Does Experiential
Avoidance Mediate the
Effects of Maladaptive
Coping Styles on
Psychopathology and
Mental Health?

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Abstract

Experiential avoidance (EA) is considered a risk factor for psychopathology. This study explores whether EA mediates the relationship between maladaptive coping styles (palliative, avoidance, and passive coping) and psychopathology and positive mental health. A total of 93 adults with mild to moderate psychological distress completed measures assessing coping styles, psychopathology (depression, anxiety, and alcohol use), and mental health (emotional, psychological, and social well-being). Results showed that EA mediated the effects of passive coping on both increased anxiety and depression and decreased emotional and psychological well-being. These results suggest that a person who is prone to use EA or has learned EA in stressful situations has a higher risk of developing psychopathology and lower mental health. This indicates that early interventions that aim at people with high levels of EA are highly relevant.

Keywords

experiential avoidance, coping, anxiety, depression, mental health

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Introduction

There is growing interest in experiential avoidance (EA) as a risk factor for psychopathology. EA has been defined as the reluctance to remain in contact with experiences such as feelings, thoughts, and bodily sensations, and attempts to alter, control, predict, or avoid the form, the frequency or the contexts in which these experiences arise (Hayes et al., 2004; Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). EA can be temporarily effective in reducing the experience of unwanted emotions, feelings, and thoughts. However, EA is often counterproductive in the long run, because attempts to avoid private events create or even increase the frequency, severity, and accessibility of the private event that one who wants to avoid (Gold & Wegner, 1995). This struggle with and controlling or avoiding of the unwanted private events predominate and interfere with the movement toward long-term desired qualities or values in life, and results in ineffective functioning and in less contact with present experiences (Hayes, Luoma, Bond, Masuda, & Lillis, 2006; Hayes, Strosahl, & Wilson, 1999; Kashdan, Barrios, Forsyth, & Steger, 2006).

It has been found in various studies that EA positively correlates with various forms of psychopathology, including depression and anxiety (Kashdan et al., 2006; Roemer, Salters, Raffa, & Orsillo, 2005; Tull, Gratz, Salters, & Roemer, 2004), post-traumatic stress (Marx & Sloan, 2005), and substance abuse (Stewart, Zvolensky, & Eifert, 2002). A recent meta-analysis (Hayes et al., 2006) of 32 studies that examined the relationship between EA as measured by the Acceptance and Action Questionnaire (AAQ) and psychopathology (e.g., anxiety, post-traumatic stress disorder, pain, and depression) found a weighted effect size of r = .42 (95% CI: .40-.44). Longitudinal studies have found that EA predicts the future symptoms of post-traumatic stress disorder in trauma survivors (Marx & Sloan, 2005), quality of life in students (Hayes et al., 2004), and the absence of mental illness in customer service workers (Bond & Bunce, 2003).

An important question is how EA is related to other coping styles that involve action to change aversive private experiences, such as avoidance coping, wishful thinking, or distancing? These coping styles have also been found to be related to negative psychological outcomes (Penley, Tomaka, & Wiebe, 2002). Although EA at first glance may appear rather similar to these coping styles, an important difference is revealed when looking at the way these construct are operationalized. EA assesses whether a person engages in attempts to change the form, frequency, or situational sensitivity of unwanted private events. Coping styles are measured in terms of how often a strategy is used and what the content of the actual behavior is to cope with stressful situations. EA is thus more focused

on the function and context of behavior, whereas coping styles are focused on the frequency and content of behavior (Hayes et al., 1996; Kashdan et al., 2006). A coping style may or may not be used to avoid personal emotions, feelings, and thoughts. Due to this difference, EA possibly mediates the effect of coping styles on mental health (Biglan, Hayes, & Pistorello, 2008; Kashdan et al., 2006). This was corroborated in a study by Kashdan et al. who found that EA mediated the effects of maladaptive coping styles on anxiety-related stress. Using an experience-sampling method, they also found that EA mediated the effects of emotional suppression and cognitive reappraisal on positive psychological functioning in students. Positive psychological functioning was assessed with measures of daily positive affect, frequency of positive events, life satisfaction, and purpose in life. EA even predicted positive psychological functioning (e.g., life satisfaction ES r = .55) better than cognitive reappraisal (ES r = .20) (Kashdan et al., 2006). EA is thus considered to be a predisposition to make people more vulnerable for developing psychopathology and reduced positive psychological functioning in reaction to various stressors (Biglan et al., 2008; Kashdan et al., 2006). However, more studies using different instruments and different settings are needed to shed light on the distinction between EA and other avoidance strategies (Chawla & Ostafin, 2007) and on the relation between EA and psychological well-being.

Therefore, this study first examines three coping styles, measured with the aid of the Utrecht coping list (UCL; Schreurs, Tellegen, & van de Willige, 1984), that have not been examined previously within this context. The UCL is the most widely used coping inventory in the Netherlands. In the UCL, coping is seen as a disposition, and a total of seven subscales are discerned. It measures how frequently each of these coping styles are used in response to "problems or unpleasant situations in general." For the current study three UCL subscales were selected that may be expected to be closely related to EA: palliative, avoidance, and passive coping. Palliative coping is seeking distraction or good company. Avoidance coping is shunning situations or problems and "letting go." Passive coping is being overwhelmed by problems, such as ruminating about the past. Higher scores on these three ways of coping are related to psychopathology, such as anxiety and depression (Schreurs, van de Willige, Brosschot, Tellegen, & Graus, 1993). In line with Kashdan et al. (2006), we expect that the coping styles themselves are not problematic unless they are used as rigid and inflexible methods for avoiding or controlling unwanted thoughts or emotions. We predict that coping styles have an influence on psychopathology, such as depression, anxiety, and alcohol use but that EA mediates this association.

Secondly, we want to pay more attention to the role of EA in positive mental health. Mental health, according to Keyes (2002), is not only the absence of

mental illness but also the presence of positive feelings and optimal functioning in private and public life. Keyes (2007) showed that adults with complete mental health missed the fewest days of work, had the healthiest psychosocial functioning, and had the fewest health limitations on activities in daily life. Mental health is defined as symptoms of emotional well-being (happiness and life satisfaction), psychological well-being (striving to become a better person), and social well-being (striving to contribute to society) (Keyes, 2002). The existing literature provides a good deal of information on the role of EA and emotional well-being (e.g., Hayes et al., 2006), but if EA prevents people from committing to value-based actions, it may also have a significant effect on positive psychological and social well-being. We therefore hypothesize that EA also mediates the effects of the coping styles on positive mental health.

In summary, the results of a study into the relationship between EA, maladaptive coping styles, psychopathology (anxiety, depression, and alcohol use), and mental health in a cross-sectional dataset of adults with mild to moderate psychological distress are presented.

Method

Participants

This study included 93 participants. Inclusion criteria were people of 18 years and older with mild to moderate anxiety or depressive symptoms. Exclusion criteria were (a) severe psychopathology requiring immediate treatment, (b) currently undergoing treatment at a mental health institution or recently started on pharmacological treatment, or (c) reporting few psychological complaints or symptoms. Table 1 shows an overview of the participants' characteristics. The mean age of the participants was 49 years (SD = 10.7; range = 24-71). The majority of the participants were women (81.7%) and Dutch (91.4%). Of the participants 46.2% were married, 39.8% had a higher education, followed by 33.3% with a secondary education, and 52.7% had a paid job.

Procedure

Participants in this study were participants who signed up for a group intervention (comprising 8 2-hr sessions) based on acceptance and commitment therapy (ACT) developed by the University of Twente. ACT is a form of behavioral therapy that focuses on diminishing EA and increasing value-based behavior (Hayes et al., 1999). Participants were randomized into the intervention or to a waiting list. This study analyzed only the data from the baseline assessment.

Table 1. Characteristics of Participants

	N	%
Gender		
Female	76	81.7
Male	17	18.3
Age (M, SD)	49.02 (10.70)	
Marital status		
Married	43	46.2
Divorced	18	19.4
Widowed	3	3.2
Never married	29	31.2
Race		
Dutch	85	91.4
Other	8	8.6
Education		
Low education	25	26.9
Middle education	31	33.3
High education	37	39.8
Daily activities		
Paid job	49	52.7
No job	44	47.3

The participants were recruited through press articles, leaflets, and posters, and through psychologists at seven mental health institutions in the Netherlands. In total, 140 individuals responded and were assessed for eligibility. Assessment of these criteria was carried out by trained psychologists in clinical face-to-face interviews. Of the 140 respondents, 93 were included in this study. These participants received an information sheet to read, and on agreement to participate in this study, they signed an informed consent form. This study was approved by a local ethical committee. After receiving informed consent, the questionnaires were sent by mail to the respondents' home address and subsequently returned. Respondents were also asked to provide demographic variables such as gender, age, marital status, race, education, and daily activities.

Measures

Acceptance and Action Questionnaire-II (AAQ-II). The AAQ-II (Bond et al., submitted) is a 10-item measure of EA. The AAQ-II assesses on a 7-point Likert-type scale ranging from $1 = never\ true$ to $7 = always\ true$ the subject's

unwillingness to be in contact with negative private events, the need to control these events, and the effect of controlling their negative private experiences on their lives. Summation of the scores results in a total score ranging from 10 to 70 whereby a higher score indicates higher acceptance and less EA. The Dutch AAQ-II showed a good factor structure in a general and clinical population in the Netherlands and good internal consistency in the current study ($\alpha = .86$) (Jacobs, Kleen, de Groot, & A-Tjak, 2008).

Utrecht coping list (UCL). The UCL (Schreurs et al., 1984) measures that coping style people use in various unpleasant situations or problems using a 4-point scale ranging from $1 = seldom \ or \ never$ to $4 = very \ often$. Three out of seven subscales are used in this study: palliative coping (eight items) measures to what extent people are looking for distraction, avoidance coping (eight items) measures to what extent people avoid difficult situations or problems, passive coping (seven items) measures to what extent people feel overwhelmed by their problems. The UCL has proven to be a reliable and valid instrument (Schaufeli & van Dierendonck, 1992). The internal consistency in this study was moderate to good ($\alpha = .78$). In a Dutch reference group of female nurses and a random sample of the Dutch population between 18 and 65 years old (n = 712), the average scores on palliative coping are 14 to 19, 12 to 16 on avoidance and 9 to 11 on passive coping (Schreurs et al., 1993).

Center for Epidemiologic Studies Depression Scale (CES-D). The CES-D (Radloff, 1977) is a 20-item questionnaire that measures depressive symptoms in the general population. Respondents rate on a 4-point scale ranging from 0 = hardly ever (less than 1 day) to 3 = predominantly (5-7 days) to what extent they had experienced depressive symptoms in the previous week. Summation of the scores result in a total score ranging from 0 to 60. A score of 16 or higher is considered indicative of clinically relevant depressive symptoms. The CES-D showed adequate psychometric properties. The Dutch translation showed similar psychometric properties in a group of eldery people in the Netherlands (Haringsma, Engels, Beekman, & Spinhoven, 2004). The scale shows high internal consistency in this study ($\alpha = .88$).

Hospital Anxiety and Depression Scale—Anxiety Subscale (HADS-A). The HADS-A (Zigmond & Snaith, 1983) is a 7-item questionnaire that assesses the presence and severity of anxious symptoms. Respondents rate on a 4-point scale ranging from 0 = not at all to 3 = often to what extent they had experienced anxiety symptoms in the previous week. The total HADS-A scores range from 0 to 21. The Dutch translation showed good psychometric properties in six different groups of Dutch participants (Spinhoven et al., 1997). Bjelland, Dahl, Haug, and Neckelmann (2002) showed that among the general population and in somatic patients samples, an optimal balance between sensitivity and specificity

was achieved when caseness was defined by a score of 8 or above. The scale showed high internal consistency in this study ($\alpha = .83$).

Alcohol use. This measure assesses the number of alcoholic beverages consumed in the preceding week. Respondents rate how many beverages they drank during each of the last 7 days. With the summation of the beverages consumed over the previous week, the weekly consumption of alcoholic beverages was calculated.

Mental health continuum—short form (MHC-SF). The MHC-SF (Keyes, 2005, 2006; Keyes et al., 2008) is a 14-item questionnaire that measures three dimensions: emotional well-being (three items), social well-being (five items), and psychological well-being (six items). Respondents rate on a 6-point scale ranging from 1 = never to 6 = every day to what extent they had experienced a feeling of well-being in the previous month. A total score was computed by summing the scores on the individual items and dividing these by the number of items. The Dutch MHC-SF is validated in a representative study among Dutch adults and showed good psychometric properties (Westerhof & Keyes, 2008). The MHC-SF showed good internal consistency in this study ($\alpha = .91$).

Statistical Analyses

All measures had a normal distribution except for the measure of alcohol use. Therefore, alcohol use was transformed into a dichotomous variable using current Dutch guidelines according to which a weekly alcohol consumption of less than 21 standard glasses of alcohol for men and 14 for women is considered safe (Health Council of the Netherlands, 2006). Pearson correlations were calculated for bivariate associations between EA and coping styles, depression, anxiety, alcohol use, and mental health. A correlation of r=.1 to .3 is considered as low, r=.3 to .5 as medium, and r=.5 to 1 as high conform Cohen's taxonomy (1992). Mediation analyses were performed using multiple regression analyses with procedures defined by Baron and Kenny (1986). To check whether EA fully mediates the effect between the independent variabele and the dependent variabeles, the Sobel test was used.

Results

Baseline Characteristics

The means and standard deviations for the measures of acceptance (AAQ-II), palliative coping (UCL-palliative), avoidance coping (UCL-avoidance), passive

Measure	N	М	SD
AAQ-II	93	36.76	10.07
UCL-palliative	93	16.65	3.93
UCL-avoidance	93	16.58	3.89
UCL-passive	92	16.32	3.61
CES-D	93	24.96	9.55
HADS-A	93	10.34	4.21
Number of alcoholic beverages	90	8.50	13.50
MHC-SF-emotional	93	3.36	1.11
MHC-SF-psychological	93	3.32	1.03
MHC-SF-social	93	2.84	0.98

Table 2. Means and Standard Deviations of Measures

Note: AAQ-II = Acceptance and Action Questionnaire-II; UCL = Utrecht coping list (palliative, avoidance, and passive copings are subscales); CES-D = Center for Epidemiologic Studies Depression Scale, HADS-A = hospital anxiety and depression scale—anxiety subscale; MHC-SF = Mental health continuum—short form (emotional, psychological, and social well-beings are subscales).

coping (UCL-passive), depression (CES-D), anxiety (HADS-A), alcohol use, and mental health are presented in Table 2. The scores on acceptance are lower (M = 36.76, SD = 10.07) than was found in a general Dutch population (M = 52.03, SD = 9.30) (Jacobs et al., 2008), meaning that the participants score high on EA. With regard to the coping styles, the participants achieved average scores on the palliative coping, high scores on avoidance coping, and very high scores on passive coping in comparison with Dutch nurses and a random sample of the Dutch population (Schreurs et al., 1993). Of the participants, 72.0% scored above the cut-off score of anxiety (8 or higher) (Bjelland et al., 2002) and 78.5% of the participants scored above the cut-off score (16 or higher) that is indicative of clinically relevant depressive syndromes (Radloff, 1977). The participants drank about 8.5 alcoholic beverages per week (15.4 for men and 7 for women), indicating that the alcohol consumption can be considered safe. There were 18 participants (5 men and 13 women) for whom the alcohol consumption can be considered unsafe. The scores on emotional well-being are lower (M = 3.36, SD = 1.11) than was found in a general Dutch population (M = 4.67, SD = .94). Also psychological well-being (M = 3.32, SD = 1.03) and social well-being (M = 2.84, SD = .98) are lower than that was found in a general Dutch population (M = 4.18, SD = .99; M = 3.33, SD = 1.01, respectively;Westerhof & Keyes, 2008).

	I	2	3	4	5	6	7	8	9	10
AAQ-II	_	10	02	56*	47*	60*	.02	.36*	.38*	.25**
UCL-palliative		_	.35*	.13	13	.01	14	.21**	.16	.15
UCL-avoidance			_	.30*	.19	.02	19	12	18	10
UCL-passive				_	.41*	.33*	.04	−.29*	37*·	17
CES-D					_	.55*	.06	−.77*	70*·	55*
HADS-A						_	08	−.42*	38*·	−.34*
Alcohol use							_	.01	04	.03
MHC-SF-emotional								_	.79*	.64*
MHC-SF-psychological	l								_	.74*
MHC-SF-social										_

Table 3. Correlations Between Experiential Avoidance, Coping Styles, Psychopathology, and Mental Health

Note:AAQ-II = Acceptance and Action Questionnaire-II; UCL = Utrecht coping list (palliative, avoidance, and passive copings are subscales); CES-D = Center for Epidemiologic Studies Depression Scale, HADS-A = Hospital anxiety and depression scale—anxiety subscale; MHC-SF = Mental health continuum—short form (emotional, psychological, and social well-beings are subscales) **p < .05. *p < .01.

Correlational Analyses

Correlations between the measures are presented in Table 3. Results show that lower levels of EA (or high levels of acceptance) are strongly related to reduced passive coping, r(92) = -.56, p < .01. For the other two coping styles, palliative coping and avoidance, no significant relations could be found. Results show that lower levels of EA are strongly related to decreased anxiety, r(93) = -.60, p < .01, and moderately related to decreased depression, r(93) = -.47, p < .01. Lower levels of EA are also moderately related to increased emotional, r(93) = .36, p < .01, and psychological well-being, r(93) = .38, p < .01 and weakly related to increased social well-being, r(93) = .25, p = .02. Alcohol use is not related to EA. The only coping style that is related with psychopathology and mental health is passive coping, which is moderately related to four health outcomes: depression, r(92) = .41, p < .01; anxiety, r(92) = .33, p < .01; emotional well-being, r(92) = -.29, p < .01; and psychological well-being r(92) = -.37, p < .01.

Mediational Analyses

Regression analyses were conducted to examine whether EA mediates the effects between the maladaptive coping styles (independent variable) on one

Table 4. Regression Analyses With Passive Coping (UCL-Passive) and EA (AAQ-II)
Simultaneously as Predictors of the Four Dependent Variables and the Sobel z to
Test if EA is a Mediator

Mediation Models	β	Sobel z
DV = CES-D		
AAQ-II	35*	2.79*
UCL-passive	.22	
DV = HADS-A		
AAQ-II	62*	4.36*
UCL-passive	01	
DV = MHC-SF-emotional		
AAQ-II	.29**	-2.26**
UCL-passive	13	
DV = MHC-SF-psychological		
AAQ-II	.25**	-2.05**
UCL-passive	23	

Note: AAQ-II = Acceptance and Action Questionnaire-II; UCL = Utrecht coping list (palliative coping is a subscale); CES-D = Center for Epidemiologic Studies Depression Scale, HADS-A = Hospital anxiety and depression scale—anxiety subscale; MHC-SF = Mental health continuum—short form (emotional and psychological well-beings are subscales). **p < .05. *p < .01.

hand, and psychopathology and mental health (dependent variables) on the other. Results from the correlations correspond with the results of the regression analyses. The first series of regression analyses showed that only passive coping as the predictor yielded a significant relation with EA (the mediator) ($\beta = -.56$, p < .01). The second series of regression analyses showed that passive coping as a predictor yielded a significant positive relation with depression and anxiety, and a negative relation with emotional well-being and psychological well-being. The third series of regression analyses were performed with passive coping and EA simultaneously as predictors of each of the four dependent variables, respectively: depression, anxiety, psychological, and emotional well-being. To achieve full mediation, the previously found relation in the second regression analyses should become nonsignificant, whereas the mediator should retain its significance. The results of these regression analyses (Table 4) show full mediation, confirmed by significant Sobel tests, on all four dependent variables. EA mediated the effects of passive coping on depression (initial $\beta = .41$, final $\beta = .22$), anxiety (initial $\beta = .33$, final $\beta = -.01$), emotional well-being (initial $\beta = -.29$, final $\beta = -.13$), and psychological well-being (initial $\beta = -.37$, final $\beta = -.23$).

Discussion

In this cross-sectional study, we explored whether three dispositional coping styles, that is, palliative coping, avoidance, and passive coping, were related to psychopathology and positive mental health and whether EA would mediate these relationship, in a sample of 93 adults with mild to moderate psychological distress. This mediational role of EA has not been studied in clinical samples before.

Only one of the three coping styles, passive coping, was (strongly) correlated with EA. This indicates that people with high levels of EA tend to become easily overwhelmed by their problems and unpleasant situations, worry about the past, feel incapable of doing something, or escape into a fantasy world. In turn, both passive coping and EA showed a moderately strong relationship with increased depression and anxiety, which corroborates the results of earlier studies (Hayes et al., 2006; Muris, Schmidt, Lambrichs, & Meesters, 2001; Norberg, Lindblad, & Boman, 2005). More importantly, this study suggests that the association between passive coping and depression and anxiety is mediated by EA. This finding may implicate that passive coping only leads to psychological distress when a person is not willing to experience certain private events and is therefore trying to control and avoid them. These efforts of control and avoidance unfortunately increase and exacerbate the distress the individual is trying to reduce. Passive coping thus appears to lead to more depressive symptomatology and anxiety by the inflexible and rigid use of EA. This study is in line with the hypothesis by Kashdan et al. (2006), that is, EA can be considered as a learned and underlying predisposition for diverse psychopathology, such as anxiety and depression. An individual who is prone to using EA or who has learned EA in stressful situations has a higher risk of developing psychopathology.

Another interesting finding in this study is that EA also mediates the relationship between passive coping and emotional and psychological well-being. The relationship between EA and emotional well-being corresponds with the finding of Kashdan et al. (2006) that EA diminishes positive affect and life satisfaction. For people who devote an excessive amount of time, effort, and energy to control unwanted experiences, it may be more difficult to live according to their values and to live the life they really want. EA narrows down the behavior repertoire of people and prevents them from participating in meaningful and value-based actions (Hayes et al., 1999). As a result EA can be expected to be related to less psychological well-being. Indeed, this study shows that EA is not only related to less emotional well-being but also to less autonomy, self-acceptance, personal growth, purpose in life, positive relationship with others and environmental mastery. In addition, the results showed that passive coping is related to lower emotional and psychological well-being as well but that this

relationship is mediated by the wish to avoid or control unpleasant experiences. This is a relevant finding, because there is growing evidence that mental health is more than just the mere absence of psychopathology and that higher levels of emotional and psychological well-being protect against psychological disorders (Keyes, 2002).

We found that EA was not associated with avoidant and palliative coping. This finding corroborates the importance of distinguishing between the two constructs. Avoidant coping, such as reconciling oneself to the situation or avoiding difficult situations, and palliative coping, such as trying to relax or looking for distraction, may not necessarily be used as attempts to change the form, frequency, or situational sensitivity of unwanted private events. We also found no relationship between EA and alcohol use in this study. Possibly, these results can be explained by the alcohol consumption level of the participants that can be considered as within the safe range (Health Council of the Netherlands, 2006). This study population probably does not use alcohol as an avoidance strategy.

Unexpectedly, we only found a weak relationship between social well-being and EA. An explanation could be that the difference in domains that are involved in both constructs. EA measures the influence of unwanted thoughts and experiences on a person's private life, whereas social well-being considers the functioning of a person in public life by assessing how a person is contributing to the society in general.

Two limitations in this study need to be addressed. First, due to the cross-sectional nature of this study, causal interpretations need to be made with the utmost care. This specifically applies to the mediational effects of EA presented in this article. However, as this is one of the first attempts to empirically test these assumptions, these data do augment our understanding of processes involved in mental health. The results certainly justify future longitudinal research. Second, the relatively small sample size, especially the number of male participants obviously limits generalization to other samples. At the same time, as large effect sizes are needed to reach statistical significance in small samples, the results found here can be considered as relatively robust. Moreover, in many previous studies the participants consisted of undergraduate students or people with a specific disorder (Chawla & Ostafin, 2007). In this study there was a considerable diversity in age, education, and daily activities, and there was a broad range of psychological distress.

Our findings further corroborate the concept of EA as an important construct that differs from the way people cope with their problems or unpleasant situations. Our study suggests that the unwillingness to be in contact with unwanted private experiences and the effort to control these experiences are directly related to depressive symptomatology and anxiety and thus mediate the relationship between coping styles and psychological distress. In addition, the

findings from this study suggest that EA is also a risk factor for not only reduced emotional well-being but also for reduced psychological well-being. These findings implicate that people with high levels of EA could profit from early interventions that target EA as a broad risk factor. Therapies that integrate acceptance and mindfulness with behavioral therapy are promising. Acceptance and commitment therapy (ACT; Hayes et al., 1999) was found to be effective with people with depression and anxiety (Forman, Herbert, Moitra, Yeomans, & Geller, 2007) and with many other illnesses (see Powers, Zum Vörde Sive Vörding, & Emmelkamp, 2009). Mindfulness-based cognitive therapy (MBCT) was found to be effective in patients with recurrent depression (Ma & Teasdale, 2004; Teasdale et al., 2002). Preliminary studies suggest that MBCT is also effective in patients with depression or anxiety disorders without a history of psychological distress (e.g., Evans et al., 2008; Finucane & Mercer, 2006; Kim et al., 2009). Roemer, Orsillo, and Salters-Pedneault (2008) developed acceptance-based behavioral therapy and found promising effects in people with generalized anxiety disorder.

The results of this study suggest that acceptance-based interventions may not only increase the efficacy of reducing the incidence of mental disorders (Biglan et al., 2008) but may also help people to live more satisfying lives.

Declaration of Conflicting Interests

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