonment, $t(852) = 3.739$, $p < .001$; mistrust/abuse, $t(852) = 2.693$, $p < .01$; social isolation, $t(852) = 4.104$, $p < .001$; defectiveness, $t(852) = 3.680$, $p < .001$; failure, $t(852) = 4.217$, $p < .001$; dependence, $t(852) = 3.749$, $p < .001$; vulnerability, $t(852) = 2.082$, $p < .05$; enmeshment, $t(852) = 5.065$, $p < .001$; insufficient self-control, $t(852) = 3.362$, $p < .01$; subjugation, $t(852) = 6.158$, $p < .001$; self-sacrifice, $t(852) = 4.458$, $p < .001$; approval seeking, $t(852) = 3.953$, $p < .001$; and negativity/pessimism, $t(852) = 2.482$, $p < .05$. Men did not score significantly higher than women on any of the early maladaptive schemas. All effect sizes fell under the "low" category, although the effect size for subjugation approached "medium" ($d = .44$).

Table 3 displays the differences in clinical interpretations for the YSQ scores for each early maladaptive schema for men and women. Schemas rated as high or very high indicate that a

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[2]Owing to the large correlation table associated with 18 early maladaptive schemas for each gender, and because almost all of the intercorrelations were statistically significant, this table is not presented. The table is available from the first author upon request.

particular schema is present in an individual. The four schemas rated most often as high/very high for men were self-sacrifice, unrelenting standards, punitiveness, and insufficient self-control. For women, the four schemas rated most often as high/very high were self-sacrifice, unrelenting standards, insufficient self-control, and punitiveness. Thus, men and women identify with similar early maladaptive schemas, although women are more likely to rate insufficient self-control and self-sacrifice as problems than men (see Table 2). For all early maladaptive schemas, whether for men or women, at least 10% of the patients were identified as high or very high for each schema.

DISCUSSION

The purpose of the current study was to examine the prevalence of early maladaptive schemas in a treatment-seeking sample of alcohol-dependent adult men and women, and whether schemas were different for men and women. The current study expanded upon previous research by using a large sample of inpatient alcohol-dependent adults and by examining gender differences in early maladaptive schemas. Furthermore, this was the first study to examine Young and colleagues' (2003) contemporary conceptualization of early maladaptive schemas among substance users. Overall, the results showed that men and women did indeed differ on a number of early maladaptive schemas, that the presence of early maladaptive schemas was high, and that there are particular schemas that may be highly relevant to alcohol-dependent patients.

Findings showed that women scored higher than men on 14 of the 18 early maladaptive schemas. It should be noted that men did endorse high rates of early maladaptive schemas too, although women endorsed even greater severity. There are a number of possible reasons for this pervasive gender difference in early maladaptive schemas. For instance, these findings could be interpreted as consistent with research that shows women often have greater rates of Axis I symptomatology, such as depression (Blazer, 2000), and present for alcohol dependence treatment with more mental health issues other than alcohol use than men (Foster, Peters, & Marshall, 2000). Therefore, it is possible that alcohol-dependent women are more likely than alcohol-dependent men to have predispositions to develop problematic early maladaptive schemas. Alternatively, because research and theory suggest that persistent Axis I symptoms may be tied with underlying early maladaptive schemas (Young et al., 2003), it is possible that the gender differences often seen in Axis I symptomatology are responsible for the gender differences found in the present study. In addition, research has shown that women are often more likely to experience traumatic childhood experiences than men, such as childhood sexual abuse (Bolen & Scannapieco, 1999), and traumatic childhood experiences are theorized to be partially responsible for the development of early maladaptive schemas (Young et al., 2003). Thus, research is needed to determine the etiological factors that may be responsible for gender differences in early maladaptive schemas during adulthood.

Although there were a large number of significant gender differences in early maladaptive schemas, the four most prevalent schemas for men and women were similar, suggesting that alcohol-dependent men and women may be more likely to struggle with certain core issues. The schemas of self-sacrifice, unrelenting standards, insufficient self-control, and punitiveness were the four most common schemas endorsed by patients. Self-sacrifice was the schema endorsed most often by both men and women. This schema is characterized by focusing excessive amounts of attention on meeting the needs of other people at the expense of focusing on one's own needs and desires (Young et al., 2003). Individuals with self-sacrifice often feel overresponsible for taking care of other people, which can result in a lack of emotional fulfillment for oneself (Young et al., 2003). One possible explanation for why this schema is extremely prevalent among the sample of alcohol-dependent men and women

used in the current study is that participants may have used alcohol as a mechanism to cope with the lack of personal fulfillment and focus on one's own needs not being met. Indeed, research shows that avoidance of schema-level beliefs is associated with increased alcohol use severity (Brotchie, Hanes, Wendon, & Waller, 2007). Future research is needed, however, to determine if the above hypothesis is indeed supported.

It is also possible that the schemas of unrelenting standards, punitiveness, and insufficient self-control are associated with alcohol use due to individuals attempting to cope with these schemas through the use of alcohol. Unrelenting standards is characterized by the belief that one must continually strive to meet high internalized standards of behavior. These individuals often experience intense pressure to perform well, which results in intense anxiety about the possibility of not living up to their internalized standards (Young et al., 2003). The schema of punitiveness is often tied with unrelenting standards, as these individuals believe that they, or other people, should be harshly punished for their mistakes. Because individuals with unrelenting standards can rarely live up to their internalized standards, it is common for them to punish themselves for their "mistakes" (Young et al., 2003). Finally, insufficient self-control is characterized by a lack of ability to exert self-discipline over a broad range of life domains, not just substance use, and appropriately restrain one's emotions and impulses (Young et al., 2003). The extreme pressure associated with unrelenting standards, the criticalness associated with punitiveness, and the lack of self-discipline associated with insufficient self-control all may lead some individuals to consume alcohol as a method to cope with these maladaptive schemas.

Another interesting question to be addressed by future research is how early maladaptive schemas are associated with Axis I and Axis II problems in alcohol-dependent individuals. Ball and Cecero (2001) showed that different schemas were associated with avoidant, borderline, depressive, and antisocial personality disorders among methadone maintenance patients. In addition, research indicates that individuals with alcohol dependence have high rates of personality disorders (Echeburua, Medina, & Aizpiri, 2007; Kessler et al., 1997), and information regarding how early maladaptive schemas are associated with personality disorders among alcohol-dependent individuals could provide useful clinical information. Thus, research is needed that examines how Axis II (and Axis I) problems are associated with early maladaptive schemas. This knowledge may help treatment providers to simultaneously target early maladaptive schemas and comorbid mental health problems.

Treatment Implications

Findings from the current study support Ball's (1998, 2007) supposition that early maladaptive schemas are highly represented in substance use populations. Theoretically, early maladaptive schemas are thought to be a cause of substance use as a mechanism to cope with their early maladaptive schemas (Young et al., 2003). Indeed, research has shown that individuals who generally cope with their early maladaptive schemas with avoidance coping styles have greater alcohol use severity (Brotchie et al., 2007). Thus, targeting early maladaptive schemas may be one way to help reduce alcohol use, as patients could be taught more adaptive ways of coping with their schemas as well as means of modifying these maladaptive thought patterns. Although there have yet to be randomized controlled trials to evaluate the efficacy of Ball's DFST for substance use, preliminary research suggests promising outcomes using this approach (Ball, 2007). Findings from the current study support the potential benefit of targeting early maladaptive schemas in alcohol-dependent men and women, which could consist of using Ball's DFST approach. Strategies specific to schema therapy (Young et al., 2003), such as cognitive, behavioral, and experiential strategies, could all be used to target and modify the existing early maladaptive schemas and to determine whether schemas are contributing to alcohol use. Because findings from the current study indicate that all 18 early maladaptive schemas are present in alcohol-

dependent men and women at varying degrees, specialized interventions for each specific schema (e.g., Young et al., 2003) could be used to help target each schema specifically.

Limitations

When interpreting the findings from the current study, it is important to consider its limitations. The cross-sectional design precludes the determination of causality among variables, and thus, longitudinal designs are needed. In addition, despite theory and research that indicate that early maladaptive schemas are indeed stable across time, the cross-sectional nature of the current study does not allow us to determine whether patients' early maladaptive schemas were stable across time and contributed to the initiation of problematic alcohol use. There was also no measure of alcohol use/dependence severity, which hindered the determination of whether early maladaptive schemas were more prevalent for individuals with severer alcohol problems. Future research would benefit from including standardized measures of alcohol use severity. Furthermore, there was no measure available that assessed Axis I and Axis II symptomatology to determine whether these symptoms could partially or fully account for the gender differences obtained in the current study. Since we did not use structured diagnostic interviews to determine patient diagnoses, we cannot be as sure that all of the patient diagnoses were accurate.

An additional limitation is that the sample was composed of primarily non-Hispanic Caucasian patients, making it difficult to generalize the findings to more diverse populations. Further, the treatment sample utilized hinders the generalizability of these findings to nontreatment-seeking samples. As with most self-report measures that assess sensitive, emotional issues, such as early maladaptive schemas, social desirability may have influenced reports on the YSQ. Future research would benefit from examining whether social desirability affects responses to early maladaptive schemas. For instance, self-sacrifice can be viewed as desirable and altruistic (Young et al., 2003), and it is possible that patients identified with this schema, in part, due to social desirability. Future research would also benefit from examining additional models of schemas in conjunction with Young and colleagues' (2003) model. For instance, Stein (1996) and Stein and Corte (2007) have discussed the interrelatedness of positively and negatively valanced self-schemas among individuals with eating disorders. Research could extend this work into substance users and determine how they are associated with Young and colleagues' (2003) schema model, as Young's conceptualization of schemas is focused on only negative, maladaptive schemas.

CONCLUSIONS

In summary, the current study was the first empirical investigation, to our knowledge, to examine gender differences in early maladaptive schemas among treatment-seeking alcohol-dependent adults. This was also one of the first studies to examine Young and colleagues' (2003) 18 early maladaptive schemas among substance users, as previous research examined Young's (1994) early conceptualization of schemas. Research and theory suggest that early maladaptive schemas may underlie alcohol use, with alcohol use potentially being a mechanism to cope with early maladaptive schemas (Brotchie et al., 2007; Young et al., 2003). Findings showed that women scored higher than men on 14 of the 18 early maladaptive schemas, although the most common schemas for men and women were similar. Thus, the results from the current study suggest that early maladaptive schemas may be an important area of intervention for alcohol dependence, through the use of schema-focused interventions, such as DFST.

GLOSSARY

Early maladaptive schemas	Adapted from Young and colleagues (2003), refers to enduring and pervasive cognitive, behavioral, and emotional patterns that shape how individual interpret and respond to stimuli in their environments. Is similar to the concept of core beliefs

References

Alterman A, Cacciola J. The antisocial personality disorder diagnosis in substance abusers: Problems and issues. Journal of Nervous and Mental Disease. 1991; 179:401–409. [PubMed: 1869868]

American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4. Washington, DC: Author; 1994.

Ball SA. Manualized treatment for substance abusers with personality disorders: Dual focus schema therapy. Addictive Behaviors. 1998; 23:883–891. [PubMed: 9801723]

Ball, SA. Cognitive-behavioural and schema-based models for the treatment of substance use disorders. In: Riso, LP.; du Toit, PL.; Stein, DJ.; Young, JE., editors. Cognitive schemas and core beliefs in psychological problems: A scientist practitioner guide. Washington, DC: American Psychological Association; 2007. p. 111-138.

Ball SA, Cecero JJ. Addicted patients with personality disorders: Traits, schemas, and presenting problems. Journal of Personality Disorders. 2001; 15:72–83. [PubMed: 11236816]

Beck, AT. Depression: Clinical, experimental, and theoretical aspects. London: Staples Press; 1967.

Blazer, DG, II. Mood disorders epidemiology. In: Sadock, BJ.; Sadock, VA., editors. Kaplan and Sadock's comprehensive textbook of psychiatry. 7. Vol. 1. Philadelphia, PA: Lippincott/Williams & Wilkins; 2000. p. 1298-1308.

Bolen RM, Scannapieco M. Prevalence of child sexual abuse: A corrective meta-analysis. Social Service Review. 1999; 73:281–313.

Brotchie J, Hanes J, Wendon P, Waller G. Emotional avoidance among alcohol and opiate abusers: The role of schema-level cognitive processes. Behavioural and Cognitive Psychotherapy. 2007; 35:231–236.

Brotchie J, Meyer C, Copello A, Kidney R, Waller G. Cognitive representations in alcohol and opiate abuse: The role of core beliefs. British Journal of Clinical Psychology. 2004; 43:337–342. [PubMed: 15333236]

Cockram DM, Drummond PD, Lee CW. Role and treatment of early maladaptive schemas in Vietnam veterans with PTSD. Clinical Psychology and Psychotherapy. 2010; 17:165–182. [PubMed: 20486158]

Cohen, J. Statistical power analysis for the behavioral sciences. 2. Hillsdale, NJ: Erlbaum; 1988.

Decouvelaere F, Graziani P, Gackiere-Eraldi D, Rusinek S, Hautekeete M. Hypothesis of existence and development of early maladaptive schemas in alcohol-dependent patients. Journal de The'rapie Comportementale et Cognitive. 2002; 12:43–48.

Echeburua E, Medina RBD, Aizpiri J. Comorbidity of alcohol dependence and personality disorders: A comparative study. Alcohol and Alcoholism. 2007; 42:618–622. [PubMed: 17766317]

Foster JH, Peters TJ, Marshall EJ. Quality of life measures and outcome in alcohol-dependent men and women. Alcohol. 2000; 22:45–52. [PubMed: 11109027]

Grant BF, Dawson DA, Stinson FS, Chou P, Dufour MC, Pickering RP. The 12-month prevalence and trends in DSM-IV alcohol abuse and dependence: United States, 1991–1992 and 2001–2002. Alcohol Research and Health. 2006; 29:79–91.

Greenfield, LA. Alcohol and crime: An analysis of national data on the prevalence of alcohol crime. Washington, DC: US Department of Justice; 1998.

Harwood, H. Updating estimates of the economic costs of alcohol abuse in the United States: Estimates, update methods and data. Bethesda, MD: National Institute of Alcohol Abuse and Alcoholism; 1998.

Kessler RC, Crum RM, Warner LA, Nelson CB, Schulenberg J, Anthony JC. Lifetime co-occurrence of DSM-III-R alcohol abuse and dependence with other psychiatric disorders in the national comorbidity survey. Archives of General Psychiatry. 1997; 54:313–321. [PubMed: 9107147]

Marlatt, GA.; Gordon, JR. Relapse prevention. New York, NY: Guilford; 1985.

Messina N, Farabee D, Rawson R. Treatment responsivity of cocaine-dependent patients with antisocial personality disorder to cognitive-behavioral and contingency management interventions. Journal of Consulting and Clinical Psychology. 2003; 71:320–329. [PubMed: 12699026]

Nace EP, Saxon JJ, Shore N. Borderline personality disorder and alcoholism treatment: A one-year follow-up study. Journal of Studies on Alcohol. 1986; 47:196–200. [PubMed: 3724153]

Riso LP, Froman SE, Raouf M, Gable P, Maddux RE, Turini-Santorelli N, et al. The long-term stability of early maladaptive schemas. Cognitive Therapy and Research. 2006; 30:515–529.

Roper L, Dickson JM, Tinwell C, Booth PG, McGuire J. Maladaptive cognitive schemas in alcohol dependence: Changes associated with a brief residential abstinence program. Cognitive Therapy and Research. 2010; 34:207–215.

Saariaho T, Saariaho A, Karila I, Joukamaa M. The psychometric properties of the Finnish young schema questionnaire in chronic pain patients and a non-clinical sample. Journal of Behavior Therapy and Experimental Psychiatry. 2009; 40:158–168. [PubMed: 18804198]

Stein KF. The self-schema model: A theoretical approach to the self-concept in eating disorders. Archives of Psychiatric Nursing. 1996; 10:96–109. [PubMed: 8935986]

Stein KF, Corte C. Identity impairment and the eating disorders: Content and organization of the self-concept in women with anorexia nervosa and bulimia nervosa. European Eating Disorders Review. 2007; 15:58–69. [PubMed: 17676674]

Waller G, Meyer C, Ohanian V. Psychometric properties of the long and short versions of the Young Schema Questionnaire: Core beliefs among bulimic and comparison women. Cognitive Therapy and Research. 2001; 25:137–147.

World Health Organization. The world health report, 2001. Geneva: Author; 2001.

Young, JE. Cognitive therapy for personality disorders: A schema focused approach. Sarasota, FL: Professional Resource Exchange; 1994.

Young, JE.; Brown, G. Young schema questionnaire. New York: Cognitive Therapy Center of New York; 2003.

Young, JE.; Klosko, J.; Weishaar, ME. Schema therapy: A practitioner's guide. New York, NY: Guilford Press; 2003.

Biographies

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TABLE 1

List of early maladaptive schemas

Early maladaptive schemas	Description
Disconnection and rejection	
Emotional deprivation	The belief that one's emotional support needs will not be met by others.
Abandonment	The belief that others will be unavailable or unreliable in their support and connection.
Mistrust/abuse	The belief that others will hurt, take advantage, abuse, and manipulate.
Social isolation	A feeling that one is isolated from the world and other people.
Defectiveness	A feeling that one is bad, defective, or inferior.
Impaired autonomy and performance	
Failure	The belief that one is, or will be, a failure in important life areas.
Dependence	The belief that one cannot handle everyday responsibilities without the help of others.
Vulnerability	Fear that catastrophic events will occur and there is nothing that can be done to prevent it.
Enmeshment	Being excessively emotionally involved/connected with important people.
Impaired limits	
Entitlement	The belief that one is superior to other people and deserves special privileges.
Insufficient self-control	Difficulty in exercising self-control and distress tolerance or in restraining excessive emotional expression.
Other directedness	
Subjugation	Always surrendering control to others due to the belief that one is coerced.
Self-sacrifice	Having to meet the needs of other people at the expense of oneself.
Approval seeking	An intense emphasis on achieving the attention, approval, and recognition of other people.
Overvigilance and inhibition	
Emotional inhibition	Inhibition of important emotions, thoughts, and communications.
Unrelenting standards	The belief that one must attain excessively high internalized standards of behavior.
Negativity/pessimism	A pervasive focus on the negative aspects of life.
Punitiveness	The belief that people should be punished harshly for their mistakes.

Note: Schema domain names are in bold.

TABLE 2

Mean differences between men and women in early maladaptive schemas

Schema	Men [M (SD)]	Women [M (SD)]	d
Emotional deprivation	9.8 (13.2)	14.5 (15.1) ***	.33
Abandonment	18.1 (22.3)	24.8 (24.8) ***	.28
Mistrust/abuse	18.1 (22.1)	22.9 (24.5) **	.20
Social isolation	8.8 (13.6)	13.4 (16.4) ***	.30
Defectiveness	11.4 (18.4)	16.9 (21.7) ***	.27
Failure	5.7 (10.2)	9.3 (13.4) ***	.30
Dependence	9.1 (15.1)	13.8 (19.4) ***	.27
Vulnerability	10.5 (14.0)	12.8 (15.4) *	.15
Enmeshment	6.1 (10.9)	10.9 (15.3) ***	.36
Entitlement	11.4 (14.0)	10.1 (11.9)	.10
Insufficient self-control	23.9 (20.7)	29.4 (21.4) **	.26
Subjugation	8.4 (12.1)	14.6 (15.4) ***	.44
Self-sacrifice	37.6 (25.7)	46.9 (29.8) ***	.33
Emotion inhibition	12.0 (13.8)	11.8 (12.7)	.02
Unrelenting standards	33.4 (25.1)	32.3 (23.9)	.04
Approval seeking	16.9 (19.5)	23.1 (21.6) ***	.30
Negativity/pessimism	15.4 (17.6)	18.8 (18.7) *	.18
Punitiveness	24.2 (20.5)	25.2 (18.6)	.05

Note: d = effect size differences between men and women

*
$p < .05$,

**
$p < .01$,

***
$p < .001$.

TABLE 3

Differences between men and women in schema interpretations

Schema	Men (%)	Women (%)
Emotional deprivation		
Low	64.6	47.7
Medium	13.7	14.2
High	11.6	17.3
Very high	10.1	20.8
Abandonment		
Low	56.5	44.2
Medium	16.6	16.8
High	9.9	12.8
Very high	17.0	26.2
Mistrust/abuse		
Low	56.5	47.8
Medium	15.9	17.3
High	11.3	14.1
Very high	16.3	20.8
Social isolation		
Low	69.3	56.6
Medium	11.9	14.2
High	8.3	8.0
Very high	10.5	21.2
Defectiveness		
Low	73.4	59.3
Medium	9.7	14.2
High	7.0	10.6
Very high	9.9	15.9
Failure		
Low	76.9	64.6
Medium	12.4	13.3
High	6.1	11.9
Very high	4.6	10.2
Dependence		
Low	77.6	66.4
Medium	11.0	15.0
High	5.3	6.2
Very high	6.1	12.4
Vulnerability		
Low	63.5	52.6
Medium	15.2	20.4
High	10.8	13.7

Schema	Men (%)	Women (%)
Very high	10.5	13.3
Enmeshment		
Low	76.7	63.3
Medium	12.3	12.8
High	5.6	12.4
Very high	5.4	11.5
Entitlement		
Low	57.3	58.8
Medium	17.8	20.8
High	12.7	12.4
Very high	12.1	8
Insufficient self-control		
Low	37.1	26.1
Medium	23.6	25.3
High	16.4	19.0
Very high	22.9	29.6
Subjugation		
Low	67.4	46.9
Medium	15.7	21.2
High	9.6	13.3
Very high	7.3	18.6
Self-sacrifice		
Low	19.3	16.4
Medium	18.8	11.5
High	17.0	16.4
Very high	44.9	55.7
Emotional inhibition		
Low	54.5	51.8
Medium	18.0	21.2
High	13.8	16.8
Very high	13.7	10.2
Unrelenting standards		
Low	26.1	24.3
Medium	16.2	20.4
High	19.6	20.8
Very high	38.1	34.5
Approval seeking		
Low	55.5	41.5
Medium	18.5	23.5
High	10.2	14.2
Very high	15.8	20.8
Negativity/pessimism		

Schema	Men (%)	Women (%)
Low	50.8	41.6
Medium	15.9	18.6
High	13.5	14.6
Very high	19.8	25.2
Punitiveness		
Low	35.0	31.8
Medium	22.9	22.6
High	19.3	23.9
Very high	22.8	21.7